



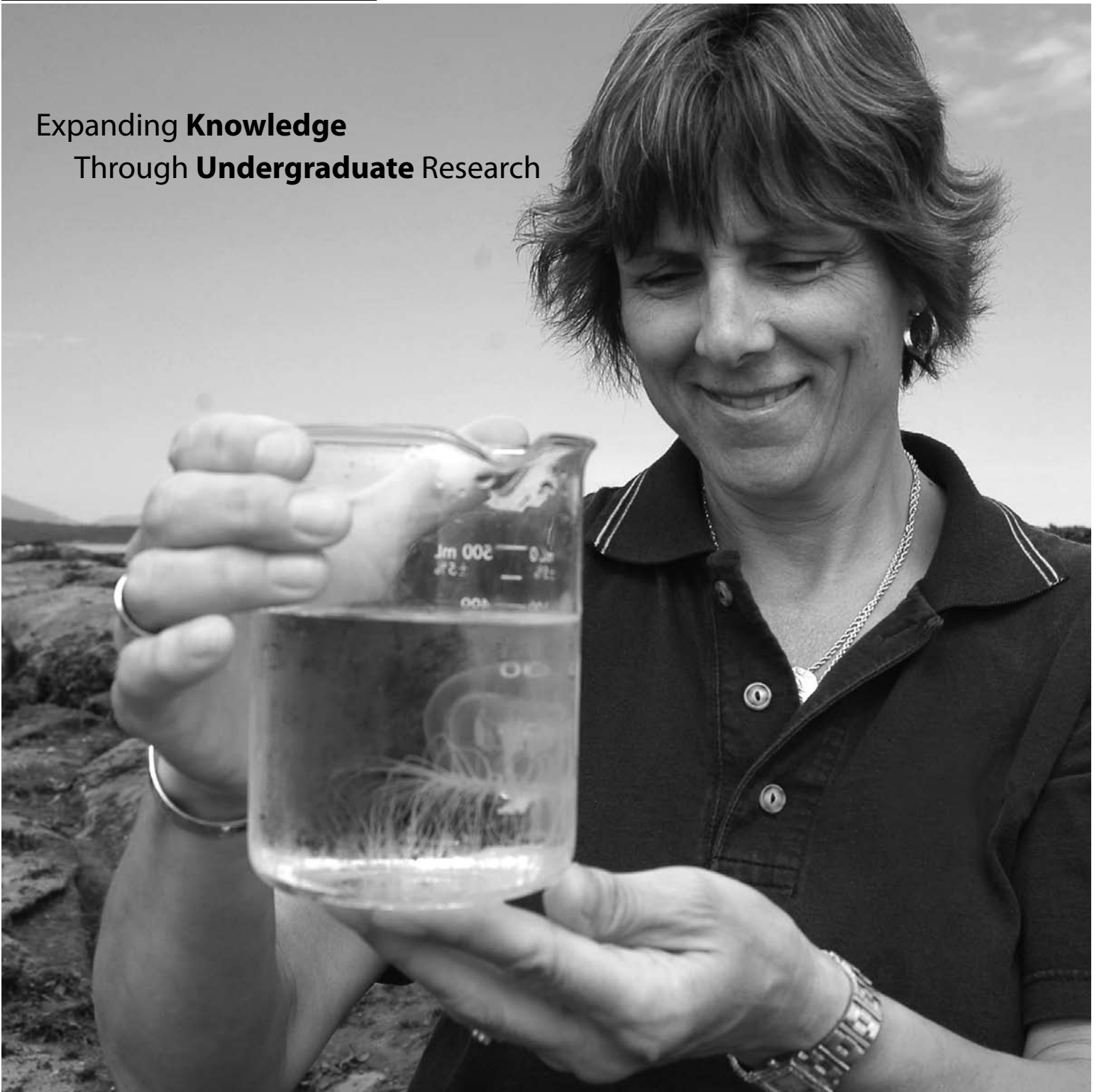
VANCOUVER ISLAND  
UNIVERSITY

2007  
2008

Research  
& Scholarly  
Activity

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Expanding **Knowledge**  
Through **Undergraduate** Research





## Message from the Vice-President, Academic

Welcome to the 2007-08 Research and Scholarly Activity Annual Report. Once again, I am astonished and truly proud of what Malaspina University-College (MU-C), now Vancouver



Island University (VIU), faculty and student researchers have accomplished this past year in the area of research and scholarly activity.

This publication is a testament to the remarkable depth, breadth, and diversity of research underway at our institution.

Research not only provides a powerful catalyst for learners, but is also the cornerstone for growth in our communities. At VIU, we recognize that early in-

volvement in research helps students cope with complexity in a challenging world, enabling them to grapple with significant questions. It also motivates many of our students to pursue graduate studies.

These are just a few of the reasons VIU takes its commitment to providing valuable undergraduate research experiences and opportunities very seriously, and we are pleased to be recognized internationally as a leader in this area.

Two years ago, our Teaching and Learning Centre was selected by the prestigious Carnegie Foundation for the Advancement

of Teaching and Learning (CASTL) to coordinate a group of institutions studying effective practices in undergraduate research. This group includes the University of Alberta, University of Waterloo, Notre Dame University, University of Maryland-Baltimore County, University of Illinois at Urbana-Champaign, Akron University, Dominican University, University of Central Florida, the Centre for Excellence at the University of Gloucestershire, United Kingdom, and the American Council on Undergraduate Research.

As part of this international study, VIU recently completed an in-house study of the benefits of undergraduate research experiences for our students. These findings are currently being tabulated and will form part of a final report to the Carnegie Foundation in October 2009.

Vancouver Island University is well positioned to maintain and enhance our academic excellence by providing and offering new and innovative programs and research opportunities at both the undergraduate and graduate levels. Our dedicated faculty are known for taking undergraduate students, from first year to fourth year, under their wings, demonstrating what it takes to be a professional researcher and achieve academic excellence.

On behalf of Vancouver Island University, my heartfelt thanks to all our faculty members and student researchers for another successful year of conducting original and creative research. It is through your efforts and ingenuity that Vancouver Island University's research profile will continue to grow regionally, nationally and internationally.

Leslie King, Ph.D.  
Vice-President, Academic  
Vancouver Island University

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# Research and Scholarly Activity at Malaspina University-College (now Vancouver Island University)

The following is a listing of some of the research and scholarly activities that faculty and staff of Malaspina University-College (MU-C), now Vancouver Island University (VIU), have engaged in during the past year. The information was supplied by each individual for publication in the Internal Annual Report via the online Research and Scholarly Activity Database, which can be accessed at [www.viu.ca/research](http://www.viu.ca/research).

## Arts and Humanities

### Art

#### PAMELA SPEIGHT

##### Project

##### *Invasive*

An exhibition of paintings, drawings and mixed media concerned with organisms that have migrated or been transferred from indigenous habitats to new environments in which they flourish uncontrollably because natural constraints are few or non-existent. Developing a theme using diverse media, presenting the resulting work in a professional venue, and engaging in rigorous academic discussion about these processes are essential skills for students in the Visual Arts Program.

### Chinese

#### DR QINGZHEN DENG

##### Article

"The Chinese Characters Applied to 'i-za' in Manyo-shu." *Josechu* 35 (2008): 1-14.

This article is based upon continuing research into the development of the Japanese written language during the classical period. Through an analysis of Japanese and Chinese extant texts, this article accounts for the emergence of a specific Chinese logogram within the Japanese written tradition which functioned linguistically as an interjection. This character was derived from a compound Chinese logogram, the adverb 'shuai-ran'. By dissecting the compound logogram and retaining only the left radical, Japanese writers generated new meaning for a Chinese character to meet the requirements of their own language. In doing so, they displayed a keen understanding of the Chinese system of writing, and more importantly, the ability to transform their own.

## Creative Writing and Journalism

### MARILYN BOWERING

#### Article

"Introduction." In *Modern Classics: The Last of the Crazy People*. Toronto: Penguin Books Canada, 2008.

A commissioned introduction to the new Penguin Books edition of Timothy Findley's first novel *The Last of the Crazy People*.

#### Books

*Green*. Toronto: Exile Editions, 2007.

A book of poems that are variations of classical themes and traditions but are driven by the immediacy of family, love and death. Coats, rooms, cars, cups, bees and finally the rose are all part of the dive into the sources of "Green".

*What It Takes To Be Human* – UK edition. London: Maia Books, 2007.

A story of a young man incarcerated in a Vancouver Island asylum for the criminally insane during World War II.

#### Accolades

Recipient of Artist Residency Award, including one (1) month's residency at the Fundacion Valparaiso to work on a book project, April 2008.

Fulbright Visiting Research Chair in Creative Writing at New York University, involving both teaching and research activities, Spring 2008.

#### Other Activities

Poetry reading for the "Poetry Bash" at Vancouver International Writers' Festival, October 20, 2007; panel participant and reader of fiction and poetry at the Ottawa International Writers' Festival, October 16, 2007; fiction reading at the Lillian Vernon Creative Writing House in New York City, March 13, 2008; and, reader for Suddenly Dance Benefit, including dance improvisation, November 1, 2007.

### DR KEITH HARRISON

#### Chapter

"Hornby Island: the Nature of Home." In *Writing the West Coast: In Love with Place* eds. Christine Lowther and Anita Sinner, 174-178. Vancouver: Ronsdale Press, 2008.

An imagistic, exteriorized account of what it means to live overlooking Tribune Bay on Hornby Island. Part of an anthology of creative non-fiction about the meaning of "at home" on Canada's West Coast.

**FRANK MOHER****Article**

"The Meaning of Richard McBeef." *The National Post* 25 April 2008.  
An op-ed about the murders at Virginia Tech.

**Other Publication**

"The Third Ascent." In *The Alberta Advantage*. Toronto: Playwrights Canada Press, 2008.

An anthology of plays.

**Other Activities**

"Big Baby"

A production of the play, "Big Baby", translated into Serbian, at Dodona Theatre, Prishtina, Kosova, October 2007.

"Odd Jobs"

A play produced at South Carolina Repertory Theatre, Hilton Head, South Carolina, January 2007.

**KATHY PAGE****Professional Development**

Served on the faculty of the Wired Writing Program at the Banff Centre for the Arts, including two weeks of face to face teaching and six months of online mentoring for four emerging fiction writers.

**Other Activity**

Completed a draft of a new novel, *The Find*, with the aid of a Canada Council Grant.

**English****DR DANIEL BURGOYNE****Book**

*Academic Writing: An Introduction* 2nd Edition. Peterborough: Broadview Press (In Press).

An adaptation of Janet Giltrow's work on genre and research writing, introducing first-year post-secondary students to the conventions of academic writing. Developed from the first edition with associate authors Richard Gooding and Marlene Sawatsky, this second edition reflects current research and makes the work even more accessible to first-year students.

**Conference Presentation**

"Emancipating Oothoon: Coil and Recoil of Abolitionist Discourse," at the 15th Annual North American Society for the Study of Romanticism (NASSR) Conference in conjunction with the 2nd NASSR/BARS Conference: "Emancipation, Liberation, Freedom" Bristol, UK, July 2007; panel discussion "Sedition, Liberation and Emancipation in William Blake."

This paper considers the implications of race and slavery in William Blake's poem, "Visions of the Daughters of Albion", by examining Blake's engravings for John Stedman's *Narrative of a Five-Year Expedition against the Revolted Negroes of Surinam* (1796).

"'Breaking on the Rack' of vicarious death: Voyeurism, Abolition, and Revolution in Stedman and Blake," at the Congress of Humanities and Social Sciences, Vancouver, BC, May/June 2008; panel discussion "Romantic Encounters: Medicine, Slavery, Psychiatry."

This paper argues that William Blake's Orc should be understood in terms of Blake's engraving "The Execution of...Breaking on the

Rack" produced for John Gabriel Stedman's *Narrative of a Five Years Expedition against the Revolted Negroes of Surinam* (1796).

"Returning to the Post-modern Condition: A Re-Appraisal," at the Congress of the Humanities and Social Sciences, Vancouver, BC, May 31, 2008; panel discussion on Jean Francois Lyotard's key publication on postmodernism.

Co-chair Dr. Richard Lane.

**Other Publications**

"Barefoot in the Margins." *Canadian Literature* 194 (Autumn 2007): 125.

A review of Susan Elmslie's *I, Nadja, and Other Poems* (Brick Books).

"By Our Lack of Ghosts." *Canadian Literature* 194 (Autumn 2007): 104-105.

A review of Earle Birney's *One Muddy Hand: Selected Poems* (Harbour Publishing).

"These Beasts in Air." *Canadian Literature* 194 (Autumn 2007): 136-138.

An omnibus Review of Matthew Holmes' *Hitch* (Nightwood Editions); Tim Bowling's *Fathom* (Gaspereau Press); and Miranda Pearson's *The Aviary* (Oolichan Books).

**Other Activities**

"Critical Inversions: Rationality and the Return to Myth"

Presented at the launch of the Literary Theory Research Group in August 2007, this paper adopts Hazard Adams' literary symbolic approach to myth to situate "myth" alongside Lyotard's approach to narrative in *The Postmodern Condition*.

"William Blake and the Abolition of Slavery"

Delivered at the English Department's Colloquium in February 2008, this paper adopts a print culture approach to show how abolitionist discourse in eighteenth-century Britain informs literature, especially the work of William Blake.

"Genre Theory and Hoaxing: the Special Case of Rosenhan's Two Pseudopatient Studies"

Delivered at the Literary Theory Research Group "Work-in-Progress Seminar" in April 2008, this paper develops a method for using historical hoaxes to analyze how certain genres harden or consolidate facts, focussing on the example of David Rosenhan's pseudopatient studies.

**TERRI DOUGHTY****Conference Presentation**

"Borderlands & Changelings: Embracing Difference in Contemporary Young Adult Fantasy," at the Relevant Across Cultures: Visions of Connectedness and World Citizenship in Modern Fantasy for Young Readers Conference, hosted by the Centre for Young People's Literature and Culture at the Institute of English Studies, Wroclaw, Poland, May 2008.

The paper looks at how liminal space, represented as the interstices between borders, and hybridity, metaphorically represented by changelings and mixed blood characters in fantasy literature, work to create opportunities for engaging positively with difference. Texts examined include Borderland short fiction from anthologies of the 1980s and 1990s, as well as contemporary fantasies by Holly Black.

**Other Publication**

“Paul Fisher;” “Weetzie Bat;” and, “Steve Harmon.” In *Student's Encyclopedia of American Literary Characters* – 4 volumes, eds. Matthew J. Bruccoli, Judith S. Baughman and Charles Brower. New York: Facts on File, 2007.

Three short essay contributions.

**DR KEITH HARRISON****Conference Presentation**

“Ladies and Gentlemen, Mr. Leonard Cohen: The Performance of Self, Forty Years On,” at the 38th Annual Conference of the National Popular Culture and American Culture Associations; panel session “Cinematic Icons, Legends, and Deities.”

The subject of this study was the National Film Board of Canada documentary (1965) focused on the charismatic presence of Leonard Cohen as a poet who had not yet become the famous singer-songwriter. The paper looked at how the film presented Cohen as hero and anti-hero, as lucid creator and wry derider of his own romantic myth. These performative elements shift biography towards autobiography, with Cohen (from a Canadian perspective) representing both in this film and in his later persona as a singer wary of iconicity – even as he is inducted into the Rock and Roll Hall of Fame: “not a distinction I coveted.”

**DR RICHARD LANE****Articles**

“The Origins of Black BC Writing: Revisiting Critical Narratives”

An article examining the tropes and structures of early Black BC fiction to show how writers on the margins of literary production developed a unique way of conceiving British Columbia. The article also looks at Black BC writing within a “history of the book” context.

“Pacific Northwest Short Stories: Creating Alternative Canons”

An academic essay examining the importance of the short story genre within the literary imagination of the Pacific Northwest. The essay is part of a collaborative project designed to encourage undergraduate student research within the humanities.

**Chapter**

“Introducing the Postcolonial Novel in English” in *Black Literature Criticism*. Belmont: Thomson-Gale Press, 2008; reprinted from Richard J. Lane, *The Postcolonial Novel*. Cambridge: Polity Press, 2006.

An examination of postcolonial literature and theory, with a critical reading of Wilson Harris's *Palace of the Peacock* elucidating the theory.

**Books**

*Jean Baudrillard* – Korean Translation. Korea: LP Publishing, 2008.

A translation of Richard J. Lane, *Jean Baudrillard* (Routledge Critical Thinkers) London: Routledge, 2000.

*Jean Baudrillard* (Routledge Critical Thinkers) – Revised & Expanded Edition. London: Routledge (In Press).

A completely updated, revised and expanded edition of a book in the Routledge Critical Thinkers Series. Additional chapters cover Baudrillard's work on terrorism, postmodernism, and architectural theory. The book also has an expanded further reading and annotated bibliography, as well as additional biographical information. The

completed manuscript, researched with help from an undergraduate student research assistant, is scheduled for publication in 2009.

**Conference Presentations**

“Binding Significance: Reading Genesis 32 via Barthes, George and Strindberg,” at the Congress of Humanities and Social Sciences, Vancouver, BC, May 2008; in conjunction with the Christianity and Literature Study Group.

The paper examines the shift into the ‘post-theory’ period in literary criticism, theory, and theology and suggests that Roland Barthes follows a German Romantic model of mimetic desire in his account of Genesis 32, known as Jacob's ‘Struggle with an Angel’.

“Post-Theory Canadian Postmodernism: An Architectonic of Canadian Literary and Visual Culture,” at the Canadian Literature Symposium “Reading the Post-modern,” Ottawa, ON, May 2008.

The paper uses French theorist Jean Baudrillard, to examine the spaces of Canadian postmodernism in relation to literary, visual and architectural ‘texts’ produced by Eden Robinson, Stan Douglas and Moshe Safdie.

“The Semiotic, the Symbolic, and the Museum in Jean Baudrillard's Writings on Fashion,” at the Congress of Humanities and Social Sciences, Vancouver, BC, May 2008.

The paper explores the question of fashion as a force for cultural change, in relation not just to Baudrillard but also Walter Benjamin's writings on the dialectical image.

“Returning to the Post-modern Condition: A Re-Appraisal,” at the Congress of the Humanities and Social Sciences, Vancouver, BC, May 31, 2008; panel discussion on Jean Francois Lyotard's key publication on postmodernism.

Co-chair Dr. Daniel Burgoyne.

**Other Activities**

The Literary Theory Research Group

Working with Professor Daniel Burgoyne, the Literary Theory Research Group was launched in the 2007-2008 academic year. The main vehicle for humanities research being developed by the group is the Seminar for Advanced Studies in the Humanities, attracting world leading international speakers such as Dr. Richard Kearney (Boston); Dr. Jens Zimmerman (Trinity Western); and, Dr. Natasha Duquette (Taylor).

“Writing a History of Canadian Literature: Issues in Theory and Criticism”

Delivered at the Literary Theory Research Group “Work-in-Progress Seminar” in April 2008, this paper outlines some of the issues involved in taking on a large research project and publication.

“Baudrillard, Benjamin and Rachel Whiteread's Holocaust Memorial: ‘Abreaction to the Event’”

An invited presentation at the Theory Collective, Victoria, BC, April 2008, this paper examines the concepts of Holocaust memorialization and the post-modern sublime, with focus on Rachel Whiteread's “Nameless Library” in Judenplatz, Vienna. Work first published in the author's monograph, *Reading Walter Benjamin: Writing through the Catastrophe*, is further developed.

“An Archaeology of Myth: Mimetic Desire & Time in Lyotard’s *The Postmodern Condition*”

Performed inaugural address at the launch of the Literary Theory Research Group in August 2007.

“The Hyperreal Life and Death of Jean Baudrillard”

Delivered at the English Department’s Colloquium in the fall of 2007, this paper examines some of the post-modern paradoxes concerning a biographical approach to Jean Baudrillard, especially in the context of writing his obituary.

#### Project

*A History of Canadian Literature*

Background research, in collaboration with three undergraduate student research assistants, for a commissioned and contracted history of Canadian literature with Routledge. Undergraduate student research focussed on the Confederation Poets; literature of the First World War; and, early feminist literature.

### DR STEVE LANE

#### Ph.D. Dissertation – Oral Defence

Steve Lane, Dean of the Faculty of Arts and Humanities, completed his doctoral program at the University of Victoria with a successful defence of his dissertation in June 2007. The dissertation, entitled ‘How Wordsworth became Wordsworth: A Poet’s Construction of Audience and Author,’ traces the emergence of the British poet’s reputation over the span of his publishing career, 1793-1850. The study draws heavily from the contemporary reviews published in response to William Wordsworth’s book publications, and employs the theories of Mikhail Bakhtin and the metaphor of “conversation” to explain the interaction between Wordsworth and his audience.

### DR CYNTHIA MASSON

#### Chapter

“Can You Just Be Kissing Me Now’: The Question(s) of Willow in *Buffy the Vampire Slayer*.” In *Televising Queer Women*, ed. Rebecca Beirne, 65-81. New York: Palgrave Macmillan, 2008.

A chapter focusing on the rhetorical power of questioning in relation to emotional and sexual intimacy. The book comprises interdisciplinary essays on the representation of lesbian and bisexual characters in popular television shows.

### DR KEVIN ROBERTS

#### Books

*She’ll be Right*. Salt Spring Island: Pilot Hill Press, 2007.

A novel woven together from three narrative threads.

*Writing the Tides: New and Selected Poems*. Vancouver: Ronsdale Press, 2006.

A journey through 30 years of a poet’s work.

#### Other Activities

External reader for PhD thesis submitted from the University of Adelaide; external assessor for PhD thesis submitted from Griffith University.

### DR KATHARINA ROUT

#### Other Publication

“The Tamyr: A Tale of Two Peoples,” translation by Katharina Rout *MANOA* 19:2 (Winter 2007): 215-221.

A translation of a piece of prose fiction by Mongolian writer Galsan Tschinag for a special issue of *MANOA* on “Maps of Reconciliation: Literature and the Ethical Imagination,” edited by Frank Stewart and Barry Lopez.

### JAY RUZESKY

#### Book Reviews

“Review” *Malahat Review* 162 (Spring 2008): 101.

A review of George Elliot Clarke Trudeau: *Long March, Shining Path* (Kentville NSL Gaspereau P, 2007) and Daniel MacIvor: *I Still Love You* (Toronto: Playwrights Canada Press, 2006).

“Review” *Malahat Review* 159 (Summer 2007): 106.

A review of Constance Rooke ed. *Writing Life* (Toronto: M&S, 2006).

#### Other Publications

“New God.” In *Long Journey: Contemporary Northwest Poets*, ed. David Biespiel Corvallis, 230. Eugene: University of Oregon Press, 2006.

“While You Were Out.” *ARC Poetry Magazine* 59 (2008): 42.

“Heat Rises;” “Second Coming;” and, “Tooklik Ground Squirrels.” *Event* 36 (1) (2007): 48-52.

#### Other Activity

Introductory lecture on “John Newlove and Canadian Poetry” for the premier of the film *What to Make of it All: The Life and Poetry of John Newlove*, Salt Spring Island, BC, April 2008.

### DR CRAIG TAPPING

#### Conference Presentations

“The Environmental Critique in J.M. Coetzee’s *Waiting for the Barbarians*,” at the Congress of the Humanities and Social Sciences, Vancouver, BC, May/June 2008; in conjunction with the Canadian Association for Commonwealth Language and Literary Studies (CACLLS) Conference.

Support for Christopher Traynor, Malaspina University-College alumni 2007, Department of English and Creative Writing, now in graduate studies at the University of British Columbia. This was Mr. Traynor’s first conference presentation; Dr. Tapping mentored Chris’s final year special studies in Caribbean poetry.

“Speaking Yoruba on Vancouver Island,” at the Congress of the Humanities and Social Sciences, Vancouver, BC, May/June 2008; in conjunction with the Canadian Association for Commonwealth Language and Literary Studies (CACLLS) Conference; panel discussion by Association for Bibliotherapy and Applied Literature on the social/cultural values of post colonial/aboriginal literatures.

The paper examines how a Nigerian play – *Death and the King’s Horseman* by Wole Soyinka – opens the Nanaimo undergraduate classroom to discussion of alien culture, the other and the shared trans-global experience of consumerist fatigue. The play examines the corruption of traditional spiritual values by the gluttony on offer in the marketplace and provokes students into a critique of advertising, the abuses of holidays turned into shopping sprees, and the shared

experience of being colonized by the same foreign power/imperialism and by “things” i.e. late 20th century capitalism and its attendant gadgetry. Theatrical tragedy creates a performance wherein what is initially alien/foreign is made personal and local.

## DR LYNN WYTENBROEK

### Other Activity

Appointed Adjunct Scholar at the Institute on Globalization and the Human Condition, an affiliation intended to advance research into the effects in the last half century of economic globalization on the environment. The appointment facilitates work with graduate students at the Institute as well the presentation of seminars and/or working papers as research progresses.

## First Nations

### DR LAURIE MEIJER DREES

#### Article

“The FNA and the IAA: Native Political Action in the 1960s,” *European Review of Native American Studies* 21(1) (2007): 31-40.

A comparison of Indigenous political action in Fairbanks, Alaska and the Indian Association of Alberta in the 1960s indicating how both organizations prioritized Aboriginal control over Aboriginal education as one of their political goals. The research is based on oral history research and challenges the notion that land claims were the primary concern of Aboriginal political organizations in this time period.

#### Conference Presentations

“The Significance of the Indian Hospital History: Research Methods,” at the Canadian Indigenous/Native Studies Association Conference, Saskatoon, BC, June 2007.

“Chance, Change and Community: A Framework for Teaching First Nations Studies with Resident Elders,” at the S'tenistow Education Conference, Victoria, BC, May 2007.

“Indian Hospitals and Aboriginal Nurses: Canada and Alaska,” at the Canadian Historical Association Conference, Saskatoon, BC, June 2007.

#### Other Activities

Peer review of Social Sciences and Humanities Research Council (SSHRC) Standard Research Grant (SRG); author of the Aboriginal Service Plan: Malaspina University-College.

#### Other Publication

A review of *Chief Smallboy: In Pursuit of Freedom* by Gary Botting for *Canadian Historical Review* 89 (2008).

#### Professional Development

Developed workshop “Teaching with Indigenous Knowledge: Using Local First Nations Protocols in Class Activities” for the Malaspina University-College Teaching and Learning Centre.

## History

### DR TIMOTHY LEWIS

#### Conference Presentation

“Selling Farmers a New Bill of Goods: Advertising Messages in the *Maritime Farmer* and Co-operative Dairyman, 1895-1929,” at the

inaugural New Brunswick and Atlantic Canada Studies Research and Development Centre Conference, Fredericton, NB, June 2007.

The paper examines the extent to which the advertising content of the *Maritime Farmer*, Atlantic Canada's leading early 20th-century agrarian journal, worked to reinforce the values of North America's emerging consumer culture amongst the region's farm populace.

## DR. CHERYL WARSH

### Article

“Corsets, Cars and Cigarettes: Women and Modernity between the Wars in Britain and North America,” *Journal of Women's History* (In Press).

Co-Author Penny Tinkler (University of Manchester).

### Books

*Health, Gender and Popular Culture: Historical Perspective*. Waterloo: Wilfred Laurier University Press (In Press).

An edited collection of research from Canada, US, Australia, and Great Britain.

*The Case for Chaos: Women and Health in North America in the 19th & 20th Centuries*. Peterborough: Broadview Press (In Press).

450 page monograph.

*The Social History of Health in Canada*

Co-Authors Laurie Meijer-Drees (First Nations Studies), Stephanie Buckingham (Nursing).

A heavily illustrated coffee table book-in-progress, requested by Lorimer Press.

### Conference Presentation

“Corsets, Cars and Cigarettes,” at the American Historical Association Pacific Branch Annual Meeting, Honolulu, US, April 2007.

### Other Activity

“From Vim to Popeye”

Front page interview in the National Post and Toronto radio interview concerning “power foods” for kids in the 1910s to 1940s.

## Media Studies

### ROBIN DAVIES

#### Conference Presentation

“The Exploding, Plastic & Inevitable Redux,” at the Interactive Futures Conference, Victoria, BC, November 2007.

A musical performance in collaboration with Adam R. Tindale and others.

### Other Activity

“Building Reusable Electronic Musical Instruments”

Lectures presented to students and faculty at the Alberta College of Art and Design in Calgary, AB.

## DR MARSHALL SOULES

### Conference Presentation

“The Image Dialogue: Agile Computing and Social Commentary,” at the Congress of the Social Sciences and Humanities, Vancouver, BC, June 2008; in conjunction with the Society for Digital Humanities.

Presented in collaboration with Michael Nixon (Department of Media Studies), former research assistant in the Media Research Lab,

the Image Dialogue is an open source web-based application allowing researchers anywhere to upload, catalogue, and comment on images of political and social import found in the public sphere. Using *Ruby on Rails* as the programming platform, interactive tools and a robust database support the comparison and discovery of meaning among groups of images. The Image Dialogue combines contemporary trends in building web applications, i.e. agile methodology, community-driven content, and dialoguing features, with the spirit of dialogic inquiry.

#### Other Activities

“Celebrating Women and Community”

A partnership concert production with the Ladysmith Resources Centre Association and the Media Research Lab, this benefit concert held in Aggie Hall, Ladysmith featured the music of Gerald Fitzella and Mama’s Kitchen. Production assistance, promotion, recording, and filming were provided by research assistants in the Media Research Lab, December 2007.

“Investing in Conflict Tour, with Dawn Paley”

A co-production with the Nanaimo Global Film Festival, the Media Studies Department, and Rights Action, this public lecture and information session focused on Canadian mining activities around the world, especially in Guatemala.

“Film Symposium”

A partnership between First Nations and Media Studies Departments, this one-day film symposium featured screenings and discussion by distinguished First Nations film-makers Christine Welsh (*Finding Dawn*) and Tracey Kim Jack (*Silent Violence, Magic on the Water*).

#### Films

*Cuba Now*

A film of the joint lecture and slide presentation with Dr. Ramiro Zayas Frutos from the University of Habana, Cuba, this presentation focuses on Cuban history, culture, and politics since the Revolution and features photographs of Cuban propaganda taken by Marshall Soules in 2006-2007 during his SSHRC-funded research “Canada-Cuba Image Dialogue.” Produced with the help of research assistant Chad Schroter-Gillespie in the Media Research Lab.

*Tom Wayman*

A film of the Ralph Gustafson Distinguished Poet reading at Malaspina University-College. Production assistance was provided by research assistants Chris Rahm and Chad Schroter-Gillespie in the Media Research Lab.

#### Projects

*Media Research Lab Website*

A collaboration with Alanna Edwards (Department of Media Studies) and research assistant Shaun Wong, this new website supports the transition of the Centre for Digital Humanities Innovation (CDHI) to the Media Research Lab (MRL) by showcasing the activities of the faculty and research assistants involved in lab activities.

*The Image Dialogue*

A collaboration with Michael Nixon and research assistants from the Media Research Lab, the Image Dialogue ([imagedialogue.ca](http://imagedialogue.ca)) is an open-source database and content management system (CMS) built by its users. This website accommodates the archiving, display, and analysis of posters, murals, billboards and graffiti with a political or

social message from around the world, but beginning with a comparison between Canada and Cuba, circa 2006-2007. As one of its objectives, the Image Dialogue project explores the significant human rights issue of communicating social and political commentary in the public sphere, equally important – for different reasons – in nations as politically diverse as Canada and Cuba. This project received a SSHRC Image Text Sound Technology (ITST) Grant, 2007-2008.

## Music

### SCOTT LITTLEJOHN

#### Other Activities

Chaired the Private Career Training Institutions Agency (PCTIA) accreditation audit of Stylus Music School, a New Westminster recording, engineering/production, and training facility and Columbia Academy, Vancouver’s oldest recording, film, and broadcast performance school. The PCTIA, a provincial government agency that regulates and oversees provincial standards for private post-secondary schools [www.pctia.bc.ca](http://www.pctia.bc.ca), accreditation is required for students to qualify for student loans, and involves a PCTIA staff member and a team of experts’ which for this audit included writer-musician and Order of Canada member, John Gray.

## Continuing Studies

### Adult Basic Education

#### KATE NONESUCH

##### Article

“Changing the Way We Teach Math,” *Research and Practice in Adult Literacy* 63 (Summer 2007): 9-11.

A report on a project asking: “How can ABE math instructors in BC apply research findings to their practice?” The project resulted in a manual for instructors ([www.nald.ca/library/learning/mathman/cover.htm](http://www.nald.ca/library/learning/mathman/cover.htm)) and a literature review ([www.nald.ca/library/research/morecomp/morecomp.pdf](http://www.nald.ca/library/research/morecomp/morecomp.pdf)). The RaPAL Journal is the journal of the Research in Practice in Adult Literacy Network, a UK organization focused on adult literacy.

“Changing Practice, Expanding Minds.” *Focus on Basics* 9 (A) (May 2008).

Available online [www.ncsall.net/fileadmin/resources/job/2008/job\\_9a.pdf](http://www.ncsall.net/fileadmin/resources/job/2008/job_9a.pdf).

