



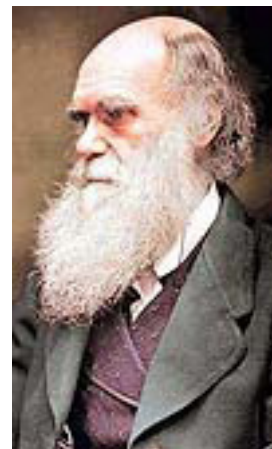
Announcements



27th Annual Darwin Dinner - This year's speaker is the internationally-renowned philosopher, scientist and best-selling author Daniel Dennett. This is an incredible opportunity for people to see a larger-than-life evolutionary celebrity. His books, including 'Breaking the Spell' and 'Darwin's Dangerous Idea', have dealt with such topics as the evolution of consciousness, critiques of adaptationism, and the biological basis of religion. You can see a 2003 TED talk of his research here:

http://www.ted.com/talks/dan_dennett_on_our_consciousness.html

The title of the talk is the 'Evolution of Reasons'. Bring your friends for the talk (its free!) Just show up in ST140 before the lecture's start at 4:30. There has been a lot of interest - seating for the lecture will be first come, first served. Please see page 10 of this newsletter for additional details.



The Tri-Council funding agencies are becoming more stringent in applying their rules for eligibility for Tri-council grant holders. Please note that information about any pertinent change in status must be forwarded to the appropriate Tri-Council agency immediately. The routing for this notification is to send it to the Department Head. The Head will forward that information to the Vice-Dean Research (currently Brian Keay), and that individual will relay the information to the Research Services Office (RSO) (current individual responsible for this is Lorna Very). The RSO will then work with the PI to send an explanatory letter to the funding agency.

Some examples of change in status that requires notification are as follows :

- retirement,
- becoming a Faculty or Emeritus professor,
- going on any type of leave including medical, maternity, leave without pay, personal leaves, etc. (Research and Scholarship leaves under one year are exempt)
- not renewing one's Adjunct Professor appointment (these are normally 3 year, renewable, appointments)
- changes to position
- changes from full-time to part-time
- termination

A presentation was assembled by Lorna Very on the eligibility rules and regulations. A copy of that PowerPoint presentation is archived on our Departmental web site www.bio.ucalgary.ca/status_winter_2012.pdf.

Tony.

Seminars



BCEM 601 seminars - Mondays at 16h00 in BI 211

February 13 - Ola Czyz - Examining the effect of anti-tumor lipids on membrane structure in *Saccharomyces cerevisiae*

CDP 601 seminars - Wednesdays at 17h30 in BI 211

February 15 - Pritha Saha - Characterization of a unique Puf RNA-binding protein in plants

EEB 601 seminars - Mondays at 12h00 in BI 211

February 13 - Lindsay Zink - Wild bees in canola: effects of landscape and managed bees

Micro 601 seminars - Wednesdays at 11h00 in BI 211

February 15 - TBA

Recent Publications



Rekdal, O., Haug, B.E., Kalaaji, M., Hunter, H.N., Lindin, I, Israelsson, I., Solstad, T., Yang, N., Brandt, M., Mantzilas, D. and **Vogel, H.J.** (2012) "The relative spatial positions of tryptophans and cationic residues in helical membrane-active peptides determines their cytotoxicity" *J. Biol. Chem.* 287: 233-244.

Huang, H. and **Vogel, H.J.** (2012) "Purification and isotope-labeling of calcium- and integrin-binding protein 1 for structural and functional NMR studies" *Meth. Mol. Biol.* (Ed. C. Heizmann; in press)



Haney, E.F., Nazmi, K., Bolscher, J.G.M. and **Vogel, H.J.** (2012) "Structural and biophysical characterization of an antimicrobial peptide chimera comprised of lactoferricin and lactoferrampin" *Biochem. Biophys. Acta – Biomembranes* 1818: 762-775.

Huang, H. and **Vogel, H.J.** (2012) "Structural basis for the activation of platelet integrin α IIb- β 3 by the calcium- and integrin-binding protein 1" *J. Am. Chem. Soc.* (in press)



Åsa Fahlman, Nigel Caulkett, Jon M. Arnemo, **Peter Neuhaus**, **Kathleen E. Ruckstuhl** (2012): Efficacy of a portable oxygen concentrator with pulsed delivery for treatment of hypoxemia during anesthesia of wildlife. *Journal of Zoo and Wildlife Medicine* 43 (1): 67-76.

Carly A. Silver & Steven M. Vamosi. 2012. Macroinvertebrate community composition of temporary prairie wetlands: a preliminary test of the effect of rotational grazing. *Wetlands* 32: 185-197.





UNDERGRADUATE RESEARCH SCHOLARSHIPS

USRP-Undergraduate Student Research Program in Health and Wellness: Application deadline- **15 Feb 2012** <http://www.kin.ucalgary.ca/usrp>

For more undergrad summer research opportunities, visit the department webpage <http://bio.ucalgary.ca/undergrad/scholar.html>

GRADUATE SCHOLARSHIPS

2012 Alberta Chapter of The Wildlife Society Student Awards

http://joomla.wildlife.org/Alberta/index.php?option=com_content&task=blogcategory&id=23&Itemid=305

Graduate Student Affairs



Did you know....



.....that if you have won a Scholarship/Award, etc., ***Sophia and I would appreciate an email from you*** indicating this. We are not always informed of these awards, and ***you may be eligible for a departmental top-up!*** Also with proof of the award we can request that it appear on your transcript! ☺

....that The Faculty of Graduate Studies is moving! On **February 22nd** (the Tuesday after Family Day long weekend), **their new digs will be MLT room 212**. Please note: they will be open in Earth Sciences until 4:30pm on February 16. (**Friday, February 17 and Tuesday, February 21 they will be closed**).

Candidacy Examination Regulations within Biological Sciences

****please note students admitted to program prior to July 1, 2012 have the option of following the new regulations for the written portion, or the old regulations for the written portion of their Candidacy.***

1) In accordance with regulations of the Faculty of Graduate Studies, Ph.D. students are required to attempt a Candidacy