## Education

### Education

#### DR MARY LINDSAY

##### Conference Presentations

“An Instinctual Archetype in the Academy: Curse or Gift?” at the 13th Biennial International Study Association on Teachers and Teaching Conference “Totems and Taboos: Risk & Relevance in Research,” St. Catharines, ON, July 2007.

A narrative study presented as performance ethnography, this work considered 'caring about' teaching as an ethical obligation and 'caring in' teaching as a natural or instinctual response that may compromise a teacher's well-being.

"A Thread from 'Spider Makes a Web': Connecting Aboriginal Head Start and Aboriginal Kindergarten Programs"

Co-presented with Pam Moore (Comox Valley Aboriginal Head Start), and Susan Leslie (School District #71 Aboriginal Kindergarten), this session at The Early Years Conference: Valuing All Children, in Vancouver, February 2008, examined agenda congruencies and transitions between two early childhood programs and discussed implications for strengthening program content, pedagogy, and transition fluidity in response to community-derived meaning, goals, and values of Aboriginal education.

"We Make a Path by Walking: Situating Our Place in Aboriginal Education," at the Canadian Council on Learning Conference "Seeing Ourselves in the Mirror: Giving Life to Learning," Vancouver, BC, February 2008.

Co-Panellists Teresia Loudon (Comox Valley Aboriginal Head Start), Susan Leslie, Jackie Lever, Gordon McMahon, Ken Lees, Lynn Joseph (School District #71 Aboriginal Education), and Jackie Finnie (Elder).

This presentation considered a community-based inquiry into locally-derived meanings and values of Aboriginal education and how existing education programs support and intersect with community beliefs. Drawing upon naturalistic inquiry, the panel invited the audience to "walk" with them by listening, questioning, and sharing to co-construct and refine a collective understanding.

"Listen! Spider's Making a Web: Researching in Aboriginal Education," at the Shawane Dagoiwin ~ Aboriginal Education Research Forum, Winnipeg, MB, May 2008.

Co-Presenters Lynn Joseph (School District #71) and Carrie Reid (Mostly Salish Consulting/PhD Candidate).

Aligning with the indigenous knowledge bundle of comprehending and nourishing the learning spirit, this presentation considered the perspectives, relationships, and interactive processes connecting Aboriginal respondents and Aboriginal and non-Aboriginal researchers as they endeavour to 'come to one mind' about Aboriginal education.

#### Other Activity

Reviewed conference papers submitted to the Canadian Society for the Study of Education Annual Conference "Thinking beyond Borders Global Ideas: Global Values," Vancouver, BC, May/June 2008.

#### Other Publication

"Aboriginal Education: A Working Agreement in Comox Valley." *BCTF Teacher Newsmagazine* (April 2008).

An article describing Aboriginal education in School District #71.

#### Project

*Spider Makes a Web: Situating Aboriginal Pedagogy and Curricula in Contemporary Contexts*

This community-based inquiry, funded by the Canadian Council on Learning, continues in Comox Valley to focus on learning from place, comprehending learning spirit, and pedagogy of professionals and practitioners in learning.

## HEATHER PASTRO

### Conference Presentation

"The Integration of Visual Art and Language Art Through the Use of Story Telling and Story Quilts and Their Application in the Classroom," at the National Council for Teachers of English World Congress, New York City, US, November 2007.

Co-Presenter Virginia McCarthy (Education).

### Other Activity

Workshop Series: Elementary Art in the Classroom

Teachers and students were introduced to the artist, Van Gogh, through different print and electronic resources. Workshop participants were then encouraged to paint sunflower paintings on canvas with acrylic paints in his unique style.

## Health and Human Services

### Bachelor Science Nursing

#### LEIGH BLANEY

##### Article

"Beyond Knee-jerk Reaction: CISM as a Health Promotion Construct." *Irish Journal of Psychology* (2008) (In Press).

##### Conference Presentation

"Critical Incident Stress Management (CISM): Knee-jerk Reaction or Health Promotion in Action?" at the British Psychological Society Annual Conference "Psychology and the Fire and Rescue Service," Dublin, Ireland, April 2008.

#### DR ANN HOLROYD

##### Articles

"Attitudes toward Aging: Implications for a Caring Profession." *Journal of Nursing Education* 47 (Spring/Summer 2008) (In Press).

Feature article.

"Interpretive Hermeneutic Phenomenology: Clarifying Understanding." *Indo Pacific Journal of Phenomenology* 8(1) (Spring 2008): 1-12.

A paper detailing why the work of hermeneutics is not to develop a procedure for understanding, but to clarify the conditions of understanding. In this explication, the authors examine the hermeneutic experience and in doing so, connect it to the practical and the historical horizons of the life-world of health professionals, particularly nurses.

##### Professional Development

Associate Health Researcher, Centre on Aging, University of Victoria. A Michael Smith Foundation Health Researcher Infrastructure Grant will fund research focused on understanding vulnerability and promoting health among individuals, populations, and systems.

##### Conference Presentations

"Interpretive Hermeneutics and Modifying the Modern Idea of Method," at the 8th International Annual Advances in Qualitative Methods Conference, Banff, AB, September 2007.

"Attitudes toward Aging: Implications for a Caring Profession," at the Centre for Aging Conference "Showcase of Research in Aging," Victoria, BC, June 2007.

“Rethinking Current Perspectives toward Chronic Illness,” at the Canadian Association of Schools of Nursing (CASN) Conference, Victoria, BC, 2006.

### Project

#### *A Pilot Study of Seniors' Experiences with Medication*

A pilot study exploring how seniors understand medication through a structured set of open-ended interviews with 20 subjects (10 women and 10 men) currently medicated with one or more prescription drugs. Subjects to be interviewed twice for reflective querying and validation by Stephenson and Holroyd, both experienced with qualitative, dialogic ethnographic interviewing techniques (Denzin and Lincoln, 2000). Because of generational differences in the drugs prescribed, the number of prescriptions per individual, and the kinds of illnesses the subjects likely experience, the study group will be broken into two cohorts: 65-74, and 75 and older.

### MAGGIE KENNEDY

#### Conference Presentation

“Nat and Nellie – The Traveling Nurses’ Show,” at the 8th International Family Nursing Conference (IFNC), Bangkok, Thailand, June 4-7, 2007.

Co-Presenter A. Grieve.

“Nat and Nellie – The Traveling Nurses’ Show” was designed in response to a call from the Nursing Directorate, British Columbia Ministry of Health Planning, to implement and evaluate a program to increase enrolment of First Nations students in nursing programs. This project (2003-2006), a collaboration amongst First Nations community leaders and educators, community health care professionals, BSN students and faculty at Malaspina University-College, uses interactive storytelling, posters, dolls, and medical toys to encourage children to role-play nursing activities.

### Project

#### *Indonesia Study Abroad Project*

Visit to Widya Mandala Surabaya Catholic University (WMSCU) in Surabaya, Java, Indonesia, to meet with faculty, students, and agency staff, and visit existing and potential practice placements such as pre-schools, day cares, schools, orphanages, community outreach programs, and parenting programs. The project, funded by the Canadian International Development Agency through the Canadian Colleges Partnership Program and the Association of Community Colleges of Canada, allows Bachelor of Science in Nursing students to work together with the Early Childhood Education and Care (ECEC) and the Child and Youth Care (CYC) programs at Malaspina University-College, and the Psychology and English programs at WMSC, to develop ECEC curriculum in Surabaya, and create practical experiences for students interested in overseas practicum opportunities.

## Community Support Worker

### MALERIE MEEKER

#### Conference Presentations

“The Ripple Effect: Exploring the Power of Leadership and Community Development,” at the BC Association for Community Living, Maple Ridge, BC, November 16-18, 2007.

Co-Facilitators Laney Bryenton (Executive Director) and Mitch Loreth (Coordinator of Inclusive Education and Family Support).

A three day training retreat for families who have a member with a developmental disability.

“The Ripple Effect: A Family Advocacy and Leadership Development Retreat,” at the BC Association for Community Living, Nanaimo, BC, February 15-17, 2008.

Co-Facilitators Laney Bryenton (Executive Director) and Mitch Loreth (Coordinator of Inclusive Education and Family Support).

A three day training retreat for families who have a member with a developmental disability.

### Other Activity

“Intent to Reality: CLBC’s Evolving Transformation from an Advocacy Perspective”

Interactive session documenting consumer experiences of Community Living BC services and supports in order to assist advocacy activities by the BC Association for Community Living.

### Project

*Community Living for Everyone – A Provincial Forum on Supporting Adults with Complex Health Care Needs: Report and Recommendations* Facilitated the Provincial Forum “Supporting Adults with Complex Health Care Needs” and drafted/submitted the final advocacy report to Community Living BC. Experts and care providers explored service gaps and service innovation for individuals living in community with developmental disabilities and complex health care needs. The intent of the advocacy report is to inform and influence the development of government service and support policies for the target group.

## Management

### Accounting/Law

### CHRISTOPHER BURNLEY

#### Other Publications

“Case Question Heli Well Canada Ltd.: An Intermediate Accounting Application”

A case developed for use in the first intermediate accounting course at the undergraduate level. Learning objectives for the case include: having students practically apply many of the key accounting concepts and principles covered in intermediate accounting, requiring students to conduct research in the CICA Handbook and make use of the conceptual framework to develop arguments in support of accounting recommendations, and utilizing the financial statements of both Canadian and international public companies to determine generally accepted industry practices. This case was awarded 2nd place in the Canadian Academic Accounting Association’s Annual Case Competition for 2007/08, a blind review process coordinated by the CAAA’s Education Committee.

#### Conference Presentations

“Audit & Assurance: A Comparative Study of Practices in India and Canada,” at the University of Delhi’s Annual “Investing in Indian Capital Markets Seminar,” New Delhi, India, February 2008.

“A Comparative Analysis of the Indian and Canadian Financial Reporting Systems,” at the Integrated Academy of Management & Technology’s Seminar, Ghaziabad, India, February 2008.

"A Comparative Analysis of the Indian and Canadian Financial Reporting Systems," at the Apeejay Institute of Technology's "Financial Integration for Global Operations Seminar," Noida, India, February 2008.

"Heli Well Canada Ltd.: Writing Successful Accounting Cases," at the Canadian Academic Accounting Association Annual Conference, Winnipeg, MB, May 2008; panel discussion "Writing and Publishing Accounting Case."

Invited, as a result of placing 2nd in Canadian Academic Accounting Association (CAAA) 2007-2008 National Case Competition, including case dissemination and subsequent critique by fellow panel members in a workshop designed to assist faculty in writing and publishing accounting cases.

## Economics

### DR KEITH JENSEN

#### Book

*Portfolio Analysis, Construction and Management*, Nanaimo: Malaspina University-College, 2007.

A draft textbook manuscript on financial portfolio analysis with PowerPoint and spreadsheet supplements for use in undergraduate finance programs.

#### Other Publication

Authored PowerPoint lecture slides to accompany the publication of the second edition of *Principles of Corporate Finance*, 2nd Canadian Edition by L. J. Gitman and S. M. Hennessey. Toronto: Pearson Addison Wesley (In Press).

#### Curriculum Development

Global Investment Management – MBA elective

Developed course syllabus for fall 2008 MBA elective course on Global Investment Management. The course examines the management of financial asset investments globally, (equities, bonds, derivatives) from their initial public offerings in various markets to the international cross-listing of securities and global issuance. Methods of valuation, portfolio construction, and risk management are covered, as well as how institutional and high net worth investors currently diversify their asset holdings, and plan for risk management using currency and derivatives hedges.

#### Other Activities

2007-08 BC Portfolio Management Challenge

Supervised 18 student teams in the BC Portfolio Management Challenge. Two of these placed in the top ten of the nearly 300 provincial teams, with gains of more than 20% above the investment benchmark.

Reviewed textbook manuscript entitled *Investments* 3rd Canadian Edition by Cleary and Jones for John Wiley & Sons, Canada.

#### Graduate Student Supervision

Ravee Chaiwiriyachot

Master of Business Administration, Malaspina University-College  
Thesis Title: "Examination of Fama-French Model on Thai Stock Market."

An examination of the application of the CAPM and the Fama-French three factor valuation model to all non-financial firms listing on the

stock exchange of Thailand for the period 2001-2006, suggesting investors in Thailand can select some combination of big and low book-to-market companies in addition to market portfolio to generate risk-adjusted returns.

### DR HARRY SACKEY

#### Articles

"Private Returns to Education in Ghana: Implications for Investments in Schooling and Migration." *African Economic Research Consortium Research Paper* 174 (2008): 1-33.

"The Determinants of School Attendance and Attainment in Ghana: A Gender Perspective." *African Economic Research Consortium Research Paper* 173 (2007): 1-34.

"Aid Effectiveness in Africa." *African Development Review* 20(2) (2008): (In Press).

Co-Author John Loxley.

#### Chapter

"Informal Sector Activities and Urban Poverty in Ghana: Patterns and Poverty Policy Options." In *Poverty Reduction Strategies in Action: Perspectives and Lessons from Ghana*. eds. Joe Amoako Tuffour and B. Armah, 243-270. Toronto: Lexington, 2008.

Co-Author J. Amoako Tuffour.

#### Conference Presentation

"Private Investment for Structural Transformation and Growth in Africa: Where do Small and Medium Sized Firms Stand?" at the African Development Bank and the United Nations Economic Commission for Africa Conference "African Economic Conference on Opportunities and Challenges of Development for Africa in the Global Arena," Addis Ababa, AFR, November 2007.

## Management

### DR BONITA RUSSELL

#### Article

"Strategic Heterogeneity in the Global Mining Industry." *Transnational Corporations* 16(3) (December 2007): 1-34.

Co-Authors Daniel Shapiro and Leyland F. Pitt.

An examination of the strategies of a sample of the 26 largest mining firms in the world showing a relatively high degree of strategic homogeneity among them.

### DR LORNA KAUFMAN

#### Ph.D. Dissertation – Oral Defence

Successfully defended doctoral dissertation, "When Spirituality 'at Work' means 'in the Academy': The Spirituality of Business Academics at Work" at the Haskayne School of Business, University of Calgary.

### DON MISKIMAN

#### Book

*The Canadian Collective Bargaining Simulation*. 4th edition. Nanaimo: Malaspina University-College, 2008.

Co-Author S. Miskiman.

A Canadian collective bargaining simulation normed to federal and provincial labour laws and legislation, providing hands-on experience in bargaining preparation, negotiations, costing proposals, and writing an agreement.

### Conference Presentations

“Exploring Workplace Cultures,” at the International Association of Administrative Professionals (IAAP) Meeting, Nanaimo, BC, February 2008.

A presentation covering how people interact with natural and constructed environments; how people attach meaning and organize place and space in organizations; and how artefacts, values and beliefs reflect the constructed environments – in this case, the workplace – and influence employees, and their interactions.

“Sustainable Enterprises and the Middle Way,” at the 15th Annual Filial Piety Conference, Jijangam, Korea, April 2008.

A presentation showing how Buddhism’s Middle Way offers a path for the establishment and growth of sustainable enterprises which respects the triple bottom line – social, ecological and financial – without making any one more dominant than another.

### JUDY PALM

#### Other Activity

Reviewed four texts in the areas of personal finance, finance, business mathematics, and statistics; produced PowerPoint slides for the 7th edition of *Contemporary Business Mathematics with Canadian Applications*; and produced instructor resource manual for the 8th edition of *Contemporary Business Mathematics with Canadian Applications*.

#### Other Publication

Contributed material to 8th and 9th editions of *Personal Finance for Canadians*.

### DR ALEXANDER PEVEC

#### Article

“Student Preferences and Pricing and Costing of Education,” (Online) [www.allacademic.com/meta/p268665\\_index.html](http://www.allacademic.com/meta/p268665_index.html).

This article, presented at the MPSA Annual National Conference in Chicago, April 3, 2008, is an analysis of student preferences in an academic setting, determining revenue drivers and cost drivers for the academic community.

### DR ROBERT WILLIS

#### Articles

“Enhancing IS Education with Flexible Teaching and Learning,” *Journal of Information Systems Education* 18(3) (Fall 2007): 297-302. A discussion of the need to use technology to design and deliver flexible, innovative, exciting, relevant learning experiences. Most importantly, Information Systems (IS) offers students increasing control over, and active participation in their own learning.

“Do the Ends Justify the Means? A Gramscian Critique of the Processes of Consent during an ERP Implementation.” *Information, Technology & People* 20(3) (2007): 212-234.

An investigation of the dynamics behind culture and fit with Enterprise Resource Planning (ERP) systems. One overlooked factor in the successful implementation of ERP systems is cultural fit: the need to choose and adapt a system to current organizational practices. This paper, a Highly Commended Award Winner at the Emerald Publishing Literati Network Awards for Excellence 2008, was singled out as “one of the most impressive pieces of work the team has seen

throughout 2007” by the journal’s editorial team, many of whom are eminent academics or managers.

### Graduate Student Supervision

Kenneth Duane Owen

Master of Management, Lakehead University

Thesis Title: “An Examination of the Effectiveness of a Folksonomy when Implemented in a Learning Object Repository.”

A project to establish whether socially constructed metadata (folksonomy) can be used to improve the electronic collection, organization and dissemination of information by examining three questions: Do folksonomies identify valuable information? Can a folksonomy be effective in a Knowledge Management (KM) environment? Does the folksonomy have parameters, such as size or tag count, that affect its ability to satisfy user expectations? The study shows how folksonomies internalize value and that a folksonomy can play a role in a knowledge management solution.

### Other Publication

*Journal of Information Systems Education* 18(3) (Fall 2007).

Guest Editor with Dr. S. Goode (Australian National University; Canberra, Australia) and Dr. James Wolfe (Illinois State University; Normal, Illinois, USA).

## Law

### DANA CHAMBERLAIN

#### Other Activity

Educational Resource for Ethical Research

Collaborator John Anderson (Criminology).

A PowerPoint presentation to inform faculty and students about the rationale for conducting ethical research, protecting privacy, and the process for approving human research at Malaspina University-College.

## Recreation and Tourism

### DR THOMAS DELAMERE

#### Article

“Measuring the Social Impact of Festivals.” *Annals of Tourism Research* 34(3) (2007): 805-808.

Co-Author Dr. Rick Rollins.

A description of replication studies involving the Festival Social Impact Attitude Scale (Delamere, 1998). On a practical basis, these studies provide residents, festival organizers, and civic officials with community attitudes toward the social impact of festivals, and the dynamic nature of those attitudes.

#### Chapter

“Festivals.” In *Arts and Cultural Programming: A Leisure Perspective*. eds. Gaylene Carpenter and Douglas E. Blandy, 129-142. Champaign: Human Kinetics, 2008.

A discussion of the importance of festival as a source of community identity and development, and the artistic and cultural capital that is reflective of the diverse nature of our communities. This book focuses on options in arts and cultural programming from a leisure standpoint.

### Conference Presentation

"The Importance of Understanding the Social Impacts of the Jazz Festival: Community Preferences and Priorities," at the 2008 Leeds International Jazz Conference "Jazz Places and Spaces," Leeds, UK, March 2008.

A discussion as to why festival organizers, festival performers, and local residents should know the social impacts of their festival; how they can collect such information; and how they can report that social impact along with the more frequently obtained economic impact of festivals.

### DR GRANT MURRAY

#### Articles

"Conceptual and Practical Issues in Defining Conservation Success: The Political, Social and Ecological in an Organized World." *Journal of Sustainable Forestry* (In Press).

Co-Authors S.R. Brechin and K. Mogelgard.

An exploration of the complex notions that should be considered when defining success with respect to international nature conservation efforts. Framing success for conservation efforts in protected areas is multifaceted, and involves a number of perspectives and actors representing multiple interests from local to international and across such domains as politics, economics, social legitimacy, scientific (ecological) knowledge, and the goals and interests of the implementing organizations. A selective focus only on one criterion, biodiversity protection, has biased the current discussion on defining protected area success. The study draws broadly on existing literature as well as a specific study case of conservation efforts in Quintana Roo, Mexico.

"The Importance of Scale and a Multi-Method Approach in Reconstructing Socio-Ecological System Change in the Newfoundland Inshore Fisheries." *Coastal Management* 36(1) (2008): 1-28.

Co-Authors B. Neis and D.C. Schneider.

A multi-scale historical reconstruction of post World War II social-ecological interactions within fisheries in Newfoundland and Labrador on Canada's East Coast to explain resource degradation in managed fisheries. Users of the ratchet metaphor tend to rely on large-scale, macro-level data. This case study draws on landings data, other archival information, and the local ecological knowledge of fish harvesters. Findings indicate that while the ratchet metaphor was consistent with large scale trends towards intensification of effort (by some measures) leading to over-harvesting at macro (province wide) levels, it masked substantial variability at smaller time and space scales, thus oversimplifying understanding of the dynamics of interactive restructuring in social ecological systems.

"Mapping Cod: Fisheries Science, FEK, and Cod Migrations in the Northern Gulf of St. Lawrence." *Human Ecology Online* DOI 10.1007/s10745-008-9178-1 (June 2008).

Co-Authors B. Neis, C. Palmer and D.C. Schneider.

An article comparing scientific texts and maps about the migrations and stock structure of cod in the Northern Gulf of St. Lawrence to texts and maps generated by the authors through the collection, aggregation and interpretation of commercial fish harvesters' ecological knowledge (FEK). In the search for social-ecological system health, recent scholarship has focused on integrating local and/or traditional knowledge with conventional scientific information in fisheries

management to improve the factual foundation upon which to base management decisions and to strengthen support for such decisions. This study shows that each knowledge system is 'situated' both socially and ecologically, that each paints an incomplete picture, and that FEK provides a valuable complement to scientific information by providing complex information on the local scale. The result is a much larger discussion about the challenges and potential benefits of the integration project.

"State Policy, Livelihood Protection and Gender in Coastal Communities," *International Journal of Canadian Studies* (In Press).  
Co-Authors M. McDonald and B. Neis.

A look at the interactions between environmental and industrial restructuring within the Newfoundland and Labrador fishery, and regime shift in three main policy areas related to fisheries. The focus is the gendered consequences of interactive restructuring across policy areas as it affects the ability of women and men in fisheries households in Newfoundland and Labrador Canada to make a living. The three main policy areas include fisheries management policy, Employment Insurance policy and policy related to the regulation of occupational health and workers' compensation. The study documents important similarities in the overall pattern and outcomes of regime shift within these three policy areas and points to ways these changes have interacted with resource degradation and industrial restructuring to influence the lives and livelihoods of fishery dependent people.

#### Conference Presentations

"Creeping Enclosure in Marine Fisheries: Reports from New Jersey Fishermen," at the NE Fish and Wildlife Conference, Galloway, New Jersey, 2007.

Co-Presenters Teresa Johnson, Bonnie McCay and Kevin St. Martin.

"Communities and Marine Protected Areas" and "Aquaculture and Community Engagement: Challenges and Opportunities" at the 8th Coastal Zone Canada Conference "Managing our Oceans and Coasts for a Sustainable and Prosperous Future," Vancouver, BC, May 2008.

"Cooperatives and the Commons: Lessons from Baja California's West Coast," at the Annual Meeting of the American Fisheries Society "Bio Complexity, Fisheries and Coupled Human Natural Systems," San Francisco, US, 2007.

Co-Presenters Wendy Weisman, B. McCay, G. Ponce Diaz, M. Beltran, J. Urchiaga, G. Saad, M. Lagunas, and M. Ramade.

"What can Genomics Offer?" at the Speaking for the Salmon Series Meeting "Encouraging Innovative Solutions for Sustainable Salmon Aquaculture," Vancouver, BC, 2008.

Co-Presenters Dr. Ben Koop (UVic), Simon Jones (DFO) and Willie Davidson (SFU).

#### Other Activities

"Social Science and Fish: An Interdisciplinary Research Agenda" Invited presentation at the Student Biotechnology Network Biotech Speaker Series, Victoria, BC.

"Moving Knowledge: LEK, Science and Social Ecological Health in Coastal Communities"

Presented at the British Columbia Centre for Aquatic Health Sciences "Workshop Traditional Ecological Knowledge".

“Oral Histories, Local Knowledge and Social Ecological Change: An Interdisciplinary Research Agenda”

Invited lecture at the University of Washington’s Friday Harbour Marine Laboratory, Washington, US.

### Workshops

“Ranking and Mapping Threats and Impacts to Marine Ecosystems in the California Current”

Invited workshop participant at the National Centre for Ecological Analysis and Synthesis, Santa Barbra, US.

“Oceans Governance on Canada’s West Coast”

Invited participant at a workshop convened by the Maritime Awards Society, Sidney, BC.

“California Current Ecosystem Based Management Initiative”

Invited participant at a workshop jointly hosted by the Communication Partnership for Science and the Sea (COMPASS) and the Institute of Marine Sciences at the University of California, Santa Cruz, US.

### Other Publications

“Aquaculture and Community Engagement: Challenges and Opportunities”

Technical report prepared for the BC Ministry of Agriculture and Lands.

“Cumulative Effects and the Human Environment: An Oral History Approach”

Co-Authors B. McCay, K. St. Martin, and M. Danko.

Final technical report to the New Jersey Sea Grant College Program, New Jersey Marine Sciences Consortium, Fort Hancock, US.

### Projects

*Protected Areas and Poverty Reduction: A Canada Africa Research and Learning Alliance*

Co-Principal Investigator on a successful letter of intent to the SSHRC/IDRC International Community University Research Alliance Program. This project involves collaborators in Ghana, Tanzania and Canada who will examine the relationship between poverty and environmental conservation in rural communities in and around protected areas with a focus on eco-tourism, human wildlife conflict, governance and information sharing/knowledge mobilization.

*North of Cascadia: Preparing for Surprise*

Co-Applicant on a successful letter of intent to SSHRC’s Major Collaborative Research Initiative. The project is being led by Rosemary Ommer (UVic) and involves an interdisciplinary examination of aspects of current socio-cultural and economic processes and structures that are likely to mediate adaptive capacity to the projected impacts of climate change.

*Fjord Ecosystems/Sami Communities: Local Ecological Knowledge and Social Ecological History*

Co-Applicant with researchers from Memorial University and the Centre for Sami Studies, University of Tromsø, on a project funded by the Norwegian Research Council. The project involves integrating Sami knowledge with scientific information with respect to coastal Norwegian fjord ecosystems.

*Baja Bio-complexity Project*

Ongoing collaboration with Rutgers University, Stanford University and several Mexican institutions. Project examines the performance

of several Mexican fishing cooperatives in the context of environmental uncertainty.

*Cumulative Effects and the Human Environment: An Oral History Approach*

Ongoing collaboration with Bonnie McCay and Kevin St. Martin at Rutgers University and the New Jersey Sea Grant Program. Project is examining the cumulative effects of regulatory change on the fishing communities of the Mid Atlantic region of the USA.

*Community University Research for Recovery Alliance*

Co-Applicant on a project led by Dr. Barbra Neis of the Memorial University of Newfoundland. This SSHRC funded project entails community-based research that will support regional efforts to devise and implement a recovery strategy for fish stocks and fishing communities on the West coast of Newfoundland

*Genomics in Lice and Salmon*

Co-Principal Investigator on an interdisciplinary research project funded by Genome BC’s Applied Genomics Innovation Program (together with Ben Koop (UVic), Simon Jones (DFO), and Willie Davidson (SFU)). The project has 4 linked goals: 1) identify salmon genetic responses to salmon lice, 2) identify parasite genetic responses to susceptible/refractory hosts (vs. temperature, salinity, chemical and biological agents), 3) confirm/define the newly identified Pacific population of *L. salmonis*, and 4) elaborate a history of the sea lice debate and analyze the effective use of science in understanding, and ultimately moving towards the resolution of the sea lice/salmon controversy.

## ROBERT PFISTER

### Book

*Recreation, Event, Tourism Businesses: Start up and Sustainable Operations*. Chicago: Human Kinetics, 2008.

A practical overview of the recreation, event, and tourism (RET) field and the business planning process from both entrepreneurial and operations management perspectives. A new conceptual model of the RET industry is presented and related to existing tourism industry models explaining how the industry works and examining the key components of commercial RET businesses. The book also describes how companies are started, operated, and managed, including information on service issues, risk management, finance, and marketing. Addresses and examples of how to operate RET businesses in a more sustainable environmentally friendly manner are included.

### Conference Presentations

“Ethics, Environmental Management, and Sustainability,” at the Tourism Educators Conference, Whistler, BC, May 2008.

Presentation on actions taken by SME’s to actively engage in Green Tourism practices and adopt social and environmental performance measures for sustainability reporting.

“Residents’ Attitudes toward Tourism and Perceived Personal Benefits in a Rural Community,” at the Association of American Geographers Conference, Boston, US, April 2008.

This research identifies and examines not only the relationships between personal benefits from tourism and residents’ attitudes toward tourism, but also the nature of benefits associated with tourism. The study, conducted in a small rural community where tourism is still at its emerging stage, found residents’ perceptions of personal benefits

from tourism were closely associated with their attitudes toward tourism. The data lends support and understanding to the social exchange theory in tourism investigations.

## DR DAVID ROBINSON

### Projects

*The Heart of Gold Costa Rica Community Empowerment Project 2004 to 2007*

A community-university research alliance between rural agricultural communities in the Los Santos Region, Costa Rican universities and environmental organizations, and MU-C to create alternative forms of sustainable economic development in the Los Santos Region of Costa Rica. Research themes: 1) Agro tourism design/implementation and its link with Direct Trade models of coffee production; 2) Sustainable ecotourism development models in rural farming communities, and 3) Forest protection based models of educational tourism development. Phase III 2008: Research theme: To research, vision, design and implement a world class 50 km eco tourism trail through the pristine high cloud forest and remote valleys from Santa Maria in central Costa Rica to Quepos on the Pacific Coast. This venture will diversify regional economies and create locally owned and operated eco tourism businesses for local farming families.

2008 placements Brad Goodwin, Maddie Koch, Reiko Allen, Kira Hilderling and Missy Wallman.

*Nicaragua Mesquito Coast Project*

Approached, as Director of the Gold Costa Rica Community Empowerment Project, by representatives of PanaPana – a Mesquitos' Native People organization in Nicaragua – and Partners for Prosperity – a non-profit Canadian international NGO – to represent them on a fact finding mission into hurricane devastated north-western Nicaragua. This assignment was completed in February. Federal government funding allows Malaspina University-College's Heart of Gold project to continue working with these partners on community development work in the coming year. CIDA funding for the project is managed by Partners for Prosperity.

## DR RICK ROLLINS

### Articles

"Perceptions of Tour Guides in Natural Areas." *Journal of Sustainable Tourism* (In Press).

Co-Author Carleigh Randall.

"Motivation, Training and Supervision of Volunteers in Conservation." *Environments* 35(1) (2007): 71-90.

Co-Author Caitlin Douglas.

"Testing the Reliability and Validity of the Festival Impact Scale." *Annals of Tourism Research* 34(3) (2007): 805-808.

Co-Author T. Delamere.

"Applications of Zoning and Limits of Acceptable Change to Manage Snorkelling Tourism." *Environmental Management* 39(6) (2007): 819-830.

Co-Authors G. Roman and P. Dearden.

"Mobility into Tourism." *Annals of Tourism Research* 34(3) (2007): 630-648.

Co-Author N. Vaugeois.

"Perceptions of Diving Impacts and Implications for Reef Conservation." *Coastal Management* 35(2) (2007): 305-317.

Co-Authors M. Bennet and P. Dearden.

### Graduate Student Supervision

Kirsten van der Meer

Master of Arts, University of Victoria

Thesis Title: "Factors Effecting the Development of Ecotourism in Post Tsunami Ko Lak, Thailand"

Merv Jefferies

Master of Arts, James Cook University

Thesis Title: "Exploring Social Enterprise in the Stakeholder Model Used by Tourism Vancouver Island"

Karen Topelka

Master of Arts, University of Victoria

Thesis Title: "An Examination of Snorkelling and Reef Sustainability in Ko Chang, Thailand"

Craigh Hyslop

Master of Arts, Royal Roads University

Thesis Title: "Rock Climbing Ecotourism in Krabi, Thailand"

### Other Activity

Gulf Islands National Park Reserve Advisory Board Member.

### Projects

*Tourism Research Innovation Project (TRIP)*

Co-Investigator with Nicole Vaugeois and Dan Macdonald on SSHRC-funded project developing tourism related knowledge transfer strategies in rural British Columbia.

*Ghana Malaspina Project*

Canadian International Development Agency (CIDA) funded poverty reduction project focussing on environmental education/knowledge transfer in the Sunyani region of central Ghana.

*Customer Satisfaction with the Coast Bastion Inn*

Customer satisfaction study conducted on behalf of the Coast Bastion Inn.

*Public Perceptions of the Urban Forest in Nanaimo*

Community survey conducted with the City of Nanaimo Parks and Recreation Department.

*Recreation Use and Conflict in Elk Beaver Lake Regional Park*

Surveys and observations of recreation use and conflict conducted on behalf of the Capital Regional District of Victoria Parks Department.

## DR NICOLE VAUGEOIS

### Chapter

"Knowledge Mobilization in the Social Sciences and Humanities: Moving Research to Action"

A contributor to Chapter Eight: *KIS* in SSHRC (*Knowledge in Society*) initiative of the Social Sciences and Humanities Research Council of Canada) profiling the Tourism Research Innovation Project.

### Conference Presentations

"Service Learning and Research in Management: A Model in Recreation and Tourism," at the Engagement Conference, Murray State, US, 2008.

The one hour workshop described the model and lessons learned in facilitating undergraduate research in a professional program.

“Engaging All Undergraduates in Research: A Model in Recreation and Tourism Management,” at the Engagement Conference, Murray State, US, 2008.

This invited presentation profiled the model developed by the Department of Recreation and Tourism Management at Malaspina University-College.

“Community Signage Projects,” at the BC Rural Network Conference, 100 Mile House, BC.

Workshop/presentation based on the community signage manual developed by the Tourism Research Innovation Project.

“Developing Conduits to Support Rural Tourism Development in BC: TRIP,” at the Canadian Rural Revitalization Conference, Vermillion, AB, October 15, 2007.

“Principles for Success: TIPS to Support Heritage Tourism,” at the Heritage Tourism: In Search of the Authentic Workshop, Vancouver, BC, February 2008.

“Developing Sustainable Tourism: How Can Branding Help?” at the Learning Initiatives in Rural and Northern (LIRN) Workshop, Ft. St. James, BC, December 7, 2007; in partnership with the Canadian Rural Partnership, SPARC BC, BC Rural Network, SHRA and the Tourism Research Innovation Project (TRIP).

“Exposing Some Realities, Questions and solutions for Growth in Tourism in Rural BC,” at the Cariboo Chilcotin Coast Tourism Association Annual General Meeting and Conference, 100 Mile House, BC, April 2008.

“Innovation in Tourism: Sourcing Ideas from BC Innovators,” at the BC Rural Network Conference, 100 Mile House, BC, March 2008, profiling innovators in rural tourism development in BC.

“Diversification through Tourism Development: Realities and Strategies to Move Ahead,” at the Initiatives in Rural and Northern (LIRN) Workshop, Grand Forks, BC, March 2008.

To assist in exposing economic development alternatives. A full report was compiled.

“Research in Action,” at the Tourism Vancouver Island Annual Fall Road Show, Vancouver Island, BC, 2007.

#### **Other Publications**

*Welcome: A Manual to Enhance Community Signage and Visitor Experience*

Co-Author student Chrystal Stone (Recreation and Tourism).

Written to encourage communities to undertake a signage audit and improve wayfinding as a method to tourism development, this manual is used throughout BC as part of the Tourism Research Innovation Project (TRIP).

“Mowachaht Muchalaht First Nations Tourism Assessment”

Collaborators Dan McDonald and five (5) undergraduate students.

A project, supported by the Ministry of Tourism Sport and the Arts, using participatory rural appraisal techniques to provide the Mowachaht Muchalaht First Nations communities with perspectives on tourism development.

#### **Projects**

*Coastal BC Extension Tour*

Collaboration with Dan McDonald and Pat Maher (UNBC), and eight undergraduate students from Malaspina University-College,

University of Northern BC, College of the Rockies and Thompson Rivers University. The research team undertook a three week extension tour throughout coastal BC to explore tourism development opportunities with the themes of aboriginal tourism and sustainability. Part of the Tourism Research Innovation Project (TRIP).

*Exploring the Impact of User-centered Web Design to Knowledge Mobilization in Rural Community Settings*

In collaboration with Alanna Edwards (Media Studies), the research objectives of this study are: to engage in a collaborative approach to design a user-centered website that benefits from blended knowledge from media studies and rural economic development; to determine if the information architecture (IA) of a website, based on a user-centered design approach is effective for the end user (in this case community-based users in rural settings); to gain insight into the requisite knowledge and skills required to engage faculty in knowledge mobilization initiatives where an information technology platform is used, and where non traditional user groups are the focus. This project receives funding support from MRAC.

*Tourism Research Innovation Project (TRIP)*

Co-ordinated the second year of a three year SSHRC funded, multiple partner provincial initiative in knowledge mobilization with rural communities in British Columbia. Activities in 2007/08 included a three week extension tour in central BC (report compiled), hiring four regional liaisons (report compiled), designing a new website ([www.trip-project.ca](http://www.trip-project.ca)), presentations at numerous workshops and conferences, and compiling a series of innovation snapshots and case studies.

*Bowen Island Resident Attitudes Towards Tourism Project*

Conducted for the Bowen Island Chamber of Commerce with collaboration by Tourism BC, undergraduate students undertook a study to measure residents of Bowen Island’s perceptions of tourism.

*People’s Voice: Local Government Satisfaction Study*

A study of 3000 households in the Alberni Valley was conducted for the City of Port Alberni, in partnership with the Alberni Valley Safety Net Project, to gain perspectives on local residents’ levels of satisfaction with government services.

*Tourism Development in MacKenzie*

This project used rapid rural appraisal techniques to provide the District of Mackenzie with insights on how to move forward with tourism development.

## **Other**

### **Administration**

#### **JEAN BLACKBURN**

##### **Other Activity**

ACCOLEDS 2007 Conference and Training Session

Malaspina University-College hosted ACCOLEDS 2007, an annual conference for data librarians working in the Western provinces, on December 4-6, 2007. ACCOLEDS (A COPPUL Consortium of Library Electronic Data Services) is a sub-committee of the Council of Prairie and Pacific University Libraries.

**ARLEIGH TRAIL****Other Publication**

"Incorporating Learning Skills into Post-Secondary Courses: An Instructor's Guide to Principles and Strategies"

A collaboration for the Scholarship of Teaching and Learning by participants at the May 2007 Conference of The Learning Specialists Association of British Columbia (LSABC). The resulting document presents a broad range of strategies and applications based on six important aspects of learning: engagement with students, metacognition, intentionality, reading, writing, and exam preparation. The compilation, expansion, and editing of this resource was done by the LSABC representatives of Malaspina University-College and the University of Victoria. Available online via the MU-C Teaching and Learning Centre.

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**Science and Technology****Biology****DR ERIC DEMERS****Article**

"Fish as Sources and Sinks of Nutrients in Lakes." *Freshwater Biology* 53 (2008): 278-289.

Co-Authors J.M. Sereda, J.J. Hudson and W.D. Taylor.

**DR ANDY SPENCER****Articles**

"Action Potential Shape Change in an Electrically Coupled Network during Propagation: a Computer Simulation,"

*Invertebrate Neuroscience* 8 (2008): 83-89.

Co-Author S.D. Buckingham.

"A Naturally Occurring Omega Current in a Kv3 Family Potassium Channel from a Platyhelminth." *BMC Neuroscience* 52 (9) (2008): doi:10.1186/1471-2202-9-52.

**Conference Presentation**

"Evolution of Excitability in Lower Metazoans: Structure and Function of Potassium Channels," at the 6th Okazaki Biology Conference

"Marine Biology," Okazaki, JP, 2008.

**Projects**

*Differentiation of Excitable cells and their Evolution: Role of Potassium Currents in Regulating the Electrical Phenotype*

Natural Sciences and Engineering Research Council (NSERC) Discovery Grant (\$34,380/annum).

*Structure/Function Analysis of Voltage-Gated Potassium Channels*

Canadian Institutes of Health Research (CIHR) Operating Grant (\$100,000/annum).

*In Situ Hybridization of Potassium Channels in a Jellyfish*

NSERC USRA-funded research by Sandy Neal, a graduate of the Department of Biology.

*A Naturally Occurring Omega Current in a Kv3 Family Potassium Channel from a Platyhelminth*

Co-Applicants T.L. Klassen and W.J. Gallin.

*Intramolecular Interactions that Determine Voltage-Sensitivity in a Cnidarian Voltage-Gated Potassium Channel, jShakl*

Co-Applicants T.L. Klassen, M. O'Mara, M. Redstone and W.J. Gallin.

*Identification of Primary Photoreceptors and Recording of Light Induced Currents in the Eyes of the Jellyfish *Polyorchis**

Co-Applicant S. Neal.

**Other Activity**

Appearance on *Project X – Light* aired March 6, 2008 – CBC TV ([www.cbc.ca/projectx/watch.htm](http://www.cbc.ca/projectx/watch.htm)). Project X explores light and experiments with its fundamentals to discover the most cutting-edge light science on the planet.

**ROBERT WAGER****Articles**

"How Organic Food Contributes to Climate Change." *TCS Daily* 08 (August 2007).

A look at CO2 emissions from different forms of agriculture.

"Run for the Hills." *Globe and Mail* 15 (June 2007).

A look at CO2 emissions and Nuclear Energy in Canada.

**DR JANE WATSON****Article**

"Estimating Carrying Capacity for Sea Otters in British Columbia." *Journal of Wildlife Management* 72(2) (2008): 382-388.

Co-Authors E. Gregor, L. Nichol, J. Ford and G. Ellis.

Habitat models and current sea otter population densities off the west coast of Vancouver Island are used to estimate the potential carrying capacity of sea otters off Vancouver Island and then British Columbia.

**Chemistry****DR TODD BARSBY****Article**

"Chemical Cues Induce Consumer-Specific Defenses in a Bloom-Forming Marine Phytoplankton." *Proceedings of the National Academy of Sciences* 104(25) (2007): 10512-10517.

Co-Authors J.D. Long, G.W. Smalley, J.T. Anderson and M.E. Hay.

A study showing chemical cues associated with different grazers induce consumer-specific, but opposing, morphological transformations in the bloom-forming species *Phaeocystis globosa*. Blooms of the phytoplankton *Phaeocystis* can comprise 85% of total production and generate major biogeochemical signals across broad oceanic regions. The success of *Phaeocystis* may result from its ability to change size by many orders of magnitude when it shifts from small cells of 4 to 6 micrometers to large colonies of up to 30,000 micrometers in diameter.

**Conference Presentation**

"Applying a NMR-Based Metabonomics Approach to the Study of Bacteria Secondary Metabolism," at the 1st Annual VIVA NMR Symposium, Vancouver, BC, June 2007.

Presented research related to the use of high-field Nuclear Magnetic Resonance (NMR) experiments to understand what/how/why changes are made to chemical production by bacteria in competitive

situations. This symposium aimed to gather together NMR users from the Pacific Northwest to discuss their research.

### Other Activity

#### *Not Rocket Science: Atoms to Apples*

Produced, with Dr. Alexandra Weissfloch, a monthly segment called "Atoms to Apples" that delves into the science and chemistry behind food and cooking for MU-C's own science-themed radio show, Not Rocket Science, a weekly broadcast that airs at 1:00 pm on Saturdays, 101.7 FM Radio Malaspina.

### Projects

#### *Secondary Metabolites from the Bubble Snail Haminoea vesicula: Isolation, Characterization, and Ecological Activity*

A study of the chemistry or biological activity of indigenous bubble snails of North America, and how to improve upon the methodologies used in prior Haminoea reports. Bubble snails (*Haminoea* spp.), partially shelled marine invertebrates, are found along the North American, Japanese, Spanish and Mediterranean coastlines. Those found in the Mediterranean are known to produce interesting chemicals as a means of communication between snails. Preliminary investigation suggests that bubble snails have interesting chemistry that may have been previously overlooked. Funded by a NSERC Discovery Grant.

#### *Complete Pheromone Characterization of the Pacific Sand Dollar, Dendraster excentricus*

In this project, the chemical that the adult Pacific sand dollars, *Dendraster excentricus*, excrete into their sand beds to trigger their free-living larvae to settle and grow in the safety of their established community, will be isolated and chemically characterized. Naturally occurring chemicals play critical roles as the means of communication between animals, between plants, and between micro-organisms, involving processes as diverse as mate location, gamete attraction, nest recognition, alarm signalling, and chemical defences. However, little is known about the chemical nature of these key molecular signals. Funded by the Bamfield Research Fund.

## DR CHRIS GILL

### Conference Presentations

"New Developments in the Design and Performance of a Thermally Assisted Membrane Interface for the On-line Analysis of VOC's and SVOC's in Air and Water Samples," at the 91st Canadian Chemistry Conference, Edmonton, AB, May 2008.

A thermally assisted membrane interface (TAMI) has been developed as a direct sample introduction platform to couple with an ion-trap mass spectrometer. The polydimethylsiloxane (PDMS) membrane rejects the bulk sample and enriches hydrophobic analytes for continuous online monitoring applications. We report improved performance characteristics including greater sensitivity and faster analytical duty cycle associated with a heating element inside a capillary hollow fibre membrane. TAMIs were evaluated using aqueous solutions of representative VOC's and SVOC's and a flame ionization (FID) detection. The response profiles of loading/unloading of analytes have been investigated as a function of different membrane geometries/thickness as well as various heating modes. The rise time for saturation of response signals were found to decrease exponentially with internal temperature and linearly with the inverse of the membrane thickness.

"Chloromethane production from the photosubstitution of a model DOC compound in marine waters," at the 91st Canadian Chemistry Conference, Edmonton, AB, May 2008.

The aqueous photochemistry of syringic acid (SA) has been studied as a model humic substance to better understand natural photochemical processes in the aquatic environment. We have investigated the production of halomethanes via photolysis in marine and estuarine waters, in an effort to better understand the mechanistic pathways involved in their formation. Since chloromethane has a relatively long atmospheric residence time, this reaction is implicated in the net transport of chlorine from the marine environment to the stratosphere, where it can contribute to ozone depletion. Photochemical product studies reveal that the carboxylate form of SA undergoes a previously unknown pathway that is initiated by charge transfer from the carboxylate to the aromatic system. Membrane introduction mass spectrometry was employed to follow the real-time production of volatile and semi-volatile photoproducts and estimate fluxes.

"Simultaneous On-Line Measurement of AOP Degradation Kinetics for Trace Gasoline Components in Aqueous Solutions and Natural Waters by MIMS-MS/MS," at the 55th American Society for Mass Spectrometry Conference, Indianapolis, US, June 2007.

The contamination of groundwater from leaking underground hydrocarbon storage tanks is a problem with significant environmental consequences. Thus, the treatment of affected water supplies as well as waste waters from remediation and industrial sites is required. Advanced oxidation processes (AOPs) represent a range of chemical and photochemical processes that are used to mineralize contaminants using strong oxidizing agents such as hydroxyl radicals. We presented a systematic comparison of the degradation kinetics for ppb level hydrocarbon mixtures (found in gasolines) in aqueous solutions and natural waters using Membrane Introduction Tandem Mass Spectrometry (MIMS-MS/MS) as an in-situ reaction monitor. A variety of UV mediated AOPs were directly compared to assess the optimum mineralization conditions.

### Articles

"Mathematical Modeling of Membrane Inlet Mass Spectrometry in Cylindrical Coordinates." *Journal of Membrane Science* (In Revision). The time resolved signal generated from membrane inlet mass spectrometry (MIMS) has been modeled in cylindrical coordinates to analyze the data from MIMS experiments, in which a capillary hollow fibre selectively passes a low molar mass analyte dissolved in an aqueous solution to a mass spectrometer. Two approximate solutions are developed to Fick's second law for a step-change in upstream concentration. The first, a finite Fourier transform, gives an accurate description of the MIMS signal at relatively long times while the second, a Laplace transform, gives an accurate description at short times. Analysis of data for trace levels of toluene in aqueous solution using a polydimethylsiloxane (PDMS) hollow-fibre yields the diffusion coefficient, partition coefficient, and their temperature dependences for the toluene/PDMS system.

"Membrane Introduction Tandem Mass Spectrometry (MIMS-MS/MS) as a Real-Time Monitor for Biogenic Volatile Organic Compound (BVOC) Emissions from Plants." *Canadian Journal of Analytical Chemistry and Spectroscopy* 53 (2008): 75-81.

The ability to monitor trace levels of biogenic volatile organic compounds (BVOCs) in real-time is important to the fields of chemical ecology and environmental chemistry. Isoprene is a ubiquitous BVOC that plays an important role in plant physiology and is also involved in a number of environmentally relevant tropospheric chemistries. The use of membrane introduction tandem mass spectrometry (MIMS-MS/MS) is presented as an online analytical technique used to directly monitor the emission of biogenic volatile organic compounds in real-time. We present data for the time-resolved emission of isoprene from potato plants (*Solanum tuberosum*) in response to mechanical wounding and heat stress by continuously monitoring the headspace air of a closed system. We demonstrate as a test case that MIMS-MS/MS is a robust and versatile technique that can be successfully applied as a real-time monitor for trace level (ppbv) biogenic volatile organic compound emissions.

"A Novel Membrane Introduction Analytical System for the Real-time Monitoring of Disinfection Byproducts and Hydrocarbon Contaminants in Water," *Microchemical Journal* 88(1) (2008): 74-81. Co-Authors Jason G.A. Devlin, John A. Amaral and Erik T. Krogh. Described is a system that employs an online membrane introduction (MI) interface coupled with parallel flame ionization and electron capture detectors (FID/ECD). We report the use of a MIFID/ECD system as an online method to detect total volatile organic halides and volatile organic compounds as aggregate parameters in environmental water samples at sub parts-per-billion levels without sample handling or analyte pre-concentration. The instrument provides rapid screening and real-time monitoring capabilities of important classes of water contaminants in a simple system without the vacuum requirements of MS detectors. The MIFID/ECD instrument was successfully used as a real-time reaction monitor for the photodegradation of toluene by an advanced oxidation process and the formation of disinfection byproducts in the chlorination of natural waters. The results compare favourably with those obtained using membrane introduction mass spectrometry.

### Projects

*Impacts of nitrogen fertilization on nitrous oxide dynamics in a Douglas-fir forest*

Co-Principal Investigator David Gaumont-Guay.

This seed project explores the use of conventional and online monitoring technologies (including membrane introduction mass spectrometry) to measure gaseous molecule fluxes (nitrous oxide, carbon dioxide, nitrogen and nitric oxide) from soils in Douglas fir forests. Funded by Bamfield Research Fellowship (\$3,750).

*Measurement of Atmospheric Contaminants in the Victoria Airshed by MIMS-MS/MS*

This was a portion of a larger body of research called the James Bay Air Quality Study. We utilized MIMS-MS/MS to determine spatial and temporal atmospheric contaminant distributions in and around the Victoria harbour during normal operations and during Cruise ship visits. Funded by British Columbia Ministry of the Environment, VIHA and the University of Victoria (\$14,500).

*Thermally Assisted MIMS Interface (TAMIMS)*

Co-Principal Investigator Erik Krogh.

Research aimed at the commercialization of TAMIMS interfaces. Funded by Natural Sciences and Engineering Research Council (NSERC) Idea to Innovation (I2I) Program (\$95,324).

*New Directions and Applications of Membrane introduction Mass Spectrometry (MIMS)*

Co-Principal Investigator Erik Krogh.

Base funding for our fundamental NSERC research related to (MIMS) and its applications for online chemical measurement. Funded by the Natural Sciences and Engineering Research Council (NSERC) Discovery Grant (\$26,000/annum).

### Graduate Student Supervision

Alexander Thompson

Master of Science, Royal Roads University

Thesis Title: "Evaluation of Waste Water Treatment Strategies at the Whistler, BC Treatment Facility"

### DR ERIK KROGH

#### Article

"Membrane Introduction Tandem Mass Spectrometry (MIMS MS/MS) as a Real Time Monitor for Biogenic Volatile Organic Compound (BVOC) Emissions from Plants," *Canadian Journal of Analytical Chemistry and Spectroscopy* 53 (2008).

Co-Authors A.J. Thompson, J.M. Etkorn, D. Van Pel, D.M. Drakeford and C.G. Gill.

"Membrane Introduction Flame Ionization/Electron Capture Detection for the Rapid Screening of Volatile Disinfection Byproducts and Hydrocarbon Contaminants in Water." *Microchemical Journal* 88(1) (2008): 74-81.

Co-Authors Jason G.A. Devlin, John A. Amaral and Chris G. Gill.

#### Conference Presentations

"Disinfection By-Product Formation Rates from Model Compounds, Pharmaceuticals and Personal Care Products Using Membrane," at the 90th Canadian Chemistry Conference, Winnipeg, MB, May 2007: Abstract#1099.

Co-Presenters O.D.M. Stechishin and C.G. Gill.

"Thermally Assisted Membrane Introduction Mass Spectrometry Using a Coaxially Heated Hollow Fibre Membrane Interface for the Analysis of Semi-Volatile Molecules," at the 90th Canadian Chemistry Conference, Winnipeg, MB, May 2007: Abstract #981.

Co-Presenters A.S. Creba, A.J. Thompson and C.G. Gill.

"Modeling of Hollow Fiber Membrane Inlet Mass Spectrometry," at the 2007 American Institute of Chemical Engineers Annual Meeting, Salt Lake, US, November 6, 2007: Abstract #236f.

Co-Presenters D.W. Janes, C.J. Durning, D.M. van Pel, M.S. Lynch and C.G. Gill.

"Simultaneous On-Line Measurement of AOP Degradation Kinetics for Trace Gasoline Components in Aqueous Solutions and Natural Waters by MIMS-MS/MS," at the 55th American Society for Mass Spectrometry Conference, Indianapolis, US, June 2007: Abstract#1342.

Co-Presenters J.H.L. Nelson, J.M. Etkorn, M.C. Lamarche, D.A. Friesen and C.G. Gill.

“Modeling Mass Transport in Membrane Introduction Mass Spectrometry to Measure Diffusion and Partition Coefficients in Capillary Hollow Fibres,” at the 90th Canadian Chemistry Conference, Winnipeg, MB, May 2007: Abstract#547.

Co-Presenters D.W. Janes, C.J. Durning, D.M. van Pel, M.S. Lynch and C.G. Gill.

#### Other Activities

“Research and Scholarly Activity in Undergraduate Education”

Invited panel guest at Malaspina Faculty Association sponsored event.

“Greenhouse Gases & Global Warming: Skeptics, Pragmatists and Controversy”

Invited lecture for Atmospheric Environmental Chemistry, November 30, 2007.

“Future Directions in Real-Time Environmental Monitoring in the Applied Environmental Research Laboratories”

Invited panel guest for Research and Scholarly Activity Office sponsored event “Linking University with Industry.”

#### Curriculum Development

Program and course development for B.Sc. Majors in Chemistry and Environmental Chemistry, Malaspina University-College.

#### Graduate Student Supervision

E. Dallin

Master of Science, University of Victoria

Thesis Title: “Mechanistic Studies of the Photochemical Production of Chloromethane from Syringic Acid Derivatives”

#### Other Publications

“Does Logging Elevated Ultraviolet Radiation Exposure of Streams Impact Juvenile Coho?”

Final Technical Report #Y073151, BC Forest Science Program, May 2007.

Co-Authors M. Bothwell, D. Lynch and E. Krogh.

#### Projects

*System for the Online Measurement of Volatile and Semi-Volatile Compounds and Use thereof*

Co-Principal Investigator C.G. Gill; US Patent Application No. 11/864,572.

*Vancouver Island Aquifer Vulnerability Mapping Project*

Research team member; funded by BC Ministry of Environment, BC Ministry of Health and Regional Districts (\$80,000).

*Segregation and Nutrient Analysis of Forest Litter Fall into Small Streams as a Function of Riparian Zone Set-backs*

Co-Applicant C. Gill; funded by Interfor (\$10,400).

*Thermally Assisted Membrane Introduction Mass Spectrometry*

Co-Principal Investigator C. Gill; funded by Natural Sciences and Engineering Research Council (NSERC) Idea to Innovation (I2I) Program (\$95,324).

*Investigating the Photochemical Formation of Benzene in Beverages and Food Stuffs Using Membrane Introduction Mass Spectrometry*

Co-Applicant C. Gill; funded by Malaspina Research Awards Committee (\$3,600).

*New Directions and Applications of Membrane Introduction Mass Spectrometry*

Co-Principal Investigator C. Gill; funded by Natural Science and Engineering Research Council of Canada (NSERC) Discovery Grant (\$26,000/annum).

*Nutrients and Vitamin D homologs in Fish Serum in Response to UV-b Exposure*

Co-Applicants M. Bothwell and C. Gill; funded by Department of Fisheries and Oceans (\$5,000).

#### Professional Development

Board of Directors, Association of the Chemical Profession of British Columbia; Registered Professional Chemist.

### DR SHAKOUR GHAFOURI

#### Project

*Optimization studies for thermally assisted membrane introduction mass spectrometry (TAMIMS)*

As part of the furthering of the TAMIMS technology towards commercialization which is supported by the NSERC's Idea to Innovation (I2I) program, Dr. Ghafouri was appointed to undertake the optimization studies of the technology. Several issues including the electrolysis of the high-ionic strength water samples were addressed, efficient heating strategies were adopted and a prototype interface device with robust design was built for parametric studies. The performance characteristics of the interface were found to follow a trend with the thickness of the membrane, based on which an optimum geometry was established for the membrane. To expand the versatility of the technology, several environmentally significant Semi-Volatile Organic Contaminants (SVOCs) were tested in diverse matrices and more are planned for near future. The thermal stability, long-term durability and work-to-failure evaluations of the interfaces are in progress.

### Fisheries/Aquaculture

#### DR DUANE BARKER

##### Conference Presentation

“Little Bugs with Smaller Bugs: Preliminary Studies on the Role of Sea Lice as a Vector of Bacteria to Salmon in BC,” at the Aquaculture Association of Canada Conference “Growing Quality Seafood through Innovation,” Saint John, NB, May 2008. The results of this MRF project, examining the role of sea lice as vectors of bacteria, were presented. Audience interest was high, especially regarding future collaborative studies with researchers from Atlantic Canada.

#### Projects

*Identification of Bacterial Pathogens from Sea Lice Infecting Wild and Farmed Salmonids in BC*

Research Assistant Laura M. Braden.

This MRF research explored a novel concept in disease transmission among fish: the ability of a parasite to carry a pathogen (e.g., bacteria) and how it is influenced by location and season (spatiotemporally).

Basically, when and where could sea lice carry important bacterial pathogens of salmon? Using standard bacteria screening protocols, the external surface and internal viscera of sea lice collected from farmed Atlantic salmon from May 2007 to April 2008 were sampled.

Published results include the first isolation of three pathogenic bacteria (*Tenacibaculum maritimum*, *Pseudomonas fluorescens* and *Vibrio sp.*) from sea lice and their salmon hosts. Geographic and seasonal (spatiotemporal) variation in bacteria was evident among external (58-100%) and internal (12.5-100%) lice samples. With such intriguing preliminary results, the researchers propose to examine and describe this association to identify significant geographic, seasonal and biological influences. Funded by the Malaspina Research Fund (\$4,000).

*Immune Response of Cultured Rainbow Trout, Oncorhynchus mykiss, Administered Varying Dosages of Oral Immunomodulators*

Research Assistants Garret Spray, Dave Switzer and Dan Fox.

A concern in aquaculture is whether hatchery reared fish receive the necessary stimuli to develop immunity comparable to that of wild fish. Fish vaccines have successfully been used to boost immunity; however, injection can be laborious, costly and stressful. An alternative method is to use immunomodulators delivered in feed to boost the non-specific immune response and provide protection against many pathogens. As an added bonus, they do not contain any chemicals or antibiotics. This project will measure immune response among cultured rainbow trout fed a commercial immunomodulator, Fin Immune from Aloha Medicinals Inc. The product contains beta glucans, vitamins and minerals and is partly derived from the Cordyceps mushroom. The overall objective of this research is to determine an optimal concentration of this product for cultured rainbow trout that provides enhanced immunity with maximal growth and health. Funded by Aloha Medicinals Inc. (\$7,500).

## DR HELEN GURNEY-SMITH

### Projects

*Developing and optimizing commercial hatchery production techniques for the indigenous cockle (Clinocardium nuttallii)*

Project funded through the Department of Fisheries and Oceans as part of the Aquaculture Collaborative Research and Development Program (ACRDP), in collaboration with Dr. Chris Pearce (governmental scientist) and industrial partner Evening Cove Oysters Ltd. This study is examining optimal diets, rations, stocking densities, rearing temperatures for larval and post-larval cockles. One paper is currently submitted from this work and others are in preparation. This project began in spring 2007 and is due for completion at the end of 2008.

*Shellfish Genome Capacity Expansion*

Secured \$409,890 of \$726,174 needed to build genomics infrastructure at the Centre for Shellfish Research. Funded by Western Economic Diversification.

*On-growing investigations for the optimal commercialization of the indigenous basket cockle (Clinocardium nuttallii)*

Funded by the Aquaculture Collaborative Research and Development Program (ACRDP), Fisheries and Oceans Canada (\$188,918): 2008.

### Conference Presentations

“Developing and optimizing commercial hatchery production techniques for the indigenous cockle (*Clinocardium nuttallii*)” at the 61st Annual Shellfish Conference & Tradeshow, Oregon, US, October 9-12, 2007.

Co-Presenters W. Liu, A.O. Alabi and C.M. Pearce.

61st Annual Shellfish Conference and Tradeshow, Welches, Oregon, US, 2007.

16th Conference for Shellfish Growers, Shelton, Washington, US, 2008.

Pacific Region Integrated Multi-Trophic Aquaculture (Sustainable Ecological Aquaculture) Workshop held by the Pacific SEA-Lab and University of Victoria in Nanaimo, BC, April 11-12, 2008.

Northwest Workshop on Bivalve Aquaculture and the Environment, Washington Sea Grant, Seattle, Washington, US, September 13-14, 2007.

### Other Activities

“Shellfish Health and Husbandry” seminar presented to the British Columbia Innovation Council and the British Columbia Aquaculture Research and Development Committee.

Co-Presenters W. Liu, A.O. Alabi and C.M. Pearce.

“Developing and optimizing commercial hatchery production techniques for the indigenous cockle (*Clinocardium nuttallii*)”

BC Shellfish Growers Association Annual R & D Workshop October 19.

Co-Presenters W. Liu, A.O. Alabi and C.M. Pearce.

Reviewer for Aquaculture and Aquaculture International.

### Publications

“Fertilization and embryonic development in the basket cockle, *Clinocardium nuttallii*.” *Journal of Shellfish Research* 27(2) (2008): 393-397.

Co-Authors W. Liu, A.O. Alabi and C.M. Pearce.

“Broodstock conditioning in the basket cockle, *Clinocardium nuttallii*.” *Journal of Shellfish Research* 27(2) (2008): 393-397.

Co-Authors W. Liu, A.O. Alabi and C.M. Pearce.

“Effects of microalgal diets on the growth and survival of larvae and post-larvae of the basket cockle, *Clinocardium nuttallii*.” *Aquaculture Nutrition*. (Submitted).

Co-Authors W. Liu, A.O. Alabi and C.M. Pearce.

### Professional Development

Mollusc Health and Disease Management Course taught by University Prince Edward Island and held in Campbell River, BC, Oct / Nov 2007.

## DR PENNY BARNES

### Projects

*Shellfish Culture and Particulate Matter Production and Cycling*

This three-year study concluded in 2007 with the submission and acceptance of the final field study report. Dr. Barnes was invited to present research from this study at two international conferences: the Pacific Coast Shellfish Growers Association Meeting in Oregon and the International Shellfish Restoration Conference in the The Netherlands. Dr. Barnes also gave an invited seminar on this research at Simon Fraser University, as part of SFU's guest speaker series, as well as presentations at the National Shellfisheries Association Conference and the Benthic Ecology Meeting, both in Rhode Island, US.

*Population genetics of three species of blue mussel*

Co-Investigators Dr. Ellen Kenchington (DFO), Dr. Dan Heath (University of Windsor) and Jody Shields (University of Windsor). Funded by DFO and D. Heath.

Jody Shields, an MSc student at the Great Lakes Institute of Environmental Research (University of Windsor), and co-supervised by Dr. Barnes and Dr. Dan Heath, successfully defended her graduate thesis in mid-2007. Jody was subsequently awarded a doctoral fellowship and is now working on her PhD at the University of Constance, in Germany.

*Biodiversity associated with deep-water, suspended Pacific oyster culture in BC*

Co-Investigator with Soleil Switzer (UBC).

Funded by the Advanced Systems Institute Fellowship (Dr. P. Barnes), NSERC Industrial Post-Graduate Scholarship (S. Switzer) and Dr. Barnes' Canada Research Chair.

This is a two-phase project. The first phase was the documentation of invertebrate diversity in fouling communities associated with deep-water oyster farms in BC, including seasonal variation in the community structure. The second phase of this project is the basis for Soleil's MSc thesis research through UBC, but based in the EIRP facility at the CSR. Soleil is co-supervised by Dr. Barnes and Dr. Scott McKinley (UBC). Soleil's research, entitled "Invertebrate fouling community composition and succession associated with Pacific oyster deep-water suspended tray culture", is carried out with the support of a local shellfish aquaculture company. Her research recognizes that invertebrate fouling on shellfish aquaculture farms is of great concern to the industry, largely due to the costs of implementing control, avoidance and prevention measures. Understanding the ecology of the fouling communities as a whole, as well as the individual harmful species, could allow the industry to design more effective prevention methods.

**Publications**

"Growth and survival differences among native introduced and hybrid blue mussels (*Mytilus spp.*): genotype, environment and interaction effects." *Marine Biology* 154(5) (2008): 919-925.

Co-Authors J.L Shields and D.D. Heath.

"Growth and production of California sea cucumbers (*Parastichopus californicus* Stimpson) co-cultured with suspended Pacific oysters (*Crassostrea gigas* Thunberg)." *Aquaculture* 275(1) (2008): 124-137.

Co-Authors D.L. Paltzat, C.M. Pearce and R.S. McKinley.

"Diversity and seasonality of invertebrate fouling communities associated with deep-water Pacific oyster (*Crassostrea gigas*) farms in British Columbia, Canada." *Canadian Journal of Zoology* (In Review).

Co-Authors S.E. Switzer and B.J. Burd.

"Clearance Rates and Biodeposit Production Rates of Three Species of Cultured Bivalves (*Crassostrea gigas*, *Mytilus edulis* and *Mytilus galloprovincialis*) Measured Using Flow-Through Laboratory Experiments." *Journal of Shellfish Research* (In Review).

Co-Authors B. Dixon and A. Perkovich.

"Biodeposit Settling Rates for Three Species of Cultured Bivalves (*Crassostrea gigas*, *Mytilus edulis* and *Mytilus galloprovincialis*) Measured Using Laboratory Experiments" (In Development).

Co-Authors B. Dixon and A. Perkovich.

**DR STEFANIE DUFF****Project**

*Bycatch Reduction in Our Local Spot Prawn (*Pandalus platyceros*) Fishery*

NSERC Undergraduate Summer Research Assistant Johnnie Manson.

When British Columbia spot prawn fishers trap their prey (*Pandalus platyceros*) in rock fish (*Sebastes sp.*) conservation areas, a percentage of their traps attract and catch juvenile rock fish. The focus of this project is to alleviate the bycatch problem through quantitative and observational behavioural research as well as modification of present day prawn trap designs. To this end, the researchers worked alongside local prawn fishermen as well as local trap designers experimenting with different trap designs, focusing on trap entrance configurations that would entice spot prawns but not the rockfish bycatch. Many entrances were created and tested, however the research is ongoing.

**Geology****DR STEVEN EARLE****Project**

*The Pacific CRYSTAL Project*

Co-Investigators Rachel Cooper (Psychology) and Todd Milford (University of Victoria).

Research into student attitudes towards science and math, and their criteria for choosing a post secondary discipline, part of the NSERC funded CRYSTAL project. The current stage of the project involves an online survey which has been deployed at Malaspina University-College (with several hundred respondents), and will be deployed at University of Victoria and Simon Fraser University in the fall. The survey is being translated into French so that it can be used by all of the institutions in the nation wide CRYSTAL consortium. The Pacific CRYSTAL Project is located at the Faculty of Education, University of Victoria. It is one of five Centres for Research in Youth, Science Teaching, and Learning (CRYSTAL) funded by the Natural Sciences and Engineering Research Council of Canada (NSERC).

**DR JEFF LEWIS****Article**

"Snowball versus Slushball Earth: Dynamic versus Non-dynamic Sea Ice?" *Journal of Geophysical Research* 112 (2007): C11014.

Co-Authors A. J. Weaver, and M. Eby.

Examining the effects of different sea ice models on a globally ice-covered ocean.

**Resource Management Officer  
Technology****DR LIZ GILLIS****Conference Presentation**

"Migration in American Dippers: A Good Strategy or Simply Making the Best of a Bad Situation?" at the Annual General Meeting of the Canadian Society for Ecology and Evolution in Vancouver, BC, May 2008.

Co-Authors D.J. Green (SFU), H.A. Middleton (SFU) and C.A. Morrissey (SFU).

In some bird populations, some individuals migrate, others do not. How both migratory strategies are maintained has puzzled ecologists. This poster summarized the results of an empirical study designed to test hypotheses regarding the evolution and persistence of multiple migratory strategies within a population. The hypotheses were tested using a species of aquatic songbird, the American Dipper.

#### Other Activities

Peer review for a manuscript submitted to the *Journal of Applied Ecology*; member of the Vancouver Island Marmot Recovery Team.

## Mathematics

### DR LEV IDELS

#### Articles

“Marine Protected Area Models with Delay.” *Journal of Applied Mathematics and Computations* (Submitted).

A study of Marine Protected Areas (MPA's) models in patchy environments, the resulting model belongs to a class of nonlinear systems of differential equations with delay. In contrast to earlier models, this model reflects the complexity of the natural setting. The conditions for the existence, and boundedness of the positive internal steady-state solutions, are obtained. It is shown that feasibility of the equilibria depends on the values of the parameters, including the time delay. Explicit sufficient global stability conditions with an extremely simple form are provided. Obtained biologically motivated restrictions guarantee global stability of the system. Findings were illustrated by numerical simulations.

“Simple Criteria for Global Stability of Nonlinear Non-autonomous Systems with Delay.” *Journal Applied Mathematical Modelling* (Submitted).

A further development of a method, originally introduced by T. Mori, for proving local stability of steady states in linear systems of delay differential equations. A nonlinear and non-autonomous system of delay differential equations with several delays is considered. Explicit sufficient conditions for global attractivity of the solutions with an extremely simple form are provided. The above-mentioned conditions make the stability test quite practical. An additional significant feature of this approach is the estimate of the rate of exponential decay of the solutions. The results obtained were applied to a new model of Marine Protected Areas.

#### Conference Presentations

“Nonlinear Delay Differential Equations: Qualitative Theory and Methods,” at the Applied and Industrial Mathematics Seminar, Toronto, ON.

Considered Delay Differential Equations with several delays. Conditions were obtained for existence of positive solutions and so-called long time average stability was studied. Oscillation and local stability results for non-autonomous DDE with several delays were also obtained. Need to extend the range of applications of the M-matrix stability theory, Lambert W function method, and the theory of monotone dynamical systems; develop further the Linearized Oscillation Methods.; and revisit some robust stability (independent of the delay) results and delay-dependent stability criteria for time delay nonlinear and non-autonomous systems.

“Mathematical Models of Marine Protected Areas,” at the PIMS-MITACS Mathematical Biology Seminar Series, Edmonton, AB, 2007-2008.

Introduced Marine Protected Area (MPA) models with delay that incorporate age-structure and explicit life-history characteristics such as diffusion, and management criteria, such as selective harvesting. The resulting models belong to a class of nonlinear non-autonomous systems of Delay Differential Equations (DDE). The explicit conditions for the existence, boundedness and permanence of the positive steady state solutions are obtained. Findings are illustrated by numerical simulations of the fish population in reserves. Some open problems and further development of these models are indicated.

#### Other Activities

Visit to the Fishery Centre at UBC

Discussed collaboration with the leading experts in Marine Protected Area Models – Dr. C. Walters, Dr. Ussif Rashid Sumaila and Dr. Daniel Pauly – as well as applications of the Eco-space and Eco-path software, and training of Malaspina students at the Centre.

#### Other Publications

Review for the *Journal of Biological Dynamics*

“Convexity versus Stability”

A review for the *International Journal of Modern Mathematics*.

For some classes of the difference and differential delay equations convexity of the sequences of the coefficients implies stability, whereas convexity of a kernel implies stability of the integro-differential equations.

#### Other Activity

External examiner for C. Kalyani Devasena's PhD Thesis, “Bioeconomical Analysis of the Fishery Dynamics in Reserves,” submitted to the Engineering and Science University (BESU), India, specializing in natural resource management and conservation.

#### Projects

*Stochastic Dynamic Programming Methods: Application to the Fishery Models*

This is a numerical optimization technique, usable for analyzing probabilities of success. The results produced via SDP can be used for various time span T without having to rerun unless parameters are changed. The Stochastic Dynamic Programming was used for the following reason: the single species model is not for realistic depiction of the dynamic of a specific population, but more to examine the impact of MPA. SDP is much more suitable in that regard. Nine sets of output are provided with this report. Note: Project involves one graduate UBC student Chang Liu.

*Bioeconomical Models of Marine Reserves*

The economical and biological effects of protected patches and harvesting on resource populations are examined. Marine Protected Area (MPA) design is a joint economic and biological problem, and MPA creation alters economic incentives. The purpose of the proposed research is to consider a new bioeconomical model of marine populations via nonlinear differential equations. The study of the dynamic optimization of a harvest policy is done by choosing the harvest effort as the dynamic variable. This modelling approach finds the relationships among biological parameters, reserve size, and optimal harvest effort. A list of testable predictions is generated, e.g. minimum

protected area requirements. The studies will lead to practical recommendations on the choice of the best harvesting strategies.

#### *Mathematical Models of Metapopulation*

This project employs a dynamic and spatial model of renewable resource exploitation to investigate the effects of marine reserve creation. The model combines a metapopulation model incorporating resource patch heterogeneity and dispersal with a behaviourally based spatially explicit harvesting model that assumes that fishermen choose location in a manner that eliminates spatial arbitrage opportunities. The combined spatial bio-economic model is used to simulate the effects of reserve creation under various ecological structures.

## Social Sciences

### Anthropology

**DR LYNETTE HARPER**

#### Conference Presentations

“Education Partnerships: Working in the Boundary Zone,” at the Community-University Partnerships Connecting for Change, Victoria, BC, May 2008.

A cultural analysis of post-secondary partnership based on a multi-site ethnography. The study focuses on shared and contradictory practices during partnership negotiations within and between two Canadian colleges and a First Nations organization. Post-secondary practices such as needs assessment, for example, produced different effects linked with the participants’ social locations. Boundary-keeping practices such as contracts and other business-oriented activities, which appear to reproduce social inequalities, held the potential to transform unequal relations through a creative form of agency. Instead of perceiving resistance and defensiveness as barriers, they may be interpreted as boundary maintenance practices that require respect and understanding.

“Bellydance in America: Transforming Middle Eastern Dance,” at the 21st World Congress of Dance Research, Athens, Greece, September 2007.

Focusing on research exploring tensions in North American translations and transformations of Middle Eastern dance, this report presents the preliminary findings from ethnographic research in bellydance communities in BC. The research focuses on social, cultural, and political dimensions of bellydance in North America. Tensions and contradictions represented in mainstream and “Tribal” bellydance reveal complex social implications: the orientalist discourse, emphasis on technical precision, and shifting centres of power that characterize American bellydance intersect with the commoditization of the dance through consumerism, entrepreneurialism, branding, and certification. The Tribal bellydance community has furthered these transformative processes by mobilizing ideas about authorship, identity, marginalization, and practices of reification and resistance.

“Performing Identity: Transnational Dimensions of Bellydance,” at the International Bellydance Conference of Canada, Toronto, ON, April 2008.

This illustrated paper traces recent changes in bellydance styles and symbolic systems, raising questions about the present and future of

the dance. Is it Raqs Sharqi or Danse Orientale or Bellydance? What is tradition, fusion, authentic, pure, appropriated? While these ideas shift to take on new meanings and relevance, dance practices are diversifying. Orientalism and beliefs in authenticity re-inscribe bellydance in new social and community contexts. Dance is a performance of cultural identity. Whether “bellydance” is represented as entertainment, social activity, ritual, or art, it exists in relationship to multiple dance forms, geographies, discourses, and ethnic/racial identities.

“Dance signals and enacts social identities. . . our most explosive and tenacious categories of identity are mapped onto bodily difference, including race and gender, ethnicity and nationality and even sexuality,” at the International Bellydance Conference of Canada, Toronto, ON, April 2008.

Additional conference contributions included “Zaman: A Nostalgic Look at Ghawazee Dance in Ottoman Egypt,” presented with Dorothy Smith: Reconstruction of an historical dance form, Egyptian “Ghawazee” street performers of the Ottoman period; and served as an invited panel member for the discussion “Tribal Bellydance: Origins and Evolutions.”

“Ethnography in the Borderlands: Culture and Power in Education Partnerships,” at the Oxford Ethnography and Education Conference, Oxford, UK, September 2007.

This presentation challenges normalizing and uncritical assumptions about partnerships and examines how culture and power shape these relations. Is partnership a means for democratizing educational institutions or a tool of neoliberalism? This multi-site ethnography investigates a complex partnership project. Data was collected during two years of partnership negotiations involving two colleges and a First Nations education society. A pluralism of loosely linked discourses, practices, and structures were found to provide options to strategically transform social relationships. The partnership process both reproduced hierarchical social relations and produced new possibilities for cultural, political, and social change. Even practices that appeared to be tightly integrated with hegemonic discourses held the potential to transform unequal relations through a creative and productive form of agency.

#### Other Activities

“Smokin”

Performance/Choreography at the 21st World Congress of Dance Research, Athens, Greece, September 2007; Dora Stratou Theatre. West meets East in a North American translation of Greek music and Turkish Roman dance. Lynette Harper represents and challenges assumptions and stereotypes about bellydance, woman, and sexuality in a six minute solo choreography to the passionate music of the 3 Mustaphas 3 rendition of “Anapse to cigaro/Light your cigarette and to hell with the world.”

#### DR. IMOGENE LIM

##### Article

“A Place Called Home – Photo Essay.” *Urban China Special Issue: Chinatown* 32 (2007): 30-31, 121.

Published in Guangzhou, China; contains photographs and comments related to Chinese Canadian social history and Cumberland, BC, including family documents.

**Chapter**

“Notes from the Chow Mein Sandwich Chick,” in *Eating Stories: A Chinese Canadian and Aboriginal Potluck*. ed. Brandy Lien Worrall, 243-246. Vancouver: Chinese Canadian Historical Society, 2007.

An essay on ethnic identity as related to food and food culture research (the chow mein sandwich).

**Other Activities**

“Tanzania – A Field Trip to Remember”

Co-Presenter Sue Wells.

Invited co-speaker for the Canadian Federation of University Women; general talk on Tanzania (history, language, culture), including activities undertaken by students and illustrated with slides.

Panel member at InFrinGinG Dance Festival Event for a discussion on integrating local history into dance performance, included three of the artists from Triaspora; sponsored by the Crimson Coast Dance Society, Nanaimo, BC.

“Our Community’s Story: Celebrating Nanaimo’s Chinese Settlers” Facilitator and panellist for “Canadian, eh? Who IS Canadian?” a discussion on the diversity of the Canadian experience – part of the Central Vancouver Island Multicultural Society’s (CVIMS) three day event entitled “Our Community’s Story: Celebrating Nanaimo’s Chinese Settlers.” Invited participant in the children’s programme “You eat THAT?! A Childhood of Food Memories” and “Talking Circle Telling Stories,” focussing on Nanaimo memories of Chinatown and its community.

Appointed by Cumberland Village Council to the Coal Creek Heritage Park Advisory Committee, January 2008; the Coal Creek Heritage Park consists of the former Chinatown and #1 Japantown.

**Project**

ANTH 390 *Presentations to the Village of Cumberland Council*

Community based heritage project proposals with an emphasis on the ethnic landscape. The Village of Cumberland Council responded positively to these student proposals, three of which were presented by students themselves.

**DR ILKA THIESSEN****Chapter**

“Macedonia’s Liminality in the European Imagination – Issues of Methodology,” in *2008 Anthropology in the City: Methods, Methodology and Theory in Urban Anthropology*. eds. Italo Pardo and Giuliana Prato. Hampshire: Ashgate Publishers, 2008.

**Conference Presentations**

“From Identity to ‘No-identity’ – Theorizing Transnational Liminality,” at the 10th Biennial Conference of the European Association of Social Anthropologists (EASA) “Experiencing Diversity and Mutuality,” Ljubljana, Slovenia, August 26-30, 2007.

Prepared for the workshop “The New Europe: the Politics of Recognition, Inclusion and Exclusion,” this paper discusses an ethnographic account of a world without borders, both in image and popular imagination, and theoretically explores the notion of territoriality and inter-ethnic, inter-state relationships.

“The City of Skopje as Research Site: Issues of Methodology and Representation around Macedonia’s EU-exclusion,” at the Round-Table Conference “Anthropology in the City: Methods, Methodology

and Theory Convenors,” University of Kent, UK, September 13-14, 2007.

Invited presentation, including travel grant from the University of Kent.

“Socialist Nostalgia amongst the Urban Intellectual Elite of Skopje,” at the 16th World Conference of the International Union of Anthropological and Ethnological Sciences (ICAES), Kunming, China, 2007; Session One “Socialism, Liberalism and the Urban Question: Humanity, Development and Cultural Diversity.”

Invited presentation, including travel grant from the Chinese Kunming Organizing Committee.

“Macedonia as Liminal Space between Europe and the Balkans: Issues of Invisibility and Imagery,” at the AAA 107th Annual Meeting “Space, Risk, and Modernity,” San Francisco, US, November 2007.

**Curriculum Development**

Macedonia Field School 2008

Students will be introduced to the ancient lands of Europe, to music, folklore, mythology, wedding rituals, churches, monasteries and ancient ruins. They will also learn about modern cities versus villages, post-socialist history and European integration, the interconnections between Macedonia, Greece, Turkey and the issues of borders, identity and transnationality.

ANTH 325G Eastern European Ethnography

This course examines some of the processes of cultural and social transformation underway in the former USSR and Central/Eastern Europe. How do socialist-era institutions and ideologies continue to influence peoples’ contemporary efforts to create (or adapt to) a new kind of society? What does the so-called transition to capitalism look like from the perspectives of particular groups of people and in terms of their relationships to the state, the market, and each other? In what sense can we speak of shared national histories and cultures as determinative of these processes or is it culture itself that is changing? And what are the promises and limitations of ethnography for understanding such transformation?

Internationalizing the Curriculum Grant

Critical Issues in Development Anthropology course focusing on environmental justice, land rights, human rights, human trafficking, health and the right to self-identify. The practical part of the course will focus on student contributions to changing those social conditions. The course will create the opportunity for students to truly experience anthropology – a discipline that builds on the co-operation between the outside researcher and the international research site and its people – and to practice anthropology’s commitment to social justice and to be inclusive, international and practice-oriented.

**Other Activities**

Organization of three month internships at Macedonia NGOs; internships promote student training and consulting activities. The areas of application of the NGO’s are water supply and sanitation; health and education; rural development; employment and income generation; civic society and democratisation; emergency aid; Capacity Building Program for Roma; implementation of Local Environmental Action; gender and marginalized issues; technical assistance and guidance for institutions and communities dealing with the problem of human traf-

ficking; and, support to institutions and communities in the area of youth.

Convenor of “The New Europe: the Politics of Recognition, Inclusion and Exclusion,” a workshop at the 2008 European Association of Social Anthropologists (EASA).

### Project

*Building Bridges for Development – Diaspora from Macedonia in Canada as a Potential Resource*

In conjunction with N. Kusnikova, Institute for Sustainable Communities Macedonia; Dr. L. Risteski, Sts. Cyril & Methodius University; Dr. R. Dimova, Osteuropa Institut, Free University Berlin and Dr. G. Janev, Institute for Sociological, Political, and Legal Research, Skopje; Max Planck Institute for Religious and Ethnic Diversity in Goettingen. The goal of the research is to initiate and develop international research collaborations between Canadian and Macedonian anthropologists and development workers in the field of diaspora philanthropy. The aim is to contribute to the advancement and sustainability of the civil society in the Republic of Macedonia through promoting diaspora philanthropy among the diaspora from Macedonia in Canada. The research is intended for use by practitioners from the NGO sector, scholars from Canada and Macedonia, and anyone interested in diaspora issues.

## Criminology

### DR JOHN ANDERSON

#### Other Activities

Online Booking System, Writing Centre

Collaboration with software company, WC Online to implement and evaluate software for registering student appointments with the MU-C Writing Centre. The system replaces a manual sign-up system posted on the door of the Writing Centre. Utilization rate of the Centre has increased by 20%, with fewer “no shows” as students can cancel an appointment through the web-based software.

Creating an Online Survey for Evaluating the Writing Centre  
Of 400 students registered on “WC Online”, 80 responded with praise or ideas to improve the tutoring experience. The most favourable comments were for the new online reservation system for making appointments at the Writing Centre.

Educational Resource for Ethical Research

Collaborator Dana Chamberlain (Faculty of Management).

A PowerPoint presentation to inform faculty and students about the rationale for conducting ethical research, protecting privacy, and the process for approving human research at Malaspina University-College.

### LISETTE PATENAUE

#### Conference Presentation

“Scholarly Activity at Malaspina University-College,” at the FPSE Scholarly Activity Conference, Nanaimo, BC.

Invited presentations to discuss what is meant by scholarly activity in our institution, how much scholarly activity is being performed and what barriers exist to further development of faculty research agendas.

### Other Activities

Criminology Field Tour March 19-20, 2008

Twenty six students visited Kent Institution in Agassiz, BC, a maximum security, male correction facility; Mountain Institution in Agassiz, BC, a medium security, male correction facility; the Pacific Institution/Regional Reception Assessment Center in Abbotsford, BC, a multi-level security, male correction facility; and the Pacific Regional RCMP Training Centre in Chilliwack, BC.

Represented the Department of Criminology, with students, at “Law Day” hosted by the Nanaimo Court House, 2008.

### Project

*Residents Perceptions of Crime and Policing in Nanaimo*

A total of 1200 surveys were sent out to Nanaimo residents to obtain their perceptions of crime and policing in Nanaimo. Student volunteers assisted in stuffing envelopes, making calls to residents to ensure they received the survey and completed extensive data entry using SPSS 15. One student was hired on the work-op program through the Campus Career Centre.

## JOHN WHITEHOUSE

### Curriculum Development

Criminology 330: Sentencing

The sentencing of those found guilty of offences is a critical aspect of the criminal justice system. This course is being developed in order to provide students with an in-depth understanding of the philosophical justifications for, and purposes of, sentencing.

### Other Activity

Director, John Howard Society

The Nanaimo John Howard Society is a non profit charitable organization dedicated to making the justice system more effective, humane and responsible through community involvement.

### Project

*Subconscious Racial Stereotypes: Implications for the Criminal Justice System*

Within the context of cases involving racial profiling, courts have recognized that an individual’s rights under the Canadian Charter of Rights and Freedoms can be infringed by the subconsciously motivated acts of police officers. This project seeks to identify the types of evidence relied upon by the courts to make findings of a Charter infringement on this basis and to consider the implications of this area of the law on the criminal justice system as a whole.

## Geography

### DR DON ALEXANDER

#### Articles

“First Annual Film Fest A Rousing Success.” *Planning West* 49(1) (2007): 20.

An account of the successful film festival held at Malaspina University-College, sponsored by the Department of Geography.

“South Wellington Community Process: An Experiment in Service Learning.” *Planning West* 50(1) (2008): 10.

A project of community animation in which third year students assisted a rural community in tackling the challenges of an upcoming official community plan review. The project resulted in some specific

recommendations, one of which has already been implemented, and a community website [www.southwellington.com](http://www.southwellington.com).

“Smart Growth Canada Initiating Innovative On-Line Courses.” *Municipal World* 116(11) (2006): 31-33.

An exploration of an innovative approach to disseminating smart growth ideas to a wider audience via the Internet.

#### Conference Presentations

“Walkability on the Ground: Trimming the Fat in Hogtown,” at the Walk 21: Toronto 2007 Conference, Toronto, ON, October 2007.

Co-Presenter Steven Bell.

A mobile workshop, looking at conditions that support positive pedestrian environments.

“Progress in Implementing Smart Growth,” at the World Planners’ Congress, Vancouver, BC, June 2006.

Co-Presenter Ray Tomalty.

A presentation focusing on the Greater Vancouver Regional District implementation of smart growth ideas and the recent research by the co-presenters and a panel of key commentators.

“EcoDensity – Is it the Real Thing?” at the Congress of the Social Sciences and Humanities, Vancouver, BC, May/June 2008; in partnership with the Environmental Studies Association of Canada.

Co-Presenter Ryan Brown.

#### Other Publications

*The Ontario Urban Sustainability Report 2007: Measuring the Environmental, Social and Economic Sustainability of Ontario’s Municipalities.*

Co-Authors Ray Tomalty, Mark Anielski, et al.

A book-length report analyzing the state of sustainability in 27 Ontario municipalities of varying sizes and degrees of density written for the Pembina Institute.

“East of Eden: Paradise – Are We There Yet?” *Planning West* 50(1) (2008): 20.

A review of *City Making in Paradise: Nine Decisions That Saved Vancouver*, a book on the history of urban and regional planning in the Greater Vancouver region by Mike Harcourt (former premier), Ken Cameron (former GVRD lead planner), and writer Sean Rossiter. The book’s strengths and weaknesses were assessed, and ultimately its unsuitability as a textbook.

### DR ALAN GILCHRIST

#### Curriculum Development

B.Sc. Double Minor in Geography and Earth Science; work with Tim Stokes (Geology Department) to present options for a general degree offering, and one specifically tailored to meet the educational requirements for registration as a Professional Geoscientist in the Province of BC.

#### Other Activities

“World Water Resources : How Vulnerable Are We?”

Invited talk to the University Women’s Club of Nanaimo about the impact of climate change on world water resources, with specific implications for Vancouver Island.

### Professional Development

#### Enhancing Teaching and Learning in Physical Geography

An investigation into innovative teaching practices to enhance student learning in physical geography. In addition to a literature review, faculty from Geography programs at three UK Universities, and one in Denmark were interviewed to gain an international perspective on teaching in physical geography. While a Visiting Scholar at the Centre for Active Learning, University of Gloucestershire, Cheltenham, UK in October 2007, gave an invited seminar “Using Active Learning to Better Understand the Complex Behaviour of Natural Systems: A Case Study from the Teaching of Hydrology.” Also gave a seminar on “Active Learning in the Earth Sciences” at the annual BC Earth Science Articulation meeting in May 2008.

#### Projects

##### *Vancouver Island Water Resources Vulnerability Mapping Project*

This multi year inter-disciplinary collaborative initiative is aimed at developing a geographically based information system to characterize groundwater vulnerability to surface pollution on Vancouver Island. The project involves Malaspina University-College, the BC Ministries of Environment and Health, Natural Resources Canada and currently the Regional Districts of Nanaimo and Cowichan Valley. The project is now in its second year and has so far piloted a study using the DRASTIC methodology on the area around Nanaimo. This region is expected to be completed in 2008, after which the rest of Vancouver Island will be completed.

##### *Snow Pack Modeling in the Englishman River Watershed*

Supervision of Advanced Diploma in GIS Applications for practicum student, Kris Sillem, who investigated how climate change, both historical and predicted into the future with a climate model, affects snow accumulation on Vancouver Island, and the impact on water resources and recreation.

##### *Historical Climate Change on Vancouver Island*

Supervision of student research assistant, Amanda Malthus, who compiled Environment Canada weather station data and for several locations on Vancouver island and investigated the statistical significance of climate change, and the spatial variability.

### DR HANNAH WILSON

#### Article

“Heterogeneity Characteristics of an Inland Wetland Environment through Spatio Spectral Analysis.” *Canadian Journal of Remote Sensing* (In Press).

An entirely new approach to quantification of the diversity of species within a given area based on spatial statistical analysis of airborne hyperspectral data and the conceptual relationship between diversity and spatial heterogeneity. Unlike abundance counts from field surveys, spatial heterogeneity categories were derived by calculating local spatial autocorrelation of spectral values in the blue, green, red, and near infrared regions of the spectrum. The result is a categorical map of heterogeneous/homogeneous areas within an inland wetland environment in Southern Ontario.

#### Other Activities

External Examiner for Ian Mackenzie in the defence of his graduate thesis entitled “The Effect of Directionality and Anisotropy on a

Local Measure of Spatial Autocorrelation – the  $G_i^*$ ,” submitted to the University of Victoria.

Peer review of a manuscript submitted to the *Canadian Journal of Remote Sensing*.

### Project

#### *Spatial Analysis of Post-Windstorm Changes to Stanley Park Canopy*

A number of management plans are already underway to address reforestation of the 10% of Stanley Park that sustained blow down damage in the December 2006 windstorm. This project will apply spatial statistical analyses to multi-date (May 2006 and June 2007) satellite image data in order to quantify the magnitude and direction of change to the forest canopy. Fieldwork data collection occurred in July 2007 and will continue in summer 2008. Results from this project will provide spatial information vital to assessing the ecosystem management plan going forward. Undergraduate students in GEOG 228 (Spatial Analysis) will undertake an historical air photo analysis of the Park and students in GEOG 326 (Remote Sensing) will aid with detecting and mapping the changes between May 2006 and June 2007 satellite images.

## Global Studies

### DR CATHERINE SCHITTECATTE

#### Curriculum Development

Global Studies Internal Review and Program Changes

Collaborators Raimo Marttala (Economics), Joseph Moore (Sociology), Imogene Lim (anthropology), Alex Netherton (Political Science) and Michael Tripp (Geography).

Chaired the Global Studies Task Force and successfully submitted to the Curriculum Committee, on its behalf, the program changes resulting from a year's work on the first ever internal review of the program.

Policies and Procedures: Global Studies Internship Program

Collaborators Raimo Marttala (Economics), Imogene Lim (Anthropology), Joseph Moore (Sociology) and Audrey Hansen (International Education).

Completed the policies and procedures for the Global Studies Internship Program.

Tanzania Field School

Planned, budgeted and participated in a five and a half week trip with six students to Tanzania. In the course of the field school visited and established a relationship with the University of dar Es Salaam Department of International Development Studies on behalf of the Global Studies Program, developed several contacts for potential internships in Tanzania, and assisted colleague Dr. Imogene Lim (Anthropology) with her field school to Tanzania.

#### Other Activities

Public Fund Raising Event for Ugandan Orphan Choir WATOTO

Supported the Global Studies Student Association in organizing and hosting a local global development effort, including a campus invitation to the Watoto choir. This cultural event open to the community-at-large, raised \$500.00 on behalf of the community.

### Project

#### *International Internships Workshop*

Obtained funding from the Canadian Association for Studies in International Development (CASID) to host a two day workshop on best practices in international internships for undergraduate students. The workshop brought together some 30 participants of mixed backgrounds: development practitioners, NGOs, students, administrators and faculty from various corners of the province. Faculty from the departments of Tourism, Anthropology, Sociology and Political Science attended. Global Studies students played a leading role in organizing the event. A session open to the public consisted of past interns discussing their experiences in Belize, Cambodia, and Brazil. Among the guest speakers were the Regional Director of the Canadian International Development Agency (CIDA) and a Global Studies graduate and past intern, now employed by the British Columbia Government office on Human Trafficking.

## Liberal Studies

### DR JOHN BLACK

#### Other Activity

Biosphere Conversation II

Served as moderator for Biosphere Conversation II held at the Clayoquot Field Station, September 12-14, 2007. The Biosphere Conversations are an ongoing series of discussions between invited guests of widely diverse backgrounds on the relation of philosophy to environmental concerns. They are co-sponsored by the Alexandro Malaspina Research Centre, the Tofino Botanical Gardens Foundation, BC Healthy Communities, the Institute for Practical Philosophy and the Institute for Coastal Research.

#### Project

#### *Translation of Historical Newspaper Articles and Letters*

A continuing project, involving student assistants Maria Soto de Podriske and Lorill Ireland, to translate a large number of letters and articles pertaining to Alexandro Malaspina and eighteenth-century European thought, and also navigation. The results of the work are posted as they are completed on the web archive of the Alexandro Malaspina Research Centre: [web.viu.ca/black/amrc/index.htm](http://web.viu.ca/black/amrc/index.htm).

### DR DAVID LIVINGSTONE

#### Conference Presentation

“Religious Identity within the State,” at the Association of Core Texts and Courses; Plymouth Harbor, Massachusetts; panel chair.

The Association for Core Texts and Courses supports individuals, provides fora, and develops initiatives that advance and strengthen the integrated and common study of world classics and texts of major cultural significance. ACTC welcomes faculty and administrators dedicated to building sound liberal education.

### DR LISA MACLEAN

#### Other Activity

#### *Book of Hours*

A solo exhibition at the Places des Arts, Coquitlam, BC from March 20 to April 19, 2008. These works are photo-based digital images inspired by Books of Hours, medieval illuminated manuscripts, a popular devotional textual form that contained particular prayers to be

recited for each ecclesiastical hour and time of year. Before the 1455 invention of printing from movable type, all books were written by a scribe on parchment or paper with accompanying illuminations and miniatures which were not merely decoration, but also provided an opportunity for spiritual reflection and prayer for salvation. This contemporary version of the Book of Hours, while not a religious text, uses images of British Columbia landscape and floral arrangements, in combination with portraits, to create works that offer a similar opportunity for reflection.

## Philosophy

### DR JANICE PORTEOUS

#### Conference Presentation

“The Rhetorical Power of Humour,” at the International Society for Humor Studies, Newport, RI, June 2007.

In his study of rhetoric as the art of persuasion, Aristotle identifies three sources of influence available to a speaker: *logos* appeals to logical argument; *pathos* considers the emotional and imaginative capacities of the listener; and *ethos* involves the character of the speaker. This presentation explores humour as an exploitation of *pathos* and *ethos*, and argues that such appeals are as legitimate as the use of *logos* when it comes to the power of persuasion.

## Political Science

### DR ALEXANDER NETHERTON

#### Article

“The Political Economy of Canadian Hydro-Electricity: Between Old Provincial Hydros and Neo-liberal Energy Regimes.” *Canadian Political Science Review* 1(1) (2007): 107-124.

One of a series of articles that places hydro-electric energy policy in the context of the changing role of the state across time. In this special first issue of the CPSR, hydro is placed in the context of other resources. The article maps out three distinct regimes Formative, Keynesian and Sustainable, identifies their paradigmatic reasoning, and bases of support and opposition.

#### Chapter

“The Political Economy of Canadian Hydroelectricity,” in *Canada's Resource Economy in Transition: The Past, Present and Future of Canadian Staples Industries*. eds. Michael Howlett and Keith Brownsey, 299-329. Toronto: Emond Montgomery, 2007.

This chapter contributes to a peer reviewed collection that examines the historical transitions in staples or resource economies in Canada. The analysis pays particular attention to the policy regime changes brought about by globalization and North American integration, as well as policy responses to climate change. By focusing on ‘regime effects’ the analysis points to differences between provincial energy regimes based on hydro-electricity and those based on other staple resources, such as coal, natural gas or nuclear energy. The historical scope of this analysis provided the means to evaluate successive energy policy regimes, and address the nature of substantive policy change across time.

## DR CATHERINE SCHITTECATTE

### Conference Presentation

“Latin American Alternatives to Economic Globalization,” at the 7th Symposium on Social Justice; Malaspina Institute of Practical Philosophy, Nanaimo, BC, March 8, 2008.

Supervised a series of papers presented by undergraduate students; papers were based on field work and course research. Christina Ciolfi presented her field research results as “Alternatives in Brazil: The Landless Peasant Movement.” This field research was undertaken as a Global Studies Internship with the University of Sao Paulo (UNESP), DATA LUTA project within the Department of Geography. Sarah Anton and Holly Sponaugle presented their research paper “Alternatives in Venezuela” based on course work undertaken in a class on the Politics of Oil.

### Curriculum Development

#### Cuba Field School

Undertook a two week research trip to Cuba funded by the Faculty of International Education in order to develop a Cuba Field School; subsequently, over the next eight months developed and promoted an in depth tour in collaboration with the organization Cuba Educational Tour. Another college has expressed interest in joining MU-C in this field school.

#### Political Science Major

In collaboration with colleagues in the Department of Political Science, completed a final draft for the Political Science Major, including work on sample matrices and formulation of the proposal.

### Other Activities

#### Inter-Faculty “Clusters” Project

Over the spring term, contributed to meetings and discussions organized by the Deans of Social Sciences, Arts and Humanities, and Science and Technology regarding the identification of courses that could be “clustered” across faculties.

#### UBC Model United Nations Conference

As faculty adviser for the Model United Nations Club on campus, assisted students in preparing and attending the two and half day UBC Model United Nations Conference. Two Malaspina students received awards for distinguished contribution.

### Professional Development

#### The 49th International Studies Association Annual Conference

The International Studies Association is a professional organization that brings together scholars from around the world to share research on a wide range of topics related to the academic discipline of international relations. Several workshops included scholars whose texts are used in classes; networked with colleagues and included the Global Studies Program on a network of similar programs.

## Psychology

### DR CAROLINE BURNLEY

#### Conference Presentation

“The International Resilience Project: The Experience of Youth in Nanaimo, British Columbia,” at the 69th Annual Convention of the Canadian Psychological Association, Halifax, NS, June 2008.

The International Resilience Project (IRP) uses a unique contextual and cross cultural approach that employs both quantitative and qualitative research methods to examine individual, interpersonal, family, community and cultural factors associated with building resilience in youth within communities around the world. This presentation included a description of one community's experience in Nanaimo, British Columbia, Canada. With cooperation and direction from an advisory board, researchers from the Resilience Research Lab conducted the first study unique to this site using the research protocols from the IRP. Results and implications of the research and potential community applications/interventions were discussed.

#### Other Activity

The Resilience Research Lab, under the supervision of Caroline Burnley and Ruth Kirson (Department of Psychology) organized the visit of internationally renowned researcher, Dr. Michael Ungar, Director of the International Resilience Project, Dalhousie University. Dr. Ungar met with members of the university community as well as members of the Resilience Research Lab Advisory Board in February, 2008 and gave a public presentation entitled, "Too Safe for Their Own Good: How Risk and Responsibility Help Children Survive and Thrive."

### DR DARREN HANNESSON

#### Articles

"Amygdaloid Kindling is Anxiogenic but Fails to Alter Object Recognition or Spatial Working Memory in Rats." *Epilepsy & Behaviour* (2008) (In Press).

Co-Authors M.S. Pollock, J.G. Howland, P. Mohapel, A.E. Wallace and M.E. Corcoran.

A description of research, with an animal model, of epilepsy, investigating the relation between the brain region where seizures start and the impact of seizures on different kinds of behaviour. The results suggest that seizures starting in the amygdala increase anxiety but do not disrupt several types of memory. When seizures start in the hippocampus, several types of memory are disrupted but anxiety is unaffected. This study, along with other research in the area, suggests that careful consideration must be paid to the region where seizures originate in patients with epilepsy in order to understand the source of additional symptoms such as memory and emotional impairments that sometimes compound this disorder.

"Ventral Hippocampal Involvement in Temporal Order, but not Recognition, Memory for Spatial Information." *Hippocampus* 18(3) (2008): 251-257.

Co-Authors J.G. Howland, R.A. Harrison and A.G. Phillips.

An investigation of the role of one particular brain region – the ventral hippocampus, in two types of memory: the ability to recognize places and the ability to remember the order in which places have been visited. This study contributes to a broader understanding of the brain circuits mediating different kinds of memory, suggesting that the ventral hippocampus is needed to remember the order of places visited, but not the places themselves.

### DR ELLIOTT MARCHANT

#### Article

"Patient Views: Improving Care for People with Fibromyalgia." *Journal of Nursing and Healthcare of Chronic Illness* (2008) (In Press).

Co-Authors N. Egeli, V. Crooks, D. Matheson and M. Ursa.

#### Project

##### *Sleep and Biological Rhythms Laboratory*

Supervised a PhD thesis at SFU and a number of students presented their data at various conferences. Danica is studying the effects of a norepinephrine alpha 2 receptor antagonist and a cortical releasing factor 2 antagonist on non-photic phase shifting; Karina is studying the effect of L theanine (an amino acid found in green tea) on sleep in individuals with fibromyalgia; Nicole is looking at the effects of environmental enrichment on the quality of life in individuals suffering from mental illness; Jill (co-supervised with Dr. Melanie O'Neill) measured changes in post traumatic stress disorder during in patient treatment at Edgewood (local alcohol and drug treatment facility).

### DEBORAH MATHESON

#### Book

*The Psychology of Health and Health Care: A Canadian Perspective* 3rd Edition, Toronto: Pearson, 2008.

Co-Authors Gary Poole (University of British Columbia) and David Cox (Simon Fraser University).

#### Conference Presentation

"Does Personality Moderate the Effect of Implementation Intentions on Physical Activity?" at the Society of Behavioural Medicine's 29th Annual Meeting and Scientific Sessions, San Diego, CA, March 2008. Collaborator Ryan Rhodes (University of Victoria).

### LYNN MCCAWE

#### Project

##### *The Dynamics of Divorce: A Male & Female Perspective*

Research Assistants Breanne Caul, Monica Manhas, Maiko Ishibashi, Haillie O'Brien and Mei Yin MacDonell.

The purpose of this study was to identify the key factors about separation and divorce that may contribute to psychological/emotional distress in the male population. The study also examined whether or not men and women access or have knowledge of existing support systems within the community.

### DR MELANIE O'NEILL

#### Conference Presentations

"Intrusive Thoughts and Psychopathy in a Student and Incarcerated Sample," at the Association of Behavioural and Cognitive Therapies Convention, Philadelphia, US, November 2007.

In collaboration with student Mary Nenzel (Fear and Anxiety Lab) this poster, examining the type and nature of intrusive thoughts across varying levels of psychopathic traits, was presented.

"Non-traditional versus Traditional Students: Differences in Perfectionism, Academic Motivation/Achievement, and Worry," at the Association of Behavioural and Cognitive Therapies Convention, Philadelphia, US, November 2007.

In collaboration with student Mary Nenzel (Fear and Anxiety Lab) this poster, examining the differences between traditional and more mature students, was presented.

"Keeping Secrets: An Experimental Investigation into Concealment and Obsessive Compulsive Symptoms," at the Association of Behavioural and Cognitive Therapies Convention, Philadelphia, US, November 2007.

In collaboration with students Arlene Simpson, Jill Fikowski, Sarah Lesowski (Fear and Anxiety Lab) this poster, examining the role of concealment in individuals with sub-clinical Obsessive Compulsive Disorder symptoms, was presented.

#### Other Publication

“Empirical Limits for the Forensic Assessment of PTSD Litigants,” reprinted in *Clinical Forensic Psychology and the Law*, eds. Ron Roesch and Kaitlyn McLachlan. Hampshire: Ashgate, 2007: 121-149. Co-Authors William Koch (University of British Columbia) and Kevin Douglas (Simon Fraser University).

### DR TONY ROBERTSON

#### Projects

##### *Field Placement & Seminar Series*

With the research assistance of Michelle Good, this seminar series addressed societal, institutional/occupational and personal stigma associated with diagnostic labels for various forms of mental illness. Seminar participants included members of the Mental Health Professional Community as well as out-patient members of a mental health resource centre in Parksville, BC. The seminars provided important education and insights for all participants and resulted in concrete plans for actions to reduce all three forms of stigma associated with mental illness labels in Central Vancouver Island.

##### *Brain Electrophysiology (Part One)*

With the research assistance of Nicole Larson, this project involved two types of activities: 1) Development of technical skills for recording Sensory Evoked Potentials (EPs) and Cognitive Event Related Potentials (ERPs) from Human Subjects; 2) Development of skills to record, analyze and present examples of each type of measure (Brainstem Auditory Evoked Potentials, Middle Latency Auditory Evoked Potentials, Pattern Visual Evoked Potentials, Visual and Auditory P300 Event Related Potentials and Visual Contingent Negative Variation Event Related Potentials).

##### *Brain Electrophysiology (Part Two): Clinical and Applied ERPs*

With the research assistance of Nicole Larson, this project involved: 1) Further skill development in recording a greater variety of cognitive event related potentials (ERP's) from human subjects and acquiring the skill to record, analyze and present examples of each type of measure (Visual and Auditory P3's and Auditory P50 Sensory Gating ERPs) and the clinical application of these recordings; 2) Preparation of a research proposal to apply ERPs in diagnosis and treatment monitoring with psychiatric patients (Type I Schizophrenia and/or Depression).

##### *Brain Electrophysiology and Music Processing*

With the research assistance of Megan Yim, this project involved three types of activities: 1) Development of technical skills for recording Sensory Evoked Potentials (EPs) and Cognitive Event Related Potentials (ERPs) from Human Subjects; 2) Development of skills to record, analyze and present examples of each type of measure (Brainstem Auditory Evoked Potentials, Middle Latency Auditory Evoked Potentials, Auditory P300 Event Related Potentials and Music-Related Brain Responses measured with Event Related Potentials); and 3) Development of a research proposal to study effects of different music genres on attentional processing as indexed by Auditory P3s.

##### *Cognitive Rehabilitation Assessment and Computer-based Techniques*

With the research assistance of Breanne Caul, this project involved a review of 'Best Practices' in Clinical Neuropsychological Assessment for Rehabilitation Planning versus Diagnosis and collecting normative performance data on three Computer-Based Cognitive Rehabilitation Programs (automated, graded, attention, semantic processing, symbol – digit encoding).

##### *Brain Electrophysiology and Language Processing*

With the research assistance of May Martinez, this project involved three types of activities: 1) Development of technical skills for recording Sensory Evoked Potentials (EPs) and Cognitive Event Related Potentials (ERPs) from Human Subjects; 2) Development of skills to record, analyze and present examples of each type of measure (Brainstem Auditory Evoked Potentials, Middle Latency Auditory Evoked Potentials, Auditory P300 Event Related Potentials and Spoken Word Event Related Potentials) and 3) Preparation of a research proposal to study ERP correlates of Semantic Incongruity for bilingual and monolingual stimuli.

## Student Services

### Physical Education

#### RICK BEVIS

##### Conference Presentations

Mental Training Seminar (Goal Setting) for emerging elite lacrosse players on Vancouver Island in partnership with Pacific Sport.

Mental Training Seminar (Goal Setting) for emerging elite basketball players on Vancouver Island in partnership with Basketball BC, Vancouver Island Regional Training Centre.

Mental Training Seminar (Focus and Concentration) for emerging elite junior squash players in partnership with the Squash BC Junior Development Program.

Presented an overview of mental skills for sport and competition preparation at the Victoria Rebels Football High Performance Camp.

“A Games Approach to teaching Team Handball for elementary and high school Physical Education class,” at the Nanaimo Professional Physical Educators Conference.

##### Professional Development

BC Sports Performance Academy Volleyball Camp; led a group of emerging elite athletes in a summer development program.

##### Project

##### *Hockey Canada Skills Academy*

Ongoing mental training seminars for students enrolled in the Hockey Canada Skills program.

### DR GUY LE MASURIER

#### Articles

“BMI-Referenced Cut Points for Pedometer-Determined Steps per Day in Adults.” *Journal of Physical Activity & Health* 5(1) (2008): S126-139.

A study to establish preliminary criterion-referenced cut-points for adult pedometer-determined physical activity (PA) related to BMI-

defined weight status. Data included 3127 individuals 18 to 94 years. Best estimated cut-points for normal vs. overweight/obesity ranged from 11,000 to 12,000 steps/day for males and 8,000 to 12,000 steps/day for females (consistently higher for younger age groups). These steps/day cut-points can be used to identify individuals at risk or the proportion of adults achieving or falling short of set cut-points can be reported and compared between populations. Cut-points can also be used to set intervention goals, and they can be referred to when evaluating program impact, as well as environmental and policy changes.

“Walking for Health in Pregnancy: Assessment by Indirect Calorimetry and Accelerometry.” *Research Quarterly for Exercise & Sport* 79(1) (March 2007): 28-35.

An examination of RT3 accelerometer activity counts and activity energy expenditure at 20 and 32 weeks gestation in 36 healthy, pregnant women during treadmill walking and free-living conditions. During the treadmill walking condition, oxygen consumption was collected and activity energy expenditure was estimated for a 30-minute walk at a self-selected walking pace. Findings indicated that in the treadmill walking condition, self-selected walking pace significantly decreased from 20 to 32 weeks gestation. Additionally, few women met physical activity guidelines in the free-living condition. Encouraging pregnant women to walk for 30 to 40 minutes/day at a self-selected walking pace may be an appropriate public health recommendation.

#### Conference Presentations

“Top 10 Reasons for Quality Physical Education,” at the 2008 National Convention of the American Alliance for Health, Physical Education, Recreation & Dance (AAHPERD).

An amalgamation of Le Masurier & Corbin’s 10 utility-oriented reasons (e.g., health, financial, skills) and Scott Kretchmar’s 10 joy-oriented reasons (e.g., creative expression, delight, exploration) for providing quality physical education in schools. The articles, in *JOPERD* 2006 77(6), and *JOPERD* 2006 77(7), can also be accessed on the National Association of Sport & Physical Education’s website at: [www.aahperd.org/naspe/pdf\\_files/top10reasonsforQualityPE.pdf](http://www.aahperd.org/naspe/pdf_files/top10reasonsforQualityPE.pdf).

“Fitness for Life: Middle & High-School Curricula,” at the 2008 National Convention of the American Alliance for Health, Physical Education, Recreation & Dance (AAHPERD).

This presentation highlighted the philosophy, objectives and components of a successful concepts-based physical education curricula in high school for maintaining physical activity in the first 5 years after high school (Dale, Corbin, & Cuddihy 1998; Dale & Corbin, 2000). The textbook by the same author, *Fitness for Life: Middle School*, won a 2008 Textbook Excellence Award from the Text and Academic Authors Association (TAA).

“Gray Cells & Barbells: Implementing a Fitness Education Course,” at the Nanaimo Professional Physical Educators (NPPE) Annual Conference.

Secondary physical educators can help students become independent exercisers as adults by providing the opportunity to learn self-assessment skills, self-management skills, and to become knowledgeable consumers of health, fitness, and wellness information. This program will highlight the unique needs of secondary students and provide a useful perspective and philosophy for implementing fitness education in physical education.

“Maximizing Physical Activity in Physical Education,” at the Nanaimo Professional Physical Educators (NPPE) Annual Conference.

Elementary educators have limited time, equipment, and facilities to deliver daily, health-enhancing physical education. This session provides numerous lesson ideas, resources, and specialized skills for engaging children in active play and minor games.

#### Other Activity

As section editor (three year term) for the *Research Quarterly for Exercise & Sport* (RQES), duties involve contacting scholars to review primary research manuscripts in exercise and physical activity-related epidemiology, collating reviews, making recommendations to the Editor-in-Chief, and reviewing primary research manuscripts for numerous journals including *Medicine & Science in Sports & Exercise*, *American Journal of Preventative Medicine*, *Journal of Teaching Physical Education*, *Preventative Medicine* and *Journal of Physical Activity & Health*.

#### Projects

##### Active Moms

An examination of exercise and health behaviours during pregnancy to understand their impact on gestational diabetes for women and their babies. Participation includes: completing self-reported surveys during each pregnancy trimester, and postpartum; wearing activity monitors (accelerometers) for two 90-minute health assessments during the second and third pregnancy trimesters; and participating in an exercise program. As a co-investigator, the author provides expertise on the collection, treatment and reporting of the physical activity data.

##### *Fitness Levels of Indigenous Athletes Competing at the Cowichan 2008 North American Indigenous Games (NAIG)*

A partnership between Cowichan 2008, Malaspina University-College and Pacific Sport to gather fitness testing data on NAIG athletes to be used in establishing baseline fitness levels for Indigenous athletes competing at the Games, educating Indigenous athletes about fitness for sport, raising awareness about fitness among First Nations, providing NAIG coaches with information about the fitness levels of NAIG athletes, and expanding Pacific Sport’s fitness database for young athletes. Following the Games, data could be used to train future NAIG hosts to document changes in the fitness of NAIG athletes, and to promote initiatives with Aboriginal children and youth.

# Student Research Awards

## Canadian Institutes of Health Research (CIHR) Health Professional Student Award

The purpose of this program is to further strengthen clinical research by providing research training to health professionals and strengthen talent development. It is expected that this targeted investment will lead to the development of the next generation of clinical researchers. Students are awarded a maximum of \$4,251 each to conduct a research project of their choice.

### Rebecca Stanley

Eliminating the barriers: Increasing breastfeeding continuation and exclusivity through continuity of care and the lactation management model.

\$4,251.00

### Robert McGibbon

Responses of Male Nursing Students to Cross-Gendered Communication Differences.

\$4,251.00

## Natural Sciences and Engineering Research Council (NSERC) Canada Graduate Scholarship and Postgraduate Scholarship

NSERC Canada Graduate Scholarships and Postgraduate Scholarship provide financial support to high-calibre scholars who are engaged in master or doctoral programs in the natural sciences and engineering. The Canada Graduate Scholarships (\$17,500) are awarded to the top-ranked applicant at each level and the next tier of meritorious applicants are offered Postgraduate Scholarships (\$17,300). This support allows these scholars to fully concentrate on their studies and to seek out the best research mentors in their chosen field.

### Theresa Deering

Algorithms for Shared Shortest Paths.

\$17,300.00

### Karina Dube

Separation of neural stem cells from embryonic day 14 (E14) mouse cortex using an immunomagnetic positive selection protocol.

\$17,300.00

## Natural Sciences and Engineering Research Council (NSERC) Undergraduate Student Research Award (USRA)

The NSERC USRA funds are awarded to students to stimulate interest in research in the natural sciences and engineering. These awards are meant to encourage students to undertake graduate studies and pursue further research careers in related fields. Each award consists of \$4,500 from NSERC and an additional top-up of \$2,500 from the institution.

### Carol Bob

Complete Pheromone Characterization of the Pacific Sand Dollar, *Dendraster excentricus*.

\$4,500.00

### Johnnie Manson

Prawn Trap Bycatch Reduction.

\$4,500.00

### Jason Devlin

Condensed Phase MIMS Interfaces Based Upon Polymeric Materials.

\$4,500.00

### Michelle Lamarche

Condensed Phase MIMS Interfaces Based Upon Supported Liquid Membranes.

\$4,500.00

### Sandy Neal

Culture and Electrophysiology of Cnidarian Primary Receptors.

\$4,500.00

### Amber Paulson

Abiotic and Biotic Factors Affecting the Growth/Reproduction of Invasive Tunicate Species.

\$4,500.00

### Christine Stokes

Monitoring of Halomethane Formation in Natural Waters using MIMS.

\$4,500.00

### Ian Anderson

Culture of Pacific Geoduck Clams, *Panopea abrupta*.

\$4,500.00

## BC Government Social Policy Grant

This grant supports students with a major research project, including travel and conference fees. The BC Cross Government Research, Policy and Practice Branch has provided funding to be awarded to Malaspina Students to conduct student-led research that supports the implementation and development of research projects related to social policy. Awards are granted in the amount of \$1,500.

### Katelin Bowes

Speech-Language Pathologists' Experiences with Student Caseloads.

\$1,500.00

### Vincent Hopkins and Katie Warnock

Experiences of Undergraduate Researchers at Malaspina.

\$3,000.00

### Neva Frederick

Assessing Nanaimo's Public View of Harm Reduction.

\$625.00

### Ryan Brown

Reconciling Ecological and Social Sustainability: The Case of Vancouver's EcoDensity Initiative.

\$1,500.00

### Laura Roberts

Assessing Nanaimo's Public view of Harm Reduction.

\$625.00

# Student Research Projects

## Arts and Humanities

### English

#### Holly H. Knox

**Supervisor:** Dr. Richard J. Lane

**Research Project:** Culture, Temporality and Topography

#### Devon McDonald

**Supervisor:** Dr. Richard J. Lane

**Research Project:** Freudian Temporality and Rebecca West's *The Return of the Soldier*

### Media Studies

#### Eric Page

**Supervisor:** Dr. Marshall Soules

**Research Project:** SignPosts Tag Clouds

#### Eric Page

**Supervisor:** Dr. Marshall Soules

**Research Project:** Online Focus Groups and Social Networking

#### Kelsey Rush

**Supervisor:** Dr. Marshall Soules

**Research Project:** Innovative Educational Technology at Malaspina

## Education

### Education

#### Clay Aitken

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Motivational Factors that Affect Participation of High School Students in Physical Education

#### Kathleen Barrie

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Controversial Issues: Secondary Teaching Strategies and Skills

#### Shawn Bates

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Exploring How Secondary Students Self-edit Written Work

#### Dayna Baxter

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Cooperative Learning in the Secondary Social Studies Classroom

#### Shannon Bingham

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Strategies Teachers use to Support Students with Exceptionalities to be Active Members in Their Secondary Classrooms

#### Kimberly Birkland

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Segregation Revival: The Ever-Changing Environment of our Classrooms

#### Tiffany Black

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** How can we use students' affinity for social activity to motivate them at the Secondary level?

#### Lynn Boswell

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Is nature-deficit disorder the new affliction of the 21st century?

#### Sarah Callahan

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Transition Phase from High School to Adulthood for Students with Exceptionalities

#### Angela Carpenter

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** What factors contribute to students attending an alternative classroom/school?

#### Jenny Chung

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Students' Perspectives on the Use of the Internet, MSN Messenger and Their Writing

#### Lindsey Craig

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Increasing Student Motivation and Participation In Middle School Physical Education

#### Marjorie Evely

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Female Barriers to Participation in Physical Education Class

#### Robert Frolic

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Effectiveness of Active Learning Methods in Teaching Social Studies

#### Rebecca Haig

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Strategies that Increase Student Interest for Classroom Activities

#### Brooke Hiltz

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Role Confusion in Coaches at the Secondary School Level

#### Alexis Honeyman

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Motivating Male Students in Secondary English

#### Jennifer Inglis

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** The Value of Current Events in Grade 8 Social Studies

#### Tamara Ireland

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Adolescent Literacy

#### Jenni Jarvis

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Changing Class Content to Increase Active Participation in Secondary Physical Education Classes

#### Jaymi Johnston

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Encouraging Individual Student Voice to Enhance Motivation for Learning in Senior Level English

**Amanda Lariviere**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Technology in the grade 7 English Classroom. Given that technology is becoming more prominent in the lives of our students, how can we incorporate it to improve students' literacy?

**Kate MacGregor**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Learning Centers and How they Fit into Elementary Classroom Environments

**Michael Markin**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Critical Incidents in Secondary Schools

**Jeremy Marten**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Local Teachers' Use of Technology in High School

**Laurie Mathieson**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Benefit of Visual Arts for Special Needs Students

**Natalie McCallan**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Incorporating More of the Elements of Visual Arts into Social Studies

**Michelle McNall**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** How do you create an engaging classroom environment?

**Alyson Milne**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Motivation and Participation of Adolescent Females in Physical Education

**Mary Moore**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Critical Analysis in Social Studies 10

**Tammi Nadeau**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Bullying Issues Within the Classroom at the High School Level

**Blake Olsen**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Interest Levels In Social Studies

**John Pezel**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Political Instruction in Secondary Social Studies

**Nicole Phelan**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Technology in the Grade 8 English Classroom and its Effects on Literacy

**Katie Phelan**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** How History 12 Students are Conducting Online Research

**Susan Place**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** How are incidents of bullying, particularly cyberbullying, dealt with at the middle school level and how can we bring students' knowledge and teachers' awareness closer together to help students?

**Bonnie Postulo**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Secondary School Home Economics and Social Responsibility

**Brianne Robichaud**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** DART; Assessment of Literacy and Literacy Skills

**Patti Rogers**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Cooperative Learning at the Primary Level

**Tasha Silvius**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Strategies and Methodologies Grade 8 Teachers Use to Aid Struggling Readers

**Jasmine Sonier**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Responding to Art in the Secondary Visual Arts Classroom

**Cheryl Swan**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Technology in the Secondary Math Classroom

**Jackie Thibodeau**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Given that participation in extracurricular activities has proven to be beneficial, how do they affect secondary students from grades 10 through 12?

**Mela Vallentgoed**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Fostering an Interest in Reading for Secondary Students

**Dan Vincent**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** The Effects of Teaching Strategies and Teaching Models on Intrinsic Motivation in Senior High School Physical Education Students

**Jeff von Wartburg**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Active Participation for Middle School Students in Physical Education

**Leslie Wallis**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** How Can Teachers Develop an Alternative Physical Education Program that Promotes Student Physical Activity Outside of School?

**Janine Widsten**

**Supervisors:** Jean Tonski, Laura Harrison, Mike Silverton and Cathy Grunland

**Research Project:** Investigating School Fees

## Health and Human Services

### Nursing

**Cheryl Abesamis, Mariko Ishii & Carol Shaw (NURS 460)**

**Supervisor:** Dr. Ann Holroyd

**Research Project:** The PARTY Program (Preventing Alcohol and Risk-related Trauma in Youth) and its potential impact on reducing risk taking behaviour in youth

**Amy Dirksen, Leah Greenwell, Marissa Hoodikoff and Lisa Baker (NURS 460)**

**Supervisor:** Dr. Ann Holroyd

**Research Project:** Nursing students phenomenological experience of stress in the academic and clinical practice setting

**Neva Frederick and Laura Roberts (NURS 491)**

**Supervisor:** Dr. Ann Holroyd

**Research Project:** Nanaimo's understanding of harm reduction strategies

**Emily Janes, Elaine Ballantyne and Erin Canty (NURS 460)**

**Supervisor:** Dr. Ann Holroyd

**Research Project:** The Impact of peanut free guidelines on elementary school children and their parents: Do food restrictions Influence a parents ability to provide a nutritious lunch

**Joline McNaulty and Lauren MacNeill**

**Supervisor:** Zoe Dams

**Research Project:** The Student / Registered Nurse relationship: an Appreciative Inquiry

**Rebecca J. Stanley**

**Supervisor:** Lynn Rollison

**Research Project:** Exploring the Breastfeeding Experience through the Lactation Management Model, Part I: Antenatal Experiences

## Management

### Recreation and Tourism

#### Management

**Reiko Allen, Kevin D'Souza and Alexander France**

**Supervisor:** Richard Hudson (Manecon Business Consulting)

**Research Project:** Situational Analysis of the Tourism Economy in the North Shore, Fraser Valley and Nootka Sound Communities

**Scott Bastian, Tracy Simpson, Natalie Weir, Kenton Olsen, Tina Freaque, Letasha Seko, Carolyn Lepper, Amanda Keir, Andrea von Albedyhl, Valdón McKinnon, Cam Strachan, Miesha Breiter and Royce Pritchard**

**Supervisor:** Dr. Nicole Vaugeois, Tourism BC and the Bowen Island Chamber of Commerce

**Research Project:** Resident Attitudes of Tourism on Bowen Island

**Scott Bastian, Stephanie Chow, Ashley Madiuk, Ebony Logins, Miesha Breiter and Valdón McKinnon**

**Supervisor:** Joanne Schroeder

**Research Project:** Recreation, Tourism, and Sport Program Review

**Dustin Bodnaryk**

**Supervisor:** Dr. Nicole Vaugeois, the Northern Rockies Alaska Highway Tourism Association and Tourism BC

**Research Project:** Northern Rockies District: Value of Tourism Project 2007

**Paul Bruniski, Letasha Seto, and Royce Pritchard**

**Organization:** Backcountry Horsemen of BC

**Research Project:** Horse Trails BC Initiative

**Eva Chen and Alex Jules**

**Supervisor:** Dr. Rick Rollins

**Research Project:** Coast Bastion Project

**Richard Crowley**

**Supervisor:** Dr. Nicole Vaugeois

**Research Project:** Value of Not for Profit Sector to Tourism

**Richard Crowley, Dustin Bodnaryk, Randy Love (TRU) and Lea Thuot**

**Supervisor:** Dr. Nicole Vaugeois

**Research Project:** Tourism Research Innovation Project – Regional Liaisons

**Karla Duarte, Eva Chen, Amanda Keir, Michael Neville and Alex Jules**

**Supervisors:** Dr. Nicole Vaugeois and Dan McDonald

**Research Project:** Mowachaht Muchalaht First Nations Tourism Development Project

**Karla Duarte, Carolyn Mead, Amanda Moore, Anya Metzger, Lea Thuot**

**Supervisor:** Dr. Nicole Vaugeois, Dr. Dave Robinson and Likely Chamber of Commerce

**Research Project:** Likely Tourism Strategy

**Brad Goodwin, Maddie Koch, Reiko Allen, Kira Hildering, Missy Wallman**

**Supervisor:** Dr. Dave Robinson and Jim Ketelsen

**Research Project:** Heart of Gold Costa Rica Community Empowerment Project

**Leslie Humphrey and Andrea von Albedyhl**

**Organization:** The Wilderness Tourism Association (WTA)

**Research Project:** An inventory and website content analysis of nature-based tourism operations in British Columbia

**Polly Li and Danielle Nagy**

**Organization:** Destination Nanaimo

**Research Project:** Designing a Web-based survey for Hot Spot Project

**Carolyn Mead**

**Supervisor:** Dr. Nicole Vaugeois

**Research Project:** Understanding visitors: A How to Manual to undertake market research in the tourism sector

**Amanda Moore**

**Supervisor:** Dr. Nicole Vaugeois for World Leisure, UN Commission

**Research Project:** Intercultural Readiness Guidebook

**Jason Muise**

**Supervisor:** Jimmy Young (Tourism Planning Group)

**Research Project:** Bowen Island Resident Attitude Study

**Kenton Olson, Amanda Keir and Carolyn Lepper**

**Supervisor:** Carleigh Randall (2007 Cowichan Wine & Culinary Festival Committee)

**Research Project:** The 3rd Annual Cowichan Valley Wine and Culinary Festival Evaluation 2007

**LA Shibish, Megan Fisher, Jody Young, Diane Weatherston (COTR), Sandra Borton (TRU), Courtney Worsely (UNBC), Amber Faktor (UNBC)**

**Supervisors:** Dr. Nicole Vaugeois, Dan McDonald and Pat Maher (UNBC)

**Research Project:** Coastal Study Tour – April to May 2008

**Lea Thuot**

**Supervisor:** Dr. Nicole Vaugeois, Dr. Wayne Pealo and Horne Lake Teepee and Caves

**Research Project:** Market Analysis: Horne Lake Visitor and Interpretive Centre

**Lea Thuot, Brad Goodwin, Danielle Burrows, Tracy Simpson, Doug Craig & Sebastian Schneider**

**Supervisor:** Dr. Nicole Vaugeois and Dr. Grant Murray

**Research Project:** Tourism Research Innovation Project, Research assistance, DVD production, database and mapping

**Lea Thuot, Tracy Simpson, Brad Goodwin, Carolyn Lepper, Cam Strachan, Scott Bastian, Eva Chen**

**Supervisor:** Dr. Nicole Vaugeois and Richard Giele

**Research Project:** Port Alberni – People's Voice: Local Government Satisfaction Study

**Missy Wallman and Cam Strachan**

**Supervisor:** Dr. Rick Rollins and Dr. Ken Hammer

**Research Project:** The Malaspina Ghana Project

**Natalie Weir, Rafael Eder, Mike Hogman, and Ayman Salah**

**Supervisor:** Dr. Nicole Vaugeois and Stephen Burr

**Research Project:** Student Perceptions of the Malaspina name

**Kelly Whitney-Squire**

**Supervisor:** Nicole Vaugeois and The Ministry of Tourism, Sport and the Arts

**Research Project:** A Comparative Analysis of Programs and Services: Mid-Size Resorts in British Columbia, Alberta, and Manitoba

## Masters of Business

### Administration

**Ilham Laaoula**

**Supervisor:** Dr. Joseph W. Chang

**Research Project:** Strategic Market Analysis of Moroccan Video-Game Industry for Nintendo Inc.

**Jih-Yuan Lu**

**Supervisor:** Dr. Joseph W. Chang

**Research Project:** Strategic Market Analysis of China's Computer Industry for Acer Inc.

**Chueh-Chuan Pan**

**Supervisor:** Dr. Joseph W. Chang

**Research Project:** Strategic Marketing Analysis of Taiwan's Credit Card Industry for ChinaTrust Commercial Bank

**Li Qu**

**Supervisor:** Dr. Joseph W. Chang

**Research Project:** Strategic Market Analysis of China's Tourism Industry for CITS

**Jianan (Bill) Song**

**Supervisor:** Dr. Joseph W. Chang

**Research Project:** Strategic Market Analysis of China's Banking Industry for the Bank of China

**Hung-Te (Jat) Tsai**

**Supervisor:** Dr. Joseph W. Chang

**Research Project:** Strategic Marketing Analysis of Taiwan's Mobile Phone Market: BenQ as An Example

**Xiao-Min Yang**

**Supervisor:** Dr. Joseph W. Chang

**Research Project:** Strategic Marketing Analysis of China's Automobile Market for BMW Brilliance Automotive

**Kai Zang**

**Supervisor:** Dr. Joseph W. Chang

**Research Project:** Strategic Market Analysis of Shanghai Hotel Industry for Jin Jiang Tower Hotel

**Zhihua Zhong**

**Supervisor:** Dr. Joseph W. Chang

**Research Project:** Strategic Marketing Analysis of China's Hotel Industry for Hilton Hotels Corporation

## Science and Technology

### Biology

**Dara Barker (BIOL 491)**

**Supervisor:** Dr. Allan Gibson

**Research Project:** The effects of myo-inositol treatment on expression of the MYC oncoprotein in human cancer cell

**Stephanie Chalmers (BIOL 491)**

**Supervisor:** Dr. Eric Demers

**Research Project:** Ecological role of lake whitefish (*Coregonus clupeaformis*) in Skaha and Osoyoos Lakes

**Chris Duncan (BIOL 491)**

**Supervisor:** Dr. Rosemarie Ganassin

**Research Project:** Optimization of media to facilitate development of a sea urchin coelomocyte cell line

**Jake Etzkorn (BIOL 491)**

**Supervisor:** Dr. Tim Goater, Dr. Duane Barker and Dr. Chris Gill

**Research Project:** Helminth parasites of the *rhinoceros auklet*, *Cerorhinca monocerata*, as biological indicators of heavy metal contamination in the marine environment

**Richard Hon (BIOL 491)**

**Supervisor:** Dr. John Amaral

**Research Project:** Methane dynamics in compost

**Fatima Kaabar (BIOL 491)**

**Supervisor:** Dr. Mercedes Hernandez

**Research Project:** Comparative susceptibility to Triclosan antibiotics among *Staphylococcus isolates* from Southern Vancouver Island

**Kristin Kaese (BIOL 491)**

**Supervisor:** Dr. Tim Goater

**Research Project:** Helminth parasite infracommunities of American robins (*Turdus migratorius*) from Southern Vancouver Island

**Stephen Kirkpatrick (BIOL 491)**

**Supervisor:** Dr. Susan Sanders

**Research Project:** Qualitative analysis of primary contact recreational water supply quality, with regard for microbial content using membrane filtration and disinfectants susceptibility tests

**Christen Miller (BIOL 491)**

**Supervisor:** Dr. John Amaral

**Research Project:** Factors affecting violacein production in *Janthinobacterium lividum*

**Den Neang (BIOL 491)**

**Supervisor:** Dr. Erick Groot

**Research Project:** Microbial respiration and its contribution to whole-animal oxygen consumption rate measurements made using an aquatic micro-respirometer

**Sandy Neal (BIOL 490)**

**Supervisor:** Dr. Andy Spencer

**Research Project:** In-situ hybridization using RNA probes to identify the cells that express specific voltage-gated potassium clones in the jellyfish *Polyorchis penicillatus*

**Jennifer O'Donnell (BIOL 491)**

**Supervisor:** Dr. Mercedes Hernandez

**Research Project:** Characterization of the mobile genetic element responsible for methicillin resistance in environmental and clinical staphylococcal isolates by multiplex PCR assay

**Johanne Picard (BIOL 491)**

**Supervisor:** Dr. Rosemarie Ganassin

**Research Project:** The effect of resveratrol on a calcitriol-differentiated human promyelocytic cell line, HL-60

**Ryan Powell (BIOL 491)**

**Supervisor:** Dr. Bill McMillan

**Research Project:** The effect of varying nitrogen containing fertilizers on growth and berry production of Shuksan, Fort laramie, Tristar and Hood strawberry cultivars.

**Jas Randhawa (BIOL 491)**

**Supervisor:** Dr. Mercedes Hernandez

**Research Project:** Response of methicillin-resistant *Staphylococcus aureus* to long term cultivation at sublethal levels of Triclocarban

**Tim Ryper (BIOL 491)**

**Supervisor:** Dr. Eric Demers

**Research Project:** Population dynamics and potential effects of the introduced signal crayfish (*Pacifastacus leniusculus*) in Enos Lake

**Anna Turo (BIOL 491)**

**Supervisor:** Dr. Allan Gibson

**Research Project:** Investigation of p110/p115 c-myc antigens

**Denise Williamson (BIOL 491)**

**Supervisor:** Dr. Suzanne Nilson

**Research Project:** Preliminary investigation of *Flavobacterium columnare* populations in two different water tank systems at the Malaspina University-College hatchery

**Chemistry****Kuldeep Basi (CHEM 490)**

**Supervisor:** Dr. Erik Krogh and Dr. Ian Bailey (Mathematics)

**Research Project:** The use of multi-variate analysis in the separation of time resolved membrane introduction mass spectrometry signals arising from mixed solutions

**Natalie Cielanga (CHEM 490)**

**Supervisor:** Dr. Erik Krogh and Dr. Chris Gill

**Research Project:** Investigation of photochemical chloromethane production in natural waters using membrane introduction mass spectrometry

**Liam Cross (CHEM 490)**

**Supervisor:** Dr. Chris Gill

**Research Project:** Supported Liquid Membranes and their use for MIMS

**Nick Davey**

**Supervisor:** Dr. Erik Krogh and Dr. Chris Gill

**Research Project:** Optimization studies for thermally assisted membrane introduction mass spectrometry

**Kyle Duncan**

**Supervisor:** Dr. Erik Krogh

**Research Project:** Segregation and nutrient analysis of forest litterfall in the Clayoquot forest district

**Cam Newhook**

**Supervisor:** Dr. Erik Krogh

**Research Project:** Investigation of the production of benzene in food and beverage products using membrane introduction mass spectrometry

**Computing Science****Michael J. Mills**

**Supervisor:** Dr. Huizhu Liu

**Research Project:** The Robot

**Fisheries and Aquaculture****Christine Bentley (FISH 490)**

**Supervisor:** Dr. Stefanie Duff

**Research Project:** Larval development of Pacific coast crab species

**Carol Bob**

**Supervisor:** Dr. Helen Gurney-Smith

**Research Project:** The standardization of the biochemical composition of the Pacific oyster *Crassostrea gigas* by Near Infra-Red (NIR) analysis

**Cristina Greunding**

**Supervisor:** Dr. Helen Gurney-Smith and Dr. Stefanie Duff

**Research Project:** Care and maintenance of the basket cockle, *Clinocardium nuttallii*

**Johnnie Manson**

**Supervisor:** Dr. Stefanie Duff

**Research Project:** Bycatch reduction in the prawn fishery

**Sebastien Ottow and Ron Hill (AQUA 292)**

**Supervisor:** Dr. Duane Barker

**Research Project:** Intestinal helminths of Marine Fish as Indicators of Predator Prey Relationships

**Sebastien Ottow and Kyle Girgan (AQUA 291)**

**Supervisor:** Dr. Duane Barker

**Research Project:** Preliminary Investigations into Marine Stickleback Biology and Parasitology

**Cam Robinson**

**Supervisor:** Dr. John Morgan and Dr. Duane Barker (FISH 491)

**Research Project:** Efficacy of AQUI-S, clove oil and TMS anesthesia using juvenile white sturgeon (*Acipenser transmontanus*)

**Engineering****Michael Engelman Germain**

**Supervisor:** Dr. Brian Dick

**Research Project:** Construction of a Carbon Nanotube Growth Facility

**Resource Management Officer Technology****David Walkey**

**Supervisor:** Dr. Liz Gillis and Gill Radcliffe (Pacific Northwest Raptors)

**Research Project:** Resident Canada geese management and control using trained birds of prey

**Social Sciences****Geography****Ryan Brown**

**Supervisor:** Dr. Don Alexander

**Research Project:** Reconciling Ecological and Social Sustainability: The Case of the EcoDensity Initiative

**Melissa Dinsdale**

**Supervisor:** Dr. Tim Stokes

**Research Project:** Preliminary Investigation into the Sand Dunes of Savary Island

**Liberal Studies****Ann Marie Dunn**

**Supervisor:** Dr. Janina Hornosty

**Research Project:** The Fifth Door: Myth, Poetry, Love, Intoxication and the Divine

**Mairi Edgar**

**Supervisor:** Dr. Lisa MacLean

**Research Project:** Female Heroines in Literature and Art

**Stacey Forbes**

**Supervisor:** Dr. Mark Blackell

**Research Project:** Born Good: An Encounter between Rousseau and Liedloff

**Lorill Ireland**

**Supervisor:** Dr. Lisa MacLean

**Research Project:** The Road to Self-Knowledge: Creating a Personal Coat of Arms as a Tool for Self-Discovery

**Juniper LeBaron**

**Supervisor:** Dr. Janina Hornosty

**Research Project:** Why Canadian Eskimos Can't Kayak

**Dan Miller**

Supervisor: Dr. David Livingston  
 Research Project: Plato's Republic

**Deanna Robertson**

Supervisor: Dr. John Black  
 Research Project: Eve: the First Feminist

**Psychology****Darby Eakins**

Supervisor: Dr. Caroline Burnley and Deborah Matheson  
 Research Project: Risk and Resilience in Youth Living with Diabetes: A Community Study

**Larissa Predy**

Supervisor: Dr. Caroline Burnley  
 Research Project: Expressed Achievement Goals of Private and Public Elementary School Teachers

**Ron Rattink**

Supervisor: Lynn McCaw  
 Research Project: Dying from Divorce: Intra, Inter, and Extra-Factorial Elements Relating to Parental Alienation and Suicide

**Simona Sebastian**

Supervisor: Dr. Robert Harper  
 Research Project: In Search for Evidence of Non-local Aspects of Consciousness

**Tara Semple**

Supervisor: Dr. Caroline Burnley  
 Research Project: Prenatal Programs in Nanaimo: A Needs Assessment

**Tania Smethurst**

Supervisor: Dr. Caroline Burnley  
 Research Project: Cultivating Resilience: An Evaluation of a Youth Wilderness Program

**Sociology****Katelin Bowes**

Supervisor: Dr. Linda Derksen  
 Research Project: Speech Language Pathologists' Experiences with Student Caseloads

**Alyssa Robertson**

Supervisor: Dr. Linda Derksen  
 Research Project: Journeys in Feminist Theory

**Student Services****Physical Education****Rosanna Chamberlin (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: Best Practices for Treating Muscular Lower Back Pain

**Claire Champagne (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: The Relationship between Physical Activity and Female Body Satisfaction

**Sarah Cross (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: The Unintended Consequences of Female Athletes and Sport

**Carolyn Dawson (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: 6-Week Exercise Intervention of an Unstable Knee

**Genevieve Dogherty (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: Tapering & Triathletes

**Jessica Englouen (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: The Effects of Diabetes on Physical Activity & Motivation

**Adam Evans, Amrit lally, Craig Horncastle and Michael Warren**

Supervisor: Guy Le Masurier and Rick Bevis  
 Research Project: On-Campus & Off-Campus Walkability at Malaspina's Nanaimo Campus

**Jeffrey Fleming (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: Patellar Tendon vs. Hamstring Tendon Grafts, used during ACL Reconstruction Surgery

**Sarah Frostad (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: Anxiety & Rock Climbing

**Graham Giske (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: Motor Delay in Children and the Role of Physiotherapy

**Amy Harrison (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: Water vs. Land: An examination of two aerobic environments on weight loss in previously sedentary individuals

**Sandeep Heer (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: Coaching High School Basketball Successfully in British Columbia

**Hannah Henderson (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: Active Schools! BC & Other Valuable Initiatives for Sustained Intrinsic Value of Active Living in Children & Youth

**Brook Hiltz (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: Student Interest in Secondary School Physical Education

**Daniel Holenstein (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: Golf & Physical Activity: How many steps do golfers take when playing 18 holes of Golf?

**Maria Kirkbride (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: Exercise: An Alternative Medicine for Depression

**Sonja Kurkiniemi (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: Cultural Comparison of Physical Activity

**Lauren LaFleur (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: Does Sport Lower the Level of Depression in Teen Indigenous Populations

**Launi Legg (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: Coaches Effect on Participation and Dropout Rates in Soccer

**Kim Le Grand (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: Youth Smoking: A Social Influence or an Environmental?

**Anna Leung (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: A checklist of specific skill sets for adolescent female basketball players to become elite basketball players

**Kevin Levesque (PHED 491)**

Supervisor: Rick Bevis  
 Research Project: Freshman 15

**James Lockwood (PHED 491)****Supervisor:** Rick Bevis**Research Project:** An Analysis on the Prevalence, Etiology and Severity of Patellofemoral Pain Syndrome**Angela Losch (PHED 491)****Supervisor:** Rick Bevis**Research Project:** Perceived Effectiveness of Massage and Chiropractic Therapies for the Treatment of Chronic Pain Relief**Kirstin Mitchell (PHED 491)****Supervisor:** Rick Bevis**Research Project:** The Effects of Physical Activity on Balance Control in Older Adults**Kathleen MacKay (PHED 491)****Supervisor:** Rick Bevis**Research Project:** The Effects Physical Activity has on Perceived Cognitive Abilities**Natashia Nagy (PHED 491)****Supervisor:** Rick Bevis**Research Project:** Factors in Running Behaviour**Erik Peterson (PHED 491)****Supervisor:** Rick Bevis**Research Project:** Changes in the Quality of Life of Breast Cancer Survivors participating in Regular Dragon Boat Training**Kristopher Pritchard (PHED 491)****Supervisor:** Rick Bevis**Research Project:** External Auditory Canal Exostoses In Cold Water Athletes**Shannon Purse (PHED 491)****Supervisor:** Rick Bevis**Research Project:** Behavioural Responses to Stress in the Middle Age Population (40-55)**Jeffrey Roy (PHED 491)****Supervisor:** Rick Bevis**Research Project:** The Importance and Impact of Sport in the Socialization and Development of Youths**Natalie Schafer (PHED 491)****Supervisor:** Rick Bevis**Research Project:** The Physiological and Psychological Benefits of Yoga**Serene Smyth (PHED 491)****Supervisor:** Rick Bevis and Guy Le Masurier**Research Project:** What are the fitness levels of adolescent aboriginal athletes training for the North American Indigenous Games?**Rebecca Stannard (PHED 491)****Supervisor:** Rick Bevis**Research Project:** The Role of Parents on the U-10 Female Youth Soccer Player**Danielle Steele (PHED 491)****Supervisor:** Rick Bevis**Research Project:** How many steps per day do you get from walking a dog?**Meghan Struch (PHED 491)****Supervisor:** Rick Bevis**Research Project:** The Negative Health Effects of Working at an Indoor Aquatic Facility**Jaclyn Thibodeau (PHED 491)****Supervisor:** Rick Bevis**Research Project:** Does participation in competitive recreational sports influence alcohol consumption among adult women?**Dan Vincent (PHED 491)****Supervisor:** Rick Bevis**Research Project:** The Effects of an Intervention on the Distance and Accuracy of a Beginners Golf Swing with the Driver**Jeffrey Von Wartburg (PHED 491)****Supervisor:** Rick Bevis**Research Project:** How many steps per day do you get from walking a dog?**Leslie Wallis (PHED 491)****Supervisor:** Rick Bevis**Research Project:** What activities do adults participate in to stay healthy? Are we teaching these activities in school PE?**Michael Warren (PHED 491)****Supervisor:** Rick Bevis**Research Project:** Describing the Off-Campus Built Environment around Malaspina University-College**Carson Williams (PHED 491)****Supervisor:** Rick Bevis**Research Project:** Anaerobic vs. Aerobic Fitness: Predictors of playing time in college – Level Male Basketball Players

# Research Centre, Institute and Laboratory Activities at Malaspina University-College (now Vancouver Island University)

## Applied Environmental Research Laboratories (AERL)

Director(s): Dr. Chris Gill and Dr. Erik Krogh  
WEB: [web.viu.ca/AERL/](http://web.viu.ca/AERL/)

### Overview

The AERL facility includes a sample processing lab, a wet chemistry lab and a state-of-the-art instrument facility specializing in environmental chemical analysis by traditional and emerging methods. Our program includes pure and applied research related to analytical and environmental chemistry. Our focus is on developing new and improved strategies for direct measurements in complex environmental samples, continuous 'real-time' monitoring and applications of these techniques to the study 'real-world' environmental processes. We are on the leading edge of an evolution in the discipline of 'bringing chemical measurements to the sample' rather than the other way around. Advantages include, less sample handling, fewer consumables, faster response, less contamination, and temporally resolved data acquisition for direct assessments of chemical kinetics and environmental fluxes. The central innovation in this work is a membrane interface that allows us to continuously analyze a flowing sample by passing chemical analytes to a mass spectrometer. We are employing these techniques to investigate the rates of chemical transformations and the properties of new semi-permeable materials. The AERL strives to provide mentoring opportunities for undergraduate and graduate students on a range of projects. These students become fully engaged in the challenges and discovery process of cutting edge research and are encouraged to participate in the dissemination of results via participation in meetings attendance at conferences and co-authorship on peer-reviewed publications.

### Projects

*New Directions and Applications of Membrane Introduction Mass Spectrometry*

Natural Sciences and Engineering Research Council (NSERC) Group Discovery Grant (\$26,000/annum)

*Thermally Assisted Membrane Introduction Mass Spectrometry*  
NSERC Ideas to Innovation (I2I) Grant (\$95,324)

### Conference Presentations

"Modeling of hollow fiber membrane inlet mass spectrometry," at the 2007 American Institute of Chemical Engineers Annual Meeting, Salt Lake, US, November 6, 2007: Abstract #236f.

Co-Authors D.W. Janes, C.J. Durning\*, D.M. van Pel, M.S. Lynch, E.T. Krogh and C.G. Gill.

"Simultaneous On-Line Measurement of AOP Degradation Kinetics for Trace Gasoline Components in Aqueous Solutions and Natural Waters by MIMS-MS/MS," at the 55th American Society for Mass Spectrometry Conference, Indianapolis, US, June, 2007: Abstract#1342.

Co-Authors J.H.L. Nelson, J.M. Etzkorn, M.C. Lamarche, D.A. Friesen, E.T. Krogh and C.G. Gill\*.

"Modeling Mass Transport in Membrane Introduction Mass Spectrometry to Measure Diffusion and Partition Coefficients in Capillary Hollow Fibres," at the 90th Canadian Chemistry Conference, Winnipeg, MB, May 2007: Abstract#547.

Co-Authors D.W. Janes, C.J. Durning, D.M. van Pel, M.S. Lynch, C.G. Gill and Erik Krogh\*.

"Disinfection By-Product Formation Rates from Model Compounds, Pharmaceuticals and Personal Care Products Using Membrane Introduction Mass Spectrometry," at the 90th Canadian Chemistry Conference, Winnipeg, MB, May 2007: Abstract#1099.

Co-Authors O.D.M. Stechishin, C.G. Gill and E.T. Krogh\*.

"Thermally Assisted Membrane Introduction Mass Spectrometry Using a Coaxially Heated Hollow Fibre Membrane Interface for the Analysis of Semi-Volatile Molecules," at the 90th Canadian Chemistry Conference, Winnipeg, MB, May 2007: Abstract#981.

Co-Authors A.S. Creba, A.J. Thompson, C.G. Gill and E.T. Krogh\*.

### Articles

"Modeling Analyte Permeation in Cylindrical Hollow Fiber Membrane Introduction Mass Spectrometry." *Journal of Membrane Science* (Submitted).

Co-Authors D. Janes, C. Durning, D. Van Pel, M.S. Lynch, C.G. Gill and E.T. Krogh.

"Membrane Introduction Tandem Mass Spectrometry (MIMS-MS/MS) as a Real-Time Monitor for Biogenic Volatile Organic Compound (BVOC) Emissions from Plants." *Canadian Journal of Analytical Sciences and Spectroscopy* 53 (2008) (In Press).

Co-Authors A.J. Thompson, J.M. Etzkorn, D. Van Pel, E.T. Krogh, D.M. Drakeford and C.G. Gill.

"A Membrane Introduction Flame Ionization/Electron Capture Detection (MIFID/ECD) System for the Rapid, Real-time Screening of Volatile Disinfection By-products and Hydrocarbon Contaminants in Water," *Microchemical Journal* 88 (2008): 74-81.

Co-Authors Jason G.A. Devlin, John A. Amaral, Erik T. Krogh, and Chris G. Gill.

### Technical Reports

“Nutrient Levels in Segregated Forest Litter Samples from Clayquot Sound Forest District,” written for International Forest Products, February 2008.

“Available Soil Nutrient Levels in Great Blue Heron Colonies on Vancouver Island,” written for Tamagawa Gakuen of Canada Society, February 2008.

### Patent

System for the online measurement of volatile and semi-volatile compounds and use thereof.

U.S. Patent Application No. 11/864.572 filed September 28, 2007.

### Student Support

In 2007-2008, the AERL supported ten (10) part-time undergraduate student research assistants; six (6) summer research assistants, including three NSERC Undergraduate Summer Research Assistant (USRA), four (4) undergraduate research projects and three (3) visiting and/or co-supervised graduate students: Jake Etzkorn, Jason Devlin, Christine Stokes, Michelle Lamarche, Leah Welsh, Cam Newhook, Breanne Mason, Anna Turo, Natalie Ciealanga and Kuldeep Basi.

## Alexandro Malaspina Research Centre (AMRC)

**Director:** Dr. John Black

**WEB:** [web.viu.ca/black/amrc/index.htm](http://web.viu.ca/black/amrc/index.htm)

### Overview

The Alexandro Malaspina Research Centre has continued its activities on a number of fronts. The translation of Spanish-language newspaper articles and letters for publication on the AMRC website is complete. In order to extend the purview of its research mandate, furthermore, the Centre co-sponsored the first two of a series of symposia on environmental issues (Biosphere Conversations), and formed the Heritage Research Group, an affiliated set of scholars working on a range of historical issues related to British Columbia. Several new members joined the Centre in a variety of capacities. Most notably, the Centre gained a new Honorary Research Associate, Barry Gough, Professor Emeritus of History from Wilfrid Laurier University and among the most renowned historians of Canada.

### Projects

#### *General Theses on Physics*

Last year, Bill Weller produced the Latin text of this, the only work published by Alexandro Malaspina during his lifetime, which consist of an axiomatization of the metaphysical basis of Newtonian physics. John Black has taken over the project of translating it from Latin into English, and intends to complete this in the academic year 2008-09 with the help of time-release awarded him by the Research and Scholarly Activity Committee.

#### *Pictures of an Expedition*

Lisa MacLean, a printmaker and art historian in the Liberal Studies Department, joined the Centre in January 2006 to pursue a project involving the critical analysis of images made by the artists of the Malaspina expedition. Of interest are the ways in which European documentary artists depicted First Peoples, their artefacts and their

customs, and the possibility that these involved distortions in the service of various political, economic or ideological ends. This project is ongoing.

#### *Translation and Web Publication of Source Documents*

The ongoing project of translating the letters of Alexandro Malaspina, historical newspaper articles about him and his expedition, as well as other documents, for publication on the Centre's website, took a big step forward during the year, through the efforts of Research Assistants María Soto de Podriske and Lorill Ireland. Of the items written in Spanish, all the newspaper articles, and all but one letter, have been completed.

### Lectures

The Centre sponsored three public lectures in the fall semester of 2008. The first was given by Honorary Research Associate Barry Gough on his new book *Fortune's a River*. The second, organised by Cheryl Krasnick Warsh of the Heritage Research Group, was given by Michael Bliss, on the subject *Failed and Changing Dreams of Canada*. The third was by Kevin Neary, a freelance historical researcher, on his work for First Nations groups developing support for aboriginal title from the European historical record.

### Publications

*The Meditations of Marcus Aurelius*. Woodstock: SkyLight Paths Publishing, 2007.

Former Director Dr. Russell McNeil published a selected and annotated version of Marcus Aurelius' *Meditations*. The book, which has been very well received, suggests that the Roman emperor's Stoicism – discussed at length by Alexandro Malaspina in his *Meditation on Beauty in Nature* – is truly a philosophy for our time.

### Symposia

#### *Biosphere Conversation Series*

AMRC has co-sponsored, and contributed to the organising and financing of, the first two in a series of symposia on philosophy and the environment. In April and October 2007 invited guests, drawn from a range of disciplines, stakeholder groups and walks of life, met at the Clayoquot Field Station in Tofino for discussions on the role of philosophical discourse in helping people with diverse perspectives on environmental issues achieve a common ground for communication. The first meeting was moderated by John Black and Robert Pepper-Smith of the Institute for Practical Philosophy, the second by John Black alone. It is hoped that a third Conversation will take place in Fall 2008.

### Student Support

#### *Alexandro Malaspina Liberal Studies Award*

As a way of honouring Alexandro Malaspina's broad range of intellectual achievement, the Centre last year supplied seed funding for a student award, to go to the Liberal Studies BA major student who shows the greatest commitment to and achievement in interdisciplinary study, with need and general academic performance as tie-breaking factors. Through donations from Liberal Studies faculty, alumni and audience members at the Department's regular Music of the World concerts, the endowment reached the minimum for matching funds from the University. The first recipient of the award was Lorill Ireland, coincidentally a Research Assistant in the Centre. The AMRC also supports two (2) student assistant positions.

## The Brain Electrophysiology and Neuropsychology Lab

Director: Dr. Tony Robertson

WEB: [records.viu.ca/~psyc/research.html](http://records.viu.ca/~psyc/research.html)

### Overview

The Brain Electrophysiology and Neuropsychology Lab, housed in MU-C's Psychology Department, consists of microcomputer-based apparatus for stimulus presentation and EEG and behavioural response recording and analysis. Facilities include software and hardware for experimental control, data storage, analysis and imaging of brain activity during sensation, perception, cognition and behavioural response preparation. Operating with a Malaspina MRAC grant, considerable development of stimulus presentation, data acquisition apparatus and response analysis protocols was carried out during this year. Several students trained in the lab to gain basic skills for recording sensory Evoked Potentials, perceptual/cognitive Event Related Potentials and behavioural performance data associated with a variety of cognitive tasks. These measures are important in basic Cognitive Neuroscience, applied and clinical Neuropsychological Assessment and for planning and monitoring Training and Rehabilitation. Currently research projects include study of Behavioural data and Event Related Potentials (ERP) associated with attention, music and language processing in the Human brain and of measurable effects of computer-based cognitive rehabilitation.

### Projects

*N400 Responses to Semantically Incongruous Word Stimuli in Spoken Unilingual and Bilingual Phrases*

*Changes in Sensory Gating associated with Participation in a Post-Acute Care Socialization Program in a Group of Participants being Treated for Type I Schizophrenia: P50 ERP and Behavioural Measures*

*Mismatch Negativity and P3 ERP Amplitude and Latency Differences associated with Music Rated as More or Less Preferred*

*P3 and N1 ERP Changes associated with Computer-Based Auditory and Visual Attention Training*

*N400 ERP Responses to Harmonically Incongruous Music Cadences in Music Students and Non-Music Students*

## Centre for Coastal Health (CCH)

Director: Dr. Craig Stephen

WEB: [www.viu.ca/cch/](http://www.viu.ca/cch/)

### Overview

The Centre for Coastal Health (CCH) is an independent, non-profit organization whose mission is to identify and understand the interactions of human, animal and environmental health. We do this by undertaking problem-oriented research, risk assessments, research planning, policy development, field investigations and education. The CCH provides objective solutions to health issues and does not take advocacy positions. Our projects are funded through competitive grants, contribution agreements with government, and fee-for-service contracts. The CCH is also home to the Animal Determinants of Emerging Infectious Disease, funded by the Michael Smith Foundation for Health Research.

### Projects

*Veterinary public health as part of the global response to emerging diseases. Building a sustainable model in Sri Lanka with extension to South and Southeast Asia*

Teasdale Corti Global Health Research Initiative (IDRC/CIDA/CIHR) (\$1,382,380)

*Systematic review of methods for evaluating disease early warning surveillance systems*

National Collaborating Centre for Environmental Health (\$43,000)

*Perspectives of public health practitioners on the uses and value of animal health information*

Public Health Agency of Canada (\$10,000)

*Cross-disciplinary public health training for veterinarians – pilot study*

Canadian Food Inspection Agency (\$21,000)

*Veterinary public health capacity needs and strengths*

Canadian Food Inspection Agency (\$24,000)

These projects represent a small portion of CCH external funding; for a comprehensive listing of all CCH funded research activities, visit [www.viu.ca/cch/index.asp](http://www.viu.ca/cch/index.asp).

### Undergraduate Student Supervision

P. Stephen

University of Victoria

Research Project: *West Nile virus surveillance on Vancouver Island*

A. Cortese

University of Victoria

Research Project: *Database development for the Canadian Cooperative Wildlife Health Centre*

S. Iwasawa

Malaspina University-College

Research Project: *Methods for tick trapping for public health surveillance*

B. Munk

University of Calgary/Colorado State University

Research Project: *Framework for sustainable salmon aquaculture in British Columbia*

### Graduate Student Supervision

Sarah Boyle

Masters of Resource Management, Royal Roads University.

Thesis Title: "Management framework for wildlife diseases surveillance"

Michele Anholt

Masters of Science, University of Calgary

Thesis Title: "Veterinary public health capacity in Canada"

Amanda Salb

Doctor of Philosophy, University of Calgary

Thesis Title: "Epidemiology of anthrax in Wood Bison"

Kate Sawford

Doctor of Philosophy, University of Calgary

Thesis Title: "International strategies for detection and prevention of emerging diseases"

Ravi Bandara

Master of Philosophy, University of Peradeniya

Thesis Title: "Policy issues relevant to emerging disease preparedness in Sri Lanka"

L. Vrbova

Doctor of Philosophy, University of British Columbia

Thesis Title: "Surveillance and zoonotic disease"

C. Glass

Doctor of Philosophy, University of British Columbia

Thesis Title: "Animals as determinants of Masai community health"

### Conference Presentations

"Veterinary Medicine on the Edge: Looking at Health Problems across places, issues and species," at the Students of the Canadian Veterinary Medical Association (SCVMA) Annual Meeting, Guelph, ON, 2008.

"How safe is safe: Grappling with the issues of wild sheep – farm sheep interactions," at the Bighorn Sheep Disease Workshop, Salt Lake City, US, 2008.

"Ecosystem health in a veterinary curriculum," at the University of Minnesota Ecosystem Health Working Group, St. Paul, US, 2008.

"Wildlife Health Management: Developing the "Colorado Charter" at the Wildlife Disease Association Annual Meeting, Estes Park, US, August 2007.

"Prediction, prevention and control of emerging diseases: The role of veterinary services," at the PHAC-PAHO Joint Meeting on Veterinary Public Health, Ottawa, ON, May 2007.

"Attributing cause and effect in free-ranging wildlife: Challenges and shifting approaches – Keynote Lecture," at the Respiratory Disease in Mountain Sheep: Knowledge, Gaps and Future Research Workshop, Davis, US, 2007.

"Panics, Pandemics and Poisons: Part 1 – Origins" and "Panics, Pandemics and Poisons: Part 2 – Solutions," at the Society for Northwestern Vertebrate Biology Conference, Victoria, BC, 2007.

"Systematic Review of Surveillance Systems for Emerging Zoonotic Diseases," at the International Conference on Emerging Infectious Diseases, Atlanta, US, March 16-19, 2008.

Co-Presenters L. Vrbova, N. Kasman, R. Boehnke, M. Doyle-Waters, B. Gibson, A. Chablitt-Clark, M. Fitzgerald and D. Patrick.

"Surveillance Systems for Emerging Infectious Diseases: Definitions of Surveillance and Evaluation," at the Association of Medical Microbiology and Infectious Disease Canada and the Canadian Association for Clinical Microbiology and Infectious Diseases (AMMI-CACMID) Conference, Vancouver, BC, February 27 – March 1, 2008.

Co-Presenters L. Vrbova, N. Kasman, R. Boehnke, M. Doyle-Waters, B. Gibson, A. Chablitt-Clark, M. Fitzgerald and D. Patrick.

### Publications

"Obstacles to Developing a Multinational Report Card on Antimicrobial Resistance for Canada." *Microbial Drug Resistance* 13(4) (2007): 251-260.

Co-Authors J. Parmley, J. Dawson-Coates, E. Fraser and J. Conly.

"Case Report: Clinical and Pathologic Manifestations of Gas Bubble Disease in Captive Fish." *Journal of Exotic Pet Medicine* 16(2) (2007): 104-112.

Co-Authors B.H. Grahn, C. Sangster, C.C. Breaux and L. Sandmeyer.

"Reporting of suspect cases of foot-and-mouth-disease during the 2001 epidemic in the UK, and the herd sensitivity and herd specificity of clinical diagnosis." *Preventive Veterinary Medicine* 78(1) (2007): 12-23.

Co-Authors McLaws, C. Ribble, B. McNabb and P. Romero Barrios.

"Opportunities and obstacles to collecting wildlife disease data for public health purposes: Results of a pilot study on Vancouver Island, British Columbia." *Canadian Veterinary Journal* 48(1) (2007): 83-90.

Co-Authors T. Stitt and J. Mountfield.

## Centre for Shellfish Research (CSR)

**Director:** Don Tillipaugh

**WEB:** [www.viu.ca/csr/](http://www.viu.ca/csr/)

### Overview

In its short history, the Center for Shellfish Research (CSR) has attracted prominent researchers and staff, provided practicum and research opportunities for more than 30 undergraduate students and supported thesis research of five graduate students. Interest and enthusiasm generated in CSR laboratory and field research projects has led students to careers in the industry and into graduate school in related fields. CSR has also developed a considerable capacity for technology transfer and training, which is particularly important for the many First Nations that are becoming actively involved in creating shellfish farming operations in their communities.

Despite officially opening only three short years ago, CSR has already had a significant impact on the shellfish farming industry. Its achievements include: research that has demonstrated that deepwater raft culture of oysters is ecologically sustainable in the surrounding marine environment; research that has revealed that oysters grown on strings suspended from rafts provide habitat for a large number of marine organisms – and have the potential to serve as refuge and nursery sites for rare and valuable species; research that will allow First Nations to farm cockles, a traditional food, in their territories for both food and economic revitalization; \$3 million from the BC Government to deliver shellfish farming training to First Nations communities and industry; \$7 million for research infrastructure, equipment and programs at Malaspina University-College; and \$3.3 million for infrastructure at the Deep Bay Field Station.

### Research Programs

*Ecological Interactions Research Program (EIRP)*

EIRP endeavours to link the development of a sustainable shellfish aquaculture industry in British Columbia with conservation of coastal marine ecosystems.

*Shellfish Health and Husbandry Research Program (SHHRP)*

Research currently underway is focused on the development of techniques for reliably maturing and spawning broodstock of the indigenous cockle *Clinocardium nuttali*. Other aspects to be investigated by the SHHRP include the development of hatchery and nursery techniques and grow-out methods for indigenous species.

*Social Sciences Research Program*

Many BC coastal communities are considering the potential of shellfish aquaculture to revitalize their economies. In addition to facing issues of economic stability, coastal communities are also struggling to re-establish social and cultural stability. The CSR facilitates interdisciplinary research to ensure social health and benefits to coastal communities.

**Fear and Anxiety Research Laboratory**

**Director:** Dr. Melanie O'Neill

**WEB:** [web.viu.ca/oneill/fear&a.htm](http://web.viu.ca/oneill/fear&a.htm)

**Overview**

The mandate of the Fear and Anxiety Research Laboratory is to explore anxiety and related disorders in the hopes of improving understanding and treatment efficacy. The lab has had a busy and fruitful year.

**Projects***Obsessive Compulsive Disorder*

Currently, the lab is collecting data on different mechanisms that maintain symptoms of Obsessive Compulsive Disorder. Our current focus is on concealment and anxiety. Concealment is the act of intentionally hiding the contents of one's thoughts. The study hopes to establish the role of concealment in producing and sustaining obsessive-compulsive symptoms through interview sessions. Students have been extensively training in interview techniques. The study is recruiting participants from classes, and is slated for completion in 2011.

*Posttraumatic Stress Disorder and Post-Concussion Syndrome in Motor Vehicle Accident Survivors*

Another project underway is examining discrepancies in the assessment of post-concussion syndrome in motor vehicle accident survivors in collaboration with Dr. William Koch from UBC Hospital. The students heading this project, Myriah Mulvogue and Karina Kerber, will present a poster at the Association of Behavioral and Cognitive Therapies (ABCT) in November 2008 and the National Undergraduate Conference in May 2008. Ms. Mulvogue and Ms. Kerber are also examining the Posttraumatic Cognitions Inventory (PTCI), a potential assessment tool in the recognition and treatment of posttraumatic stress disorder (PTSD) in a motor vehicle accident-surviving population.

*Substance Dependence and Posttraumatic Stress Disorder*

Jill Fikowski has been working in conjunction with a Vancouver Island-based substance abuse treatment center examining the interplay between posttraumatic stress disorder and substance dependence. Results from this collaboration were presented locally at the treatment facility, as well as at the Canadian Society of Addiction Medicine's 19th Annual Scientific Conference in Ottawa. The study will also be presented at ABCT 2008.

**Conference Presentations**

The Fear and Anxiety Lab annually attends the Association of Behavioural and Cognitive Therapies (ABCT) conference. This year, Jill Fikowski and Arlene Simpson, a former member now completing her MA in Counselling Psychology at the University of Victoria, presented three posters. The first examined intrusive thoughts in an incarcerated and student sample, a second explored perfectionism in older students, and the third studied concealment and anxiety.

**Student Involvement**

Since May of 2007, the lab has supported one student through a research assistant position, and ten students through the on-campus work opportunities program. Two students, Elizabeth Plant and Karina Kerber, were awarded external scholarships. Currently, the lab has eight members.

**Heritage Research Group  
Overview**

This past academic year saw the foundation of the Heritage Research Group, composed of historians working at Malaspina University-College on a wide variety of projects connected by the themes of heritage, memory and identity. The Group will function administratively under the purview of the Centre, and while its work will not be restricted to the Centre's mandate there are promising opportunities for fruitful collaboration. Of the founding members, Stephen Davies leads the Canadian Letters and Images Project; Patrick Dunae studies local British Columbian history, especially public history; Laurie Meijer-Drees works on First Nations history, with an emphasis on healthcare; and Cheryl Krasnick Warsh examines Canadian medical history with a special eye on the health of women.

**Institute for Coastal Health (ICR)**

**Acting Director:** Dr. Bill Pennell

**WEB:** [www.viu.ca/icr/](http://www.viu.ca/icr/)

**Overview**

The Institute for Coastal Research (ICR) has an interdisciplinary research mandate focusing on coastal communities of British Columbia, the Pacific North, and beyond. Though a relatively new research centre, it is synthesizing the bonds between local and academic communities and industry through discussion and research. The aim is to foster interdisciplinary research involving the natural sciences, the social sciences and the humanities as they relate to coastal study, research and activity. The focus is on understanding and promoting the resilience of our coastal social-ecological systems. The ICR mandate has recently expanded to include a range of research, scholarly activities and facilitating functions related to the coast.

**Projects***AquaPort*

Work funded by the \$300,000 grant to the ICR from AquaNet is largely complete. 20 students and five professors from five institutions across Canada participated in content development for the new web-based information system. Eight of the students were from Malaspina, and four additional Malaspina students are now doing the last of the work. Two national meetings were held at Malaspina University-College to develop the AquaPort concept, and an Advisory Committee was established to guide AquaPort through the stages of transition to a new governance model, an independent, non-profit society. This has now been done; the Canadian Aqua Portal Society (CAPS) has been formed with nine board members.

*The Gustafson Chapbooks*

In February 2008, Robert Bringhurst worked with Rhonda Bailey's publishing students to create two new chapbooks, the lectures by visiting poets Dionne Brand and Tom Wayman, both high profile poets

and essayists. The new chapbooks have the same form as the first two books, and the series of four will have great marketing potential. Several professors on the Gustafson Committee are emerging as champions for this project and numerous marketing strategies have been developed. The Gustafson Committee is now in charge of the series from choice of poet to marketing the product. The ICR will provide help as needed, but the series will soon be self supporting. ICR involvement in this project should underline the message that interdisciplinary work clearly includes the arts and humanities.

#### *New ICR Series of Publications*

The next ICR publishing project will be a new series of small books addressing various aspects of coastal life. We will soon have two manuscripts that will form the first volume which will be designed by students from several departments.

#### **Events**

##### Thursday Afternoon Events

This year, the ICR began a series of on-campus discussions held at the ICR. The first two were meetings of the campus research centre directors. The purpose of these gatherings was to create mutual awareness of the centres, now numbering over a dozen, and to articulate their needs and potential contributions to the institution.

##### ICR Symposium

The second ICR Symposium entitled, "Community engagement and the governance of coastal social-ecological systems," was held in April 2008. 'Governance' and 'community engagement' are complex concepts and involve a number of different concepts, actors, sectors, and contexts. As a result, there is much to learn from one another, and a great opportunity for the cross-fertilization of ideas, and the exchange of lessons learned, and 'best practices' insights. Accordingly, the ICR assembled a group of speakers from a number of different perspectives on community engagement and governance with contributions from the mining, forestry, fisheries, and 'academic' (community-university research partnerships) sectors as well as from the aboriginal perspective.

##### IOS First Nations Sea Food Diet and Contaminant Study

On April 5, 2008, the ICR co-hosted (Institute of Ocean Sciences (IOS)) a workshop to discuss the results of a year long study on the sea food consumption patterns in four First Nations communities and the levels of contaminants in the sea foods utilised by these communities. This has been a highly interactive study with the First Nations groups fully involved, and the workshop will emphasise inclusive discussions of the results and pathways to preserve the health of traditional marine products on the BC coast.

#### **Student Involvement**

There has been a steady presence of work study students in the ICR. Megan Foss developed a list of coastal research institutions last year and helped with various ICR activities, Annie Buelles has helped on a variety of projects including research on fellowship programs in other institutions, and Glenda Wills is working with Grant Murray as well as on other ICR projects. Gustafson students will be working in the ICR to produce and market the next chapbooks and they will be aided by a new work study student from the MBA program, Handoko Utama.

## **International Centre for Sturgeon Studies (ICSS)**

**Director:** Dr. John Morgan

**WEB:** [www.viu.ca/sturgeon/](http://www.viu.ca/sturgeon/)

### **Overview**

The ICSS will conduct research that has application for four main areas: wild populations, conservation hatcheries, commercial culture, and socio-economic issues. A major goal of the Centre will be to facilitate cooperation between conservation and aquaculture activities at regional, national and international levels. To that end, a research team has been assembled that includes world-class and emerging new scientists from across Canada, the United States and Europe. The ICSS will provide the link necessary to form a cluster of industry, university, government and non-governmental organizations involved in sturgeon research.

## **The Literary Theory Research Group**

**Director(s):** Dr. Richard Lane and Dr. Daniel Burgoyne

**WEB:** [www.viu.ca/english/LTG.asp](http://www.viu.ca/english/LTG.asp)

### **Overview**

The Literary Theory Research Group was launched by Professor Richard J. Lane and Professor Daniel Burgoyne in the Spring of 2007, at Malaspina University-College with support from the Department of English and the Dean, Faculty of Arts and Humanities. The main aim of the group is to foster advanced studies in the humanities at MU-C, through focused, theoretically oriented research topics. Two main formats were followed during 2007-2008: research seminars, with emphasis on sharing work-in-progress in the humanities at MU-C, and guest lectures by visiting speakers, attracting experts from across Canada and the US, culminating with a special panel at ACCUTE, Congress 2008 (UBC), with speakers Professor Dorota Glowacka (University of Kings College), Professor Ian Rae (McGill University), and Professor Nick Morwood (University of Toronto).

The focus for 2007-2008 was 'myth in contemporary literary theory', guided by close readings of four important books on this topic: Peter Berger's *A Rumour of Angels: Modern Society and the Rediscovery of the Supernatural*; Michel de Certeau's *The Practice of Everyday Life*; René Girard's *The Scapegoat*; and Jean-François Lyotard's *The Postmodern Condition: A Report on Knowledge*. Papers were delivered by Professor Natasha Duquette (Taylor University) and Professor Richard van Oort (University of Victoria). Internationally famous theorist, critic and author Professor Richard Kearney, holder of the prestigious Charles Seelig Chair of Philosophy, at Boston College, USA, also visited to speak on René Girard, with a formal response from Professor Jens Zimmerman, who holds a Canada Research Chair at Trinity Western University, BC.

The group also hosted faculty and students, offering opportunities to discuss and debate their ongoing humanities research projects. Speakers included upper-level English undergraduates Belinda Birkland and Holly H. Knox, and faculty and staff Clay Armstrong, Nelson Gray, Kathryn MacLeod, John Lepage, Doug Stetar, Daniel Burgoyne, and Richard J. Lane. Another aim of the group is to foster connections with research active institutions within the humanities

in Canada and the US; this process began with a guest lecture at The University of Victoria by Professor Lane, speaking on Rachel Whiteread's Holocaust Memorial, and theorists/philosophers Walter Benjamin and Jean Baudrillard. The group aims to expand its activities and increase its network of speakers in 2008-2009, with a new topic—a text by the internationally famous French theorist Julia Kristeva, called Powers of Horror, and her concept of the 'abject' as it applies to literature, theory and the arts.

## Media Research Lab (MRL)

**Director(s):** Dr. Marshall Soules and Doug Stetar

**WEB:** [www.mediamalaspina.ca](http://www.mediamalaspina.ca)

### Overview

The MRL provides expertise, assistance, and infrastructure to support projects involving digital media. Established in 2002 with funding from the Canadian Foundation for Innovation and the BC Development Fund, the Media Research Lab was originally named the Centre for Digital Humanities Innovation (CDHI). The name was changed in 2007 to signify a new direction and mandate. Core activities include: training and supervising research assistants involved digital media projects; supporting targeted faculty research in new media based on proposals; demonstrating new media research and projects; recording significant cultural events on campus and in the community (film unit); seeking partnerships and funding for projects; and researching best practices for digitization and archiving.

The Media Research Lab attempts to integrate new media more fully into institutional practices, through demonstrations, workshops, exhibits, and supported pilot projects. For example, the Film Unit explores the protocols and standards for creating an institutional digital archive. The MRL supports student collaboration with faculty on complex research projects. The directors are available to supervise research assistants (RAs); or faculty can provide their own RAs and supervision using the MRL facilities.

### Productions/Faculty Projects

Film Symposium with Christine Welsh and Tracey Kim Jack, March 2008; partnership with First Nations Department.

Sponsorship / Award, Vancouver Island Short Film Festival, January 2008.

Sponsorship / Award / Tech Support, Nanaimo Global Film Festival, February 2008.

Celebrating Women and Community: Mama's Kitchen and Gerald Fitzella Concert, December 2007; partnership with the Ladysmith Resources Community Association.

Embedded Systems / Sustainable Travel, Paris Polydorou, Doug Stetar and Marshall Soules, 2008.

Image Dialogue: Agile Computing and Visual Ethnography, Marshall Soules and Michael Nixon.

Cuba Now! Lecture series with Prof. Ramiro Zayas Frutos (University of Habana), October 2007.

### Film Unit Projects

Tom Wayman: 2007 Gustafson Distinguished Poet (with Deborah Torkko).

Cuba Now! With Ramiro Zayas Frutos, October 2007.

Music of the World, 2007-2008.

Celebrating Women and Community: Mama's Kitchen and Gerald Fitzella Concert (partnership the Ladysmith Resources Community Association), December 2007.

Speed Dating with your Future (Alumni Project), with Pam Lewis (Community and School Liaison). RAs: Chris Rahm and Chad Schroter-Gillespie. May 2008.

## Recreation and Tourism Research Institute (RTRI)

**Director(s):** Dr. Nicole Vaugeois, Dr. Rick Rollins and Dr. Ken Hammer

**WEB:** [web.viu.ca/vaugeois/courses/RTRI/](http://web.viu.ca/vaugeois/courses/RTRI/)

### Overview

The Recreation and Tourism Research Institute has been operating at Malaspina University-College since 1996 and its intent is to be the most resourceful place in British Columbia for academics, practitioners and students to obtain research and support in recreation and tourism management. RTRI's mission is "To cultivate interest, appreciation and skills in recreation and tourism management research among emerging professionals, those in the industry, and faculty at Malaspina University-College, by undertaking a wide range of research projects that involve students, provides valuable information to those working in the field, and enhances teaching and learning within the Department of Recreation and Tourism Management".

### Projects

#### *Tourism Research Innovation Project*

Principle investigator Dr. Nicole Vaugeois, Collaborators Dan McDonald and Rick Rollins as well as multiple provincial partners including University of Northern BC, Thompson Rivers University, College of the Rockies, College of New Caledonia, Tourism BC, Ministry of Tourism Sport and the Arts, Ministry of Economic Development, BC Parks, Canadian Rural Secretariat and LINK BC. The project is funded by the Knowledge in Society programme of the Social Sciences and Humanities Research Council. The intent of the three year project (2006-2009) is to enhance tourism development in rural British Columbia through knowledge mobilization efforts.

#### *Mowahaht Muchalaht First Nations Tourism Development Study*

Along with a team of five students including Alex Jules, Karla Duarte, Michael Neville, Amand Keir and Eva Chen, researchers Dan McDonald and Nicole Vaugeois lead a participatory rural appraisal of tourism development opportunities during February 2008.

#### *Bowen Island Resident Attitudes Study*

A team of undergraduate students (see undergraduate research projects for full listing) worked with the RTRI under the supervision of Nicole Vaugeois to design and implement a study on resident attitudes for the Bowen Island Chamber of Commerce in partnership with Tourism BC.

*People's Voice: A Local Government Satisfaction Study in Port Alberni*  
Principle Investigator: Dr. Nicole Vaugeois. The City of Port Alberni and the Alberni Valley Safety Net Project asked the RTRI to undertake a study of 3000 households in Port Alberni to ascertain levels of satisfaction with various local government services in the fall of 2007. Lea Thuot and Richard Giele (Alumnus) coordinated the project and employed numerous undergraduates in the data collection process.

*Long term economic impact of the Arrowsmith Explorer*  
Working under Dr. Nicole Vaugeois, Richard Giele conducted an analysis of the long term economic significance of the Arrowsmith Explorer for the Alberni Valley Museum and Chamber of Commerce.

## Research & Scholarly Activity Office (RSAO)

**Director:** Liz Hammond-Kaarremaa

**WEB:** [www.viu.ca/research/](http://www.viu.ca/research/)

### Overview

The Research & Scholarly Activity Office (RSAO) continues to provide research administrative support and professional development opportunities for the MU-C community; including, support for faculty research applications; post-award administration of grants; development and/or support on institutional applications; and the promotion of an awareness of MU-C research and scholarly activity. In 2007-2008, the RSAO welcomed Heather L. Ward as full-time Research Ethics and Grants Facilitator.

### Workshops

"How to Create a Research Centre/Institute on a Shoestring Budget," with guest speaker, Darryl Plecas, Director of the Centre for Criminal Justice Research at University-College of Fraser Valley, October 2007.

"Linking University with Industry," with representatives from NSERC, MITACS, NRC and SR&ED, October 19, 2007. The primary objective of this workshop was to increase Malaspina University-College networking with government and industry by i) bringing together government agencies that fund industry-driven research, as a means to expose industry and Malaspina University-College researchers to the sorts of funding available for university/industry partnerships; ii) introducing mid-island industries to Malaspina University-College research areas; and encouraging more industries to register with NSERC et al., allowing more Malaspina University-College students to apply for Industry Undergraduate Student Awards and Industry Post Graduate Awards.

"Research, Scholarship and You"

This workshop series was tailored for new and veteran researchers and scholars alike, focussing on topics relevant to developing scholarly and research agenda(s). Whether an intermediate/veteran scholar/researcher seeking facilitated approaches to proposal development or a new scholar/researcher interested in launching a research and scholarly activity career, this workshop series was designed to encourage participants to take a scholarly approach (naturally) to develop a research plan and polished proposal to the funding agency of their choice.

### Events

*Malaspina Undergraduate Research and Scholarly Activity Forum*  
The 1st Annual Malaspina Undergraduate Research and Scholarly Activity Forum was held on April 16, 2008. In its inaugural format, the forum allowed for research poster and power point presentations of all shapes and sizes; in fact, it was a veritable show and tell of Malaspina undergraduate research and scholarly activity efforts. Stretching from the entrance of the Cafeteria to the Royal Arbutus Room, this event attracted an eclectic audience of enthusiastic faculty and fellow students. Through the implementation of this annual event, the RSAO aims to create opportunities for the undergraduate dissemination of research and scholarly activity; supplement student CVs, resume and/or academic portfolios and expose lower level undergraduates to the sort of undergraduate research opportunities at Malaspina University-College.

### *Celebration of Research*

In mid-November, the RSAO – in collaboration with the Office(s) of the President and Vice-President Academic – hosted a tribute to dedicated Malaspina University-College researchers and research committees to celebrate their successes.

## The Resilience Research Lab

**Director(s):** Caroline Burnley and Ruth Kirson

**WEB:** [www.viu.ca/resilience/](http://www.viu.ca/resilience/)

### Overview

The Resilience Research Lab (RRL) in the Psychology Department was formed in the Spring of 2006 with the goals of contributing to the research base on resilience and to develop practical applications of the research for children and youth in our community. To help facilitate that goal, the RRL established a Community Advisory Board consisting of a variety of members, each of whom work with children and youth in Nanaimo. This board met throughout the past year and will continue to play an integral role in our research activities. Since its inception the Resilience Research Lab has achieved a number of important accomplishments and will continue to build on this foundation.

The RRL has provided an educational research venue for students in Psychology. This opportunity has allowed students to experience first-hand the collaboration and effort required to create and carry out rigorous research. With the guidance of two faculty members, Caroline Burnley and Ruth Kirson and retired Psychology faculty member, Ron Apland, the lab has supported and mentored seven students in a variety of roles over the past year. Various student lab proposals and projects have included: 1) Cultivating resilience within a Wilderness Therapy Program for youth at-risk; 2) Needs assessment of current pre-post-natal educational programs in the Nanaimo region 3) Risk and resilience in youth living with Diabetes: A community study; 4) Expressed Achievement Goals of Private and Public Elementary School Teachers. Three student members, Tania Smethurst, Tara Semple, and Larissa Predy, presented research from the lab at the 68th Annual Convention of the Canadian Psychological Association in Ottawa in June, 2007.

The RRL organized the visit of internationally renowned researcher, Dr. Michael Ungar, Director of the International Resilience Project. Dr. Ungar met with members of the university community as well as

members of the Resilience Research Lab Advisory Board in February, 2008. In addition, Dr. Ungar gave a public presentation entitled, *Too Safe For Their Own Good: How Risk and Responsibility Help Children Survive and Thrive*. This presentation was very well received by the community with over 200 in attendance.

The RRL is excited to be directing research as part of the International Resilience Project. The International Resilience Project (IRP) investigates the process of resilience in youth within their own communities by examining individual, interpersonal, family, community and cultural factors associated with building resilience. The intention of this research is to understand the experience of youth in our community and also what our community provides in terms of supporting youth who are facing adversity. The ultimate goal is to apply the research findings and seed action to make our research applicable to those who intervene with youth and those who make policy affecting youth. The initial IRP studies ask youth and adults in Nanaimo, through questionnaires and interviews, about the adversities that youth face and how they cope with these adversities.

## Malaspina Teaching and Learning Centre

**Director:** Dr. Nancy Randall

**WEB:** [www.viu.ca/teaching/](http://www.viu.ca/teaching/)

### Overview

The Malaspina Teaching and Learning Centre (MTLC) provides professional development initiatives for all university employees by enhancing teaching and learning processes; developing educational and workplace technologies and skills; contributing to the scholarship of teaching and learning; and promoting professional networks and communities of practice. The MTLC aims to increase student retention and promote increased enrolment through enhanced teaching and learning environments. The MTLC is now in the sixth year of being selected by the Carnegie Foundation for the Advancement of Teaching (CASTL), to lead catalyst initiatives for enhancing the scholarship of teaching and learning; one of twelve institutions selected from over 100 international participating institutions. Through this affiliation, the MTLC is developing scholarly descriptions of dimensions of undergraduate research that assist in determining priorities when designing undergraduate research experiences. As an outcome of our CASTL work, the MTLC was invited to host the first international Council on Undergraduate Research Institute, which had maximum registration and resulted in dynamic action plans for institutional integration of undergraduate research.

### Projects

*Implications of the Freedom of Inquiry Protection of Privacy (FOIPOP) Guidelines*

BC Campus

An examination of the implications of Freedom of Inquiry Protection of Privacy (FOIPOP) guidelines as they pertain to online survey applications and the integration of Web 2.0 technology into course design. Judy Southwell and Sheila Cooper, for the Academic Computing Steering Committee, will lead this investigation.

### *The Collaboratory*

BC Campus

Development and design of an online Learning Collaboratory, which will be a province wide virtual online professional development centre. This exciting concept will include an interactive BC higher education professional development (PD) calendar; an online searchable expertise inventory; a database of funding sources for the scholarship of teaching and learning; and a database of university and college teaching and faculty development awards, including institutional, provincial, national and international ones, to provide guidance for institutions considering such awards. Nancy Randall, with provincial partners, will lead this initiative.

### *Experiences of Undergraduate Researchers at Malaspina*

Undergraduate student researchers Lisa Munro, Vincent Hopkins, and Katie Warnock, were mentored by Nancy Randall in their investigation of the experiences of undergraduate student researchers at Malaspina. They completed a thorough literature review and worked through a stringent question development phase, assisted by Lynette Harper and Grant Murray, amongst many other faculty advisors. The online survey was completed by 45 of the 100 student researchers participating in the undergraduate research forum. Vincent Hopkins and Katie Warnock also facilitated focus groups of undergraduate student researchers. The study is on-going with in-depth analysis and additional focus group interviews occurring during the next academic year.

### Other Activity

To further build a scholarly community, the MTLC also facilitated reading circles on significant teaching and learning texts; specifically, *Wikinomics: Why Mass Collaboration Changes Everything*; *What the Best College Teachers Do*; and *Transformative Learning*.

## Vancouver Island Water Resource Vulnerability Mapping Project (VIWRVMP)

**Principle Researchers:** Dr. Steven Earle, P.Geo., Dr. Alan Gilchrist, P.Geo., Dr. Erik Krogh, Pat Lapcevic, MSc., P.Geo. (Ministry of Environment), Regan Purdy, B.A.

**WEB:** [web.viu.ca/groundwater/](http://web.viu.ca/groundwater/)

The Vancouver Island Water Resource Vulnerability Mapping Project (VIWRVMP) is a collaborative project including the Ministry of Environment (MOE), Vancouver Island Health Authority (VIHA), Malaspina University-College (MU-C), Natural Resources Canada (NRCAN), Ministry of Health (MOH) and Vancouver Island Regional Districts. It is aimed at developing a decision making tool in the form of vulnerability mapping of the Vancouver Island region, that can be applied to guiding land use decisions to ensure that our valuable water resources are protected.

The project is now in its second year and has been developing datasets required for the DRASTIC analysis. It is expected to take another two years to complete the study for remaining regions of Vancouver Island. During this initial phase, a pilot study has been conducted in the regional districts of Nanaimo and Cowichan Valley. This portion is expected to be completed by Fall 2008. A meeting is currently being organized for regional district planners to further discuss the application of the final maps for community planning, and to help in the evolution of the study.

# MFA Leaves Awarded in Fiscal Year 2007–2008

## DR IAN BAILEY

### Mathematics

*New Curricular Proposals for High School Mathematics Teacher Preparation*

Malaspina University-College has a Mathematics Minor (B.Sc. and B.A.) designed specifically to prepare future secondary school math teachers. Research will be undertaken to identify improvements in the curriculum. Prior to designing appropriate new courses and programs, an examination is needed to determine the current level of math education of high-school math teachers on Vancouver Island and to identify courses/programs that provide this education in other jurisdictions, both nationally and internationally.

A survey of high-school mathematics teachers and a review of curricula from other institutions are the primary intent of this leave request. As information is reviewed, other issues will be explored such as specific course development, potential introduction of a new Minor ("Integrated Science"), and improved use of the Math Learning Centre as a workshop for future math teachers.

## DR GAY FREDERICK

### Anthropology

*5000 Years of Vertebrate Resource Use in Barkley Sound*

Archaeological research in Barkley Sound, BC, since 1990 is providing evidence of the culture history of the region over the past 5000 years. Preliminary analyses of faunal material from several sites in the sound indicate that there have been significant changes through time in the exploitation of various bird, fish and mammal species. For example, preliminary analyses of faunal remains suggest increased use of salmon and fur seals after about 700 BP. The research proposed in this application will involve identification and analysis of a larger sample of vertebrate faunal remains and comparison of the results with faunal patterns from other sites in Barkley Sound. The intent is to clarify regional versus site specific patterns of change in vertebrate resource use over the past 5000 years. An understanding of the site specific changes through time will allow discussion of changing Nuu-Chah-Nulth local group resource extraction and territories in Barkley Sound, while analysis of the broader patterns will clarify major regional trends in this important area of the Pacific Northwest Coast.

## DR ALAN GILCHRIST

### Geography

*Enhancing Teaching and Learning In Physical Geography*

This leave will examine how to enhance teaching and learning in physical geography, the study of the natural environment, and is split into three parts.

Part 1 examines my own teaching practices and the literature for "best practices" that can be specifically applied to teaching physical geography to facilitate student learning in a diverse group of learners.

Part 2 considers how research and teaching can be integrated together in physical geography to excite students and improve learning.

Part 3 uses the results of Parts 1 and 2 to design a new and innovative course in applied physical geography that integrates state-of-the-art teaching methods with applied research conducted with an external partner organization. The course will give students a practical and enriching learning experience, and the research undertaken will be on an issue that is of importance to the community.

## DR TIM GOATER

### Biology

*Coauthoring and revising the textbook, 'Parasitism: The diversity and ecology of animal parasites'*

The most exciting and innovative challenge of my professional academic career has recently emerged. The book publisher, Cambridge University Press has invited me to coauthor the second edition of a leading parasitology textbook, "Parasitism: The Diversity and Ecology of Animal Parasites", along with my brother and my graduate school mentor. A most unique and special honour indeed! We recognized that the scope of the project meant it could not be accomplished without significant amounts of time. Thus, the primary objective of my proposed study leave is to revise, edit and update several chapters of this text. New chapters that incorporate our strengths, peer reviewed criticisms, as well as new chapters that reflect the tremendous breadth of parasitology will also be written during this leave. Most of my proposed study leave time will be spent collaborating with esteemed colleagues at four different institutions (University of Lethbridge, Wake Forest University, Wilkes University, Environment Canada in Montreal). Their knowledge and expertise and the feedback from their students and mine at MU-C will be invaluable during the book revision process. A second objective of the proposed leave is to engage in pioneering collaborative research at two of these institutions and publish our results in peer-reviewed scientific journals.

## MAUREEN OKUN

### Liberal Studies and English

*Soul-Making: Personhood and Relation in the Fiction of Ursula K. Le Guin*

If I am awarded a leave for 2007-08, I will write three articles on a selected recent fiction by Ursula K. Le Guin, attempt to publish them independently, and work them into a book proposal, to which I will add an introduction and initial summary chapter on Le Guin's early works. The articles and book will apply the dialogic philosophy in Martin Buber's *I and Thou* to several of Le Guin's "encounter" narratives, which feature a protagonist's attempt at forging a relationship with an "other".

Buber argues that we can make one of two mutually exclusive relationships with others: a utilitarian, experiential relationship (saying "i-it") and a reciprocal relationship of full understanding (saying "I-You"). My work will supply a lack in Le Guin criticism, which has said little about the affinities between Buber and Le Guin and has consistently ignored or downplayed the role self-transmutation plays in her writing.

**DR LIZA POTVIN****English & Creative Writing***Canadian Poetry Anthology*

For several years, I have been frustrated with the quality of anthologies of Canadian verse from which I must teach. I've begun a process of writing the apparatus for a college textbook of Canadian poetry, initially with the esteemed Canadian man of letters Robin Skeltem (University of Victoria), but he died a few years ago and so did my enthusiasm. But now I am ready to approach the task again, and interest has been expressed by publishers at both Broadview Press and Nightwood Editions. I would use this text in three of my courses. I also have several articles that are only half complete and would like to work on the research needed for their publication. It takes a great deal of time and work to get permissions and find funding to pay the royalties for any anthology, and with poetry, the task is multiplied by the large number of pieces included.

**DR DAVE ROBINSON****Tourism & Recreation Management***Knowledge and Skill Transfer to Rural Communities In Canada and Costa Rica*

This leave will allow me to pursue full-time engagement over a six month period on two community empowerment projects that I have initiated and managed in recent years at MU-C. The focus on my leave would be to extend the knowledge and skill transfer achieved over recent years in rural settings in Canada and Costa Rica.

In 2004 I initiated the Heart of Gold Empowerment Project in Costa Rica. Our participatory action research has focused on community owned-and-managed ecotourism initiatives and radical change in the coffee productions models currently practiced in Central and South America. To date, we have placed 12 students on three to five month work placements in Costa Rica. The period of January through April 2008 of my proposed leave would take place in the Los Santos Region of Costa Rica and focus on agro-tourism development and Direct Trade initiatives.

In 2001, I initiated a community-university planning and research alliance between Ucluelet, BC, and Malaspina University-College. Over the past 5 years, our mutual learning alliance has created many benefits regarding participatory planning processes for the creation of an official community plan, and the creation of policies on affordable housing, riparian zones, and coastal access. The period of May and June in 2008 of my proposed leave would take place in Ucluelet and focus on development initiatives and challenges facing Ucluelet and other rural communities on Vancouver Island.

**DR KATHARINA ROUT****English***Translation of Galsan Tschinag's novel Die graue Erde <The Grey Earth> Mentorship Program in Creative Writing with Dr. Barbara Turner-Vesselago*

Having translated the first novel of Mongolian writer Galsan Tschinag's autobiographical trilogy, *Der blaue Himmel* <The Blue Sky> (simultaneously published by Milkweed Editions, MN, and Oolochan Books, BC, 2006), I propose to translate the trilogy's second novel, *Die graue Erde* <The Grey Earth>. My translation of *The Blue Sky* is the first translation of Tschinag's fiction into English.

Galsan Tschinag is an internationally recognized, widely translated author of poetry and fiction, mostly written in German. As political leader (chieftain) and spiritual authority (shaman) of the Tuvan people in Mongolia, he writes in order to share the oral tradition and spiritual values of his small, nomadic people – “an island of humankind from past millennia” – so they not be forgotten.

*The Grey Earth* is set in the early Fifties, a time of purges and summary executions in Mongolia. In this atmosphere of terror the child-narrator starts school and is confronted with the repressive power of the state that uses schools to eradicate the values, beliefs, and languages of minorities, such as the Tuvans. When he discovers in himself shamanistic and poetic powers, conflicts erupt, with tragic consequences.

**DR NEIL SMITH****Education***Inquiry into the Development of Leadership in the Malaspina University-College Community*

1) Scholarship of Teaching & Learning; Instructional Methods DVD  
Convinced of the need for increased scholarship in the investigation of successful models of teaching and learning, in 2005 I developed a new model of the instructional strategies represented in an instructional DVD. This is the first in a series and is based on Direct Instruction. I will now create the second instructional strategies DVD with a focus on Team-Based Learning that includes classroom episodes supplemented with faculty and student interviews.

2) Studying the Impact of a New Program of Ongoing Professional Development for Chairs and Coordinators

This study will focus on the experiences of MU-C Chairs and Coordinators who have elected into seminars and workshops designed to support their professional learning in leadership and management skills. From fifteen individual interviews and six focus groups, the documented experiences of new and seasoned Chairs and Coordinators will be summarized, with the resulting analysis informing the design and publication of a refined professional development model.

3) Study of the Impact of Interdisciplinary course in Leadership Development

In intersession 2007 Carol Matthews and I will teach the course “Fostering Leadership Development” that we co-created and first taught in 2006. Through student journals and intermittent focus groups, I will follow the students' personal analysis of their experience. Following this I will write a research paper that will attempt to reveal the distinct aspects of an interdisciplinary community-based leadership development program, and the extent to which learning in this multidisciplinary environment affects the learners' capacity to apply principles and practices of leadership in their home context.

4) Pole to Pole Expedition – Community Service

As a board member of the Pole-to-Pole Institute, I intend to participate in part of the 2007-2009 Pole to Pole Expedition. This is a team of 24 International youth on a human-powered journey from the North Pole to the South Pole. I intend to join them for six weeks through Northeastern Africa as they visit selected villages enroute to build discussion about vision, hope and change.

**DR MARNI STANLEY****English & Women's Studies**

*Bewitched, Bothered and Bewildered: The Archetype of the Witch in 20th Century Literature by Women*

I intend with this leave to write a book about the figure of the witch in literature. I will conduct research in Canada and in England and plan to attend at least one conference. In addition I have been asked to participate in establishing a new journal.

My book will not be concerned with the practice – whether real or imagined – of witchcraft. This is a book about the witch as she appears in fiction, poetry and drama, where she appears as a figure who encompasses conflicting ideas of fear and power. In the twentieth century many women writers have taken three conventional representations of the witch (the greenworld witch, the seductress, and the crone) and have used them not to represent women's malevolence, but to draw attention to issues in the lives of both historical and contemporary women and to fantasize and theorize about power and the exercise of power in the relation to gender. Examining the figure of the witch helps reveal how ideological forces shape our understanding of gender in both ourselves and the world in which we live.

**DR DAWN THOMPSON****English**

*Part I: The Limits of "Queer" for Young Adult Fiction; Part II: Culture Accommodation of First Nations Students*

The past ten years has seen an explosion of Queer Young Adult (YA) fiction, at a time when Queer Theorists argue that shame (or internalized homophobia) is still embedded within lesbian and gay subjectivity and wonder how "to incorporate a difficult or shameful past into a vision of more promising future" (Love 492).

Queer Young Adult fiction is that future. It is a perfect venue for exploring this issue because it focuses on characters whose selves are in the process of developing. I wish to continue work on a book that studies, first, the great lengths to which authors go, creating internal contradictions in narrative voice and structure, in order to try to model for young queer readers a life without shame, and second, the possibility that the most recent authors are actually moving towards such a life.

**DR MICHAEL TRIP****Geography**

*Emergence & Development of Russian National Parks as a Sociopolitical Phenomenon*

This assisted leave proposal is based on PhD dissertation research into the socio-political implications of national park development in post-Soviet Russia. This topic has been chosen to enhance the applicant's breadth and depth of academic knowledge, to increase contributions to and linkages between program concentrations within the department's recently established B.A. major, to facilitate awareness by MU-C students of the world through field study experiences and in turn to raise the international profile of Malaspina University-College. Outcomes will include a conference presentation, the submission to refereed journals for publication of 1-2 papers, and the development of a multi-disciplinary field study program (an international program in response to Malaspina University-College's goal to internationalize curricular offerings and institutional relationships).

**DR JULIAN WEST****Mathematics**

*Enumerative Combinatorics of Permutations*

The study of "permutations with forbidden patterns" has emerged in the past 20 years and has blossomed quickly. In 1991, I gave a talk on permutation enumeration at the major annual conference in Algebraic Combinatorics (FPSAC), held that year at the University of Bordeaux; within a few years one could count on seeing half-a-dozen papers at each year's conference exclusively about permutations. In 2003 we established a separate conference which is now the primary vehicle for dissemination of results in the field. This conference was held at Malaspina in 2004.

I plan to work with leading researchers in Scotland, Iceland and New Zealand on some recent open problems. One new avenue of research, begun with my student in Victoria, connects permutation patterns to the established theory of two-player perfect-information games. Another, being explored by the research group at St. Andrews, uses the machinery of formal languages from theoretical computer science.

# Internal Research Grants

## Malaspina Research Awards Committee

### Malaspina Research Fund (MRF)

#### DR TODD BARSBY

##### Chemistry

*Secondary Metabolites from the Bubble Snail Haminoea Vesicula: Isolation, Characterization and Ecological Activity*

\$3,600

Bubble snails (*Haminoea spp.*) are partially shelled marine invertebrates found along the North American, Japanese, Spanish and Mediterranean coastlines. Those found in the Mediterranean are known to produce interesting chemicals as a means of communication between snails. No studies have reported on the chemistry or biological activity of indigenous bubble snails of North America. This project aims to correct this oversight and improve upon the methodologies used in prior *Haminoea* reports. Our preliminary investigation suggests that bubble snails have interesting chemistry that may have been previously overlooked.

#### DR CAROLINE BURNLEY

##### Psychology

*International Resilience Project: The Experience of Youth in Nanaimo*

Co-Applicant Ruth Kirson.

\$2,000

In the summer of 2007, Nanaimo became an official site of the International Resilience Project (IRP-a SSHRC funded international project) which studies how youth effectively cope with the adversities that they face in life. The IRP uses a unique cross-cultural approach to examine individual, interpersonal, family, community and cultural factors associated with building resilience. The Resilience Research Lab in the Department of Psychology, with input from a community advisory board, will be investigating resilience in the Nanaimo community with the goal of developing contextually and community relevant preventions and interventions.

#### DR ERIC DEMERS

##### Biology

*Morphometric Analysis of Enos Lake Sticklebacks*

\$3,200

The objective of this project will be to develop and implement non-lethal methodology to assess the population characteristics of the endangered Enos Lake sticklebacks. The proposed methodology will involve morphometric analysis of fish using digital image analysis techniques. The morphometric data generated as part of this project will serve as a reference database to evaluate signs of potential population changes during a multiyear experimental removal of the exotic signal crayfish.

#### GORD EDMUNDSON

##### Fisheries and Aquaculture

*The Effects of Egg Absorption and Egg Size on Fertilization and Hatch Rates, as well as on Size and Survival of Larval White Sturgeon (Acipenser transmontanus)*

Co-Applicant(s) John Morgan and David Switzer.

\$3,600

Female white sturgeon (*Acipenser transmontanus*) will produce varying sizes and numbers of eggs, depending on their size, age class, conditioning and state of health. If the spawning conditions are not ideal, a mature female preparing to spawn may reabsorb her eggs. This appears to provide a significant energy boost to the female, which may alter the interval between subsequent spawning events and the overall size of her eggs. The average diameter of sturgeon eggs when spawned is approximately 3.50 mm, yet some females produce eggs which are either smaller or larger. There is no published data that demonstrates the effect of egg reabsorption or egg size on subsequent fertilization and hatch rates, or the size and survival of the resulting white sturgeon larvae. A comparison will be made between egg size, fertilization, growth rate and survival of offspring between a female that had previously reabsorbed her eggs and a female that spawned successfully.

#### DR ERIK KROGH

##### Chemistry

*Investigating the Photochemical Production of Benzene in Beverages and Food Stuffs Using Membrane Introduction Mass Spectrometry (MIMS)*

Co-Applicant Dr. Chris Gill.

\$3,600

This project will examine the presence and production rates of benzene in beverages and related food stuffs using membrane introduction mass spectrometry (MIMS). Benzene is a known carcinogen and has been observed at trace levels in a number of commercial food and beverage products. It has been proposed that it arises from the breakdown of a common food preservative known as sodium benzoate. This decarboxylation reaction is thought to be promoted by both heat and light, particularly in the presence of auxiliary reducing agents, such as ascorbic acid. The objective of this work is to directly observe this reaction and better understand the factors that control the production of benzene in complex systems such as foods and beverages. This work will help us understand the mechanism by which this contaminant is produced and mitigate against its formation. This work is important from both a regulatory and industrial perspective, as it will demonstrate a rapid screening tool for the direct detection of this contaminant and provide valuable data about the rates of benzene production under various conditions. This project will facilitate cross-disciplinary research, particularly between new analytical methodologies being developed in the AERL and applications in the food inspection sectors. This project will provide an excellent opportunity for an undergraduate summer research student project and the results of have the potential for peer-reviewed publication.

**DR MELODY MARTIN****First Nations Studies**

*Localizing Indigenous Knowledge in the Academy*

Co-Applicant Dr. Laurie Meijer Drees.

\$2,200

This is a two-part project. It begins with an investigation into the current status of Indigenous Knowledge (IK), its relationship to the academy, its conceptualization, and its contextualization for the purpose of local community-based research. Second, it involves engaging existing research partnerships with local First Nations community members for the purposes of gathering, organizing and conceptualizing local IK, and devising policies for its use within Malaspina University-College.

**DR MELANIE O'NEILL****Psychology**

*Evaluating the Effect of Concealment in Obsessive-Compulsive Disorder*

\$3,600

The aim of this project is to identify one of the active ingredients involved in the cognitive behavioral treatment of obsessive compulsive disorder (OCD). Concealment, the act of purposely hiding from others the content and frequency of one's unwanted intrusive and repugnant thoughts, has been thought to precipitate and maintain the symptoms of OCD. This study will experimentally examine the impact of concealment in 60 participants diagnosed with OCD.

**RAYMOND PENNER****Physics**

*Design and installation of a solar powered LED lighting system at a rural secondary school in Malawi*

\$2,000

The project involves designing, manufacturing, and installing a solar powered LED lighting system at a rural secondary school in Malawi. This project will be carried out as collaboration between Ray Penner, Chair of the Physics Department at Malaspina University-College and Thom Senganimalunje, Head of the Physics Department at the University of Malawi.

**DR TIM STOKES****Geology**

*Investigation into the Structure and Function of Forested Karst Sinkholes on Vancouver Island*

\$3,600

The primary goal of this research project is to investigate the structure and functions of forested karst sinkholes on Vancouver Island, and in particular the characteristics of soil, bedrock, water and air in and around these features. More specifically this project will examine soil profiles of sinkholes, investigate the nature of water infiltration into sinkholes, and also attempt to assess the subsurface geological conditions below sinkholes using geophysical methods. This research work will build upon a microclimate study of forested karst sinkholes carried out on Vancouver Island during 2005-2006.

This research work has important implications for forestry activities of road building and logging that currently occur on the karst landscapes.

**Capacity Building Grant (CBG)****ALANNA WILLIAMS EDWARDS****Media Studies**

*Exploring the impact of user-centered web design to knowledge mobilization in rural community settings*

Co-Applicant Nicole L. Vaugeois.

\$2,000

Research in the Social Sciences and Humanities has the power to effect change in the lives and culture of our societies, although a majority of research results never extends beyond the metaphoric hallways of academe. Knowledge mobilization is about putting the power of knowledge generated through academic activity back into the communities, particularly those that have participated in research projects. The Tourism Research Innovation Project (TRIP) is an excellent example of a research endeavor that is focusing on knowledge mobilization by integrating key aspects into the stated objectives of the project. TRIP is a SSHRC funded project funded through the Knowledge in Society program. It is a three-year project aimed at enhancing rural tourism development in British Columbia through a variety of knowledge transfer activities. Each of the activities in the project must be evaluated as each of the eleven SSHRC projects funded across Canada are being used to gain a better national understanding about knowledge mobilization efforts. Now in its second year of implementation, the TRIP project is embarking on the development of a web-based knowledge mobilization project where it can provide content and updates to community leaders and entrepreneurs. The challenge with this initiative is threefold: a) much of rural British Columbia remains "disconnected" with respect to access and uses of the internet, b) rural users therefore require a web experience that takes into account their level of use, and c) web-based knowledge mobilization strategies have undergone little academic study, therefore application of best practices remains difficult. Based on these realities, the development of an effective website requires collaboration among those with expertise in user-centered design and those with an understanding of those working in tourism in rural areas.

**RUTH KIRSON****Psychology**

*Development of the Resilience Research Lab*

Co-Applicant Dr. Caroline Burnley.

\$2,000

The Resilience Research Lab is submitting this application for funding to obtain the following objectives:

- To facilitate the Community Advisory Board
- To establish research protocol in the community as an official site of the International Resilience Project
- To support new projects in our research program
- To disseminate results and meet with other IRP researchers

**DR MELODY MARTIN**

**First Nations Studies**

*Localizing Indigenous Knowledge in the Academy*

Co-Applicant Dr. Laurie Meijer Drees.

\$1,800

This is a two-part project. It begins with an investigation into the current status of Indigenous Knowledge (IK), its relationship to the academy, its conceptualization, and its contextualization for the purpose of local community-based research. Second, it involves engaging existing research partnerships with local First Nations community members for the purposes of gathering, organizing and conceptualizing local IK, and devising policies for its use within Malaspina University-College.

**DOUG STETAR**

**Media Studies**

*Understanding Information Flows on Vancouver Island*

Co-Applicant Alanna Williams Edwards.

\$1,000

The purpose of the project is to establish a research team that supports and develops the outlined research agenda within the Media Studies department, faculty of Arts & Humanities. The research program the team wishes to pursue involves examining the flow patterns of information (concepts, knowledge and pleasure) exchange within the different media structures (i.e. mass media, independent media and alternative media) on Vancouver Island.

**Research & Scholarly Activity Committee Awards**

Name	Project Title	Amount Awarded
Dr. John Black	Translation from the Latin and preparation for publication of Alexandro Malaspina's "General Theses on Physics", the only book he published during his lifetime.	One release section
Burnley Caroline	Expansion of the Community Advisory Board and new projects planned within the Resilience Research Lab.	\$1,000
Dr. Rachel Cooper	Experimental replications of research into the evidence of telepathy to provide students an opportunity to learn about the importance of controls.	\$500
Robin Davies	Presentation of paper at Text, Media and Improvisation, McGill University.	\$700
Dr. Lynette Harper	Presentation of paper at Community-University Partnerships: Connecting for Change.	\$400
Chris Jaeger	Completion of PhD program through the School of Business at the University of Strathclyde in Scotland.	\$1,000
Jeff Lewis	Presentation of paper at the Canadian Meteorological and Oceanographic Society Congress.	\$500
Dr. Mary Lindsay	"In kind" support on grant application to Canadian Council on Learning: Aboriginal Learning in Canada. Project is intended to enhance retention & success of Aboriginal students in public education.	One release section
Dr. Lisa MacLean	Preliminary work towards project entitled "Ruinination" which involves a photographic and textual examination of the ruin as allegory and the continuing fascination with ruination in modernity.	\$1,000
Anne McCarthy	Attend Caribbean & Latin American Aquaculture conference.	\$1,200
Darren Paprosk	Second-year tuition fee for PhD. (Marketing) program.	\$1,000
Lisette Patenaude	Conducting a survey for the Nanaimo RCMP on public satisfaction with policing services.	\$1,000
Suki Shillon	Completion of doctorate in Education. Working with social justice group to create an advocacy film and distribute it online.	\$500
Laura Suski	Presentation of paper at the Annual Meeting of the Canadian Sociological Association, Sociological Perspectives: Thinking Beyond Borders.	\$400
Dr. Gary Tunnell	Completion of one of four ethnographic projects: Folk medicine practitioners; Harvesting & distribution of Peyote; "White Texans" with "Indian" identities; Wax camp research.	\$1,000
Marian van der Zon	Presentation of paper at the Canadian Communication Association 2008 Conference.	\$400

<b>BCGEU Professional Development Leaves</b>		
Name	Project	Leave Granted
Martin Barnett	Industry Experience (Australia)	12 weeks
Mark Dutchuk	Complete MScIS Program	18 weeks
Lisa Eckert	Industry Experience (Seoul Women's University, Korea)	4 weeks
John Loewen	Complete MScIS Program	18 weeks
Sally Vinden	M.Ed Program	7 weeks

<b>BCGEU Professional Development Grants</b>		
Name	Project Title	Amount Awarded
Martin Barnett	Hands on workshop with pastry chef Masami Waki focusing on plated desserts.	\$500
Catherine Deutscher	4 minute fitness program (co-sponsored by CUPE, MFA and BCGEU professional development).	\$500
Dr. Steven Earle Shiona Northway	TRU faculty presentation/discussion on University status (co-sponsored by MFA and BCGEU professional development).	\$500
Carol Ramey Vicki Noonan Linda Rosen	CAP AGM: communication, interaction and coordination among four campuses; subject area meetings.	\$800

<b>Travel and Study Abroad Grants</b>		
Name	Project Title	Amount Awarded
Liz Astill	Travel to Vietnam as part of Vietnam Canada Community College Project (Tra Vinh University).	\$2,000
Rick Bevis	Travel to Belize to establish contacts and opportunities for Malaspina students.	\$2,000
Alan Chapelle	Travel to Mexico to make arrangements for Field School.	\$500
Marilyn Chapman	Attend conference in Dublin and present paper.	\$500
Bill Clay	Travel to Paris to attend and exhibit at the European 2008 Conference.	\$500
Terri Doughty	Attend conference in Poland and present paper.	\$500
Milena Essig	Travel to Vietnam to support Tra Vinh English Language Department.	\$2,000
Dr. Michael Govorow	Travel to China and deliver course at Summer School.	\$500
Dr. Lisa MacLean	Travel to Turkey to develop Study Abroad program for Liberal Studies.	\$1,000
Dori Miller	Travel to Uganda to study and volunteer.	\$2,000
Dr. Grant Murray	Attend conference in England and present paper.	\$500
Ray Penner	Travel to Malawi to assist with lighting project and investigate field school opportunities.	\$2,500
Dr. Janice Porteous	Attend Liberal Studies field school in Italy.	\$1,500
Ron Sandland	Travel to Belize to investigate possible placement for students.	\$2,000
Dr. Neil Smith	Travel to Vietnam to assist in development and support of Tra Vinh Teaching Training Unit and conduct research.	\$2,000

<b>Travel and Conference Proceedings Grants</b>		
Name	Project Title	Amount Awarded
Archna Acharya	Commission on Adult Basic Education	\$490
Dr. Don Alexander	Walk 21 Toronto 2007	\$490
Dr. Don Alexander	Environmental Design Research Association: Building Sustainable Communities	\$490
Gwen Bailey	Access 2007 Conference Techtonic Ontologies	\$200
Rhonda Bailey	The Book Summit	\$350
Martin Barnett	BAC Congress 2007	\$490
Dr. Matthew Beedham	Transitional Nabokov	\$560
Frances Benton	The Last Best West	\$350
Dr. John Black	Biosphere Conversation Series #2	\$200
Dr. Mark Blackell	American Political Science Association	\$490
Marilyn Bowering	Fundacion Valparaiso	\$400
Carolyn Bowles	2007 Teacher Education roundtable Conference	\$250
Dr. Daniel Burgoyne	International Conference on Romanticism	\$560
Dr. Caroline Burnley	Canadian Psychological Association Annual Convention	\$490
David Butler	HSBC Institute on the Environment & the Economy	\$280
Dean Cadieux	Chrysler Factory Training	\$280
Dean Cadieux	SEMA	\$455
Dr. Joseph Chang	2007 AMA Summer Marketing Educators' Conference	\$490
Bill Clay	La Coupe Louis leSAFFre	\$560
Dr. Rachel Cooper	Society for the Anthropology of Consciousness	\$490
Dr. Bonita Davidson	American Educational Research Association (AERA)	\$490
Kim DeEll	Canadian Association of Practical Nurse Educators Conference	\$490
Dr. Tom Delemare	Leeds International Jazz Conference	\$560
Dr. Ana Maria Donat	SSHRC Congress	\$490
Gary Doolin	Nissan Factory Training	\$230
Dr. Patrick Dunae	32nd Annual Social Science History Association	\$490
Dr. Steven Earle	Geological Society of America Annual Conference	\$490
Eiko Eby	North American Society for the Sociology of Sport Conference 2007	\$350
Cindy Fehr	Canadian Gerontological Nursing Association National Conference	\$490
Jacqueline Foster	BC TEAL 2007 Conference	\$280
Dr. Gay Frederick	Canadian Archaeological Association Annual Meeting	\$350
Debra Freeborn	Canadian Association of Practical Nurse Educators Conference	\$455
Marilyn Funk	Canadian Historical Association Annual Meeting	\$350
Dr. Chris Gill	ASMS (Mass Spectrometry)	\$490
Dr. Michael Govovrov	56th Annual Meeting of the Canadian Association of Geographers	\$490
Mark Grall	Welding Articulation meeting	\$350
Sarah Greenway	Association of Natural Resource Enforcement Trainers Conference	\$350
Anna Grieve	8th International Family Nursing Conference	\$560
Dr. Keith Harrison	Shakespeare Association of America	\$490
Dr. Keith Harrison	Film & History Popular Culture Association National Conference	\$490
Janet Hebron	Nobody's Child, Everybody's children NRG T Conference	\$280
Dr. Ann Holroyd	Alberta Qualitative Methods 8th International Conference	\$350
Joy Liu Hui	XXXII Simposio De Analuses Economico	\$560
Dr. Lev Idels	PiMs Math Bio Seminar	\$350
Dr. Lev Idels	6th International Congress on Industrial and Applied Math	\$560
Piera Jung	Canadian Gerontological Nursing Association National Conference	\$490
Kevin Karstad	Ford Factory Training	\$280
Margaret Kennedy	8th International Family Nursing Conference	\$560

Greg Klimes	Association of Natural Resource Enforcement Trainers Conference	\$490
Elisabeth Kroeker	Neufeld Facilitators Conference	\$280
Dr. Erik Krogh	90th Canadian Chemistry Conference	\$490
Dr. Brenda Lane	Canadian Diabetes Association/Canadian Society of Endocrinology & Metabolism	\$200
Dr. Richard Lane	Through a Glass Darkly: Suffering, the Sacred & the Sublime	\$280
Sherry Leifer	Chicago Hair Show	\$490
Dr. John LePage	76th Congress of the Humanities and Social Sciences	\$350
Dr. Timothy Lewis	Inaugural Conference of the New Brunswick and Atlantic Studies Research & Development Centre	\$490
Dr. Mary Lindsay	International Study Association for Teachers and Teaching Conference	\$490
Jean Maltesen	Commission on Adult Basic Education	\$490
Claire Marshall	Practical Strategies for Nurses Working with Palliative Patients in Acute and Complex Care	\$260
Dr. Deborah Matheson	International Conference of Behavioural Medicine	\$490
Virginia McCarthy	International Reading Association Annual Conference	\$490
Nancy McInnes	The Early Years Conference: Valuing All Children	\$200
Dr. Laurie Meijer Drees	Canadian Historical Association Annual Meeting	\$490
Rick Monaghan	National Academic Advising Association 2008 Region & Conference	\$280
Lillian Morton	S'TENISTLW: An Indigenous Educators' Forum	\$200
Paul Mottershead	CONEXPO	\$455
Maureen Parkes	The 8th Collaborative Mental Health Care conference	\$490
Heather Pastro	National Council of Teachers of English	\$490
Michael Pelletier	IKA/ Culinary Olympics	\$520
Lynda Phelan	Chicago Hair Show	\$490
Dr. Brad Piekola	International Society for Theoretical Psychology: Theoretical Psychology Beyond Borders	\$490
Dr. Janice Porteous	International Society for Humor Studies	\$490
Dr. Liza Potvin	Saskatchewan Writers' Guild - Writers' Colony	\$350
Caroline Ramey	Commission on Adult Basic Education	\$490
Dr. Janet Rankin	IEOZ 07	\$560
Beverly Revin	Early Childhood Faculty Forum-ECE Affinity Group	\$350
Dr. David Robinson	Los Santos Regional Community Development Workshop	\$560
Harry Sakey	African Economic Conference	\$560
Stu Seifert	CONEXPO	\$455
Caniel Simons	Canadian Economics Association 41st Annual Meeting	\$490
Joe Skipsey	CONEXOP	\$455
Monica Soth	Pacific Dental Conference	\$200
Dr. Frances Sprout	ACCUTE Conference	\$350
Dr. Timothy Stokes	Geological Association of Canada	\$350
Dr. Tim Stokes	Annual meeting of Association of Professional Engineers & Geoscientists of BC	\$260
Dr. Ilka Thiessen	106th Annual Meeting of the American Anthropological Association	\$490
Dr. Michael Tripp	Association of American Geographers	\$490
Jac Vandoorn	CONEXOP	\$455
Dr. Nicole Vaugeois	Engagement Conference: A Summit for the Higher Education Community	\$490
Sally Vinden	Chicago Hair Show	\$490
Dr. Cheryl Warsh	American Historical Association Pacific Branch	\$490
Anne Woods	From Atlantic to Pacific: Celebrating Diversity: ACCC Continuing Case Affinity Group	\$490
Tricia Young	Bright Futures with Smart Reading	\$280

# Committee Membership

## Animal Care

Dr. David Drakeford, *Chair*  
 Dr. Andy Spencer, *Vice-Chair*  
 Susan Sanders  
 Frank Dalziel  
 Dr. Erick Groot  
 Duane Barker  
 Liz Hammond-Kaarremaa, (*ex officio*)  
 Henrik Kreiberg  
 Brian Godfrey  
 Johanne Picard  
 Katherine Hall  
 Dr. Leslie King (*ex officio*)

**Support:** Patricia Stuart  
**Affiliation:** Advisory to the President

## British Columbia Government Employee Union (BCGEU) Professional Development

Shiona Northway, *Chair*  
 Milena Essig  
 Rosemary Holley  
 Christine Mitchell  
 Gary Doolin  
 Nancy Randall

**Support:** Shelley Lumsden  
**Affiliation:** Advisory to the Vice-President,  
 Academic

## BCGEU Professional Development Leave

Stu Seifert, *Co-Chair*  
 Sheila Swanson, *Outgoing Chair*  
 Lynn Myers  
 Fred McDonald  
 Kathleen Matheson

**Affiliation:** BCGEU (B.C. Government and  
 Service Employees Union, Local 702)

## Canadian Institutes for Health Research (CIHR) Scholarship Selection

Dr. Deborah Matheson, *Chair*  
 Ann Holroyd  
 Rosemarie Ganassin  
 Mary Ann Moloney  
 Kim Love  
 Andrea Smilski

**Support:** Kathryn Jepson  
**Affiliation:** Vice-President, Academic

## Faculty and Staff Travel and Study Abroad Grants

Brock Dykeman  
 Audrey Hansen  
 Sheila Swanson  
 Don Miskiman  
 Michel Vallee  
 Sandra Galloway

## Malaspina Research Awards

Dr. Leslie King  
 Dr. John Amaral  
 Dr. Ann Holroyd  
 Dr. Deborah Matheson  
 Dr. Ana Maria Donat  
 Dr. Rick Rollins  
 Liz Hammond-Kaarremaa, *Chair (ex-officio)*

**Support:** Shelley Lumsden  
**Affiliation:** Advisory to the Vice-President,  
 Academic

## Malaspina Faculty Association (MFA) Leave

Doug Corrin, *Chair*  
 Rick Bevis, *Chair*  
 Dr. Tony Robertson  
 Marie Scoretz  
 Dr. Steve Lane  
 Dr. Duane Friesen  
 Dr. Ann Holroyd  
 Deanne Schultz  
 Dr. David Drakeford (*ex officio*)

**Support:** Shelley Lumsden  
**Affiliation:** Malaspina Faculty Association

## MFA Professional Development

Steve Earle, *Chair*  
 Frank Fucile  
 Piera Jung  
 Rachel Cooper

**Support:** Lynda Milne  
**Affiliation:** Malaspina Faculty Association

## Natural Sciences and Engineering Research Council (NSERC) Scholarship Selection

Dr. Chris Foote, *Chair*  
 John Amaral  
 Dr. Elliot Marchant  
 Sandra Patrick  
 Dr. Ian Bailey

Dr. Darren Hannessen  
 Dr. Erik Krogh  
 Dr. Maggie McCall

**Support:** Kathryn Jepson  
**Affiliation:** Vice-President, Academic

## Research & Scholarly Activity

**Chairperson:** Anne Leavitt  
 Dr. Steven Earle  
 Dr. Philip Dauk  
 Raimo Marttala  
 Frances Sprout

**Support:** Sharon Rise  
**Affiliation:** Malaspina Faculty Association

## Committee for Research Involving Human Subjects

Dana Chamberlain, *Chair*  
 Heather Ward, *Ethics Officer*  
 Tiffany McLaughlin, *Support*  
 John Anderson  
 Linda Byrnes  
 Bonita Davidson  
 Brock Dykeman  
 Ruth Kirson  
 John Lepage  
 Mary Lindsay  
 Alex Pevec  
 Barbara Thomas  
 Katie Black  
 Jacqueline Gaudet

**Support:** Tiffany McLaughlin  
**Affiliation:** Advisory to the President

## Travel and Conference Proceedings

Dr. Bernie Krynowsky, *Chair*  
 Jim Dean – BCGEU  
 Gary Doolin – BCGEU  
 Kathleen Matheson – MFA

**Support:** Darlene Higgins  
**Affiliation:** Advisory to the Vice-President,  
 Academic

## BC Government Social Policy Grant for Student-led Research

Dr. Anne Leavitt, *Chair*  
 David Livingstone  
 Ann Holroyd  
 Lynda Patterson

**Support:** Heidi Abbott





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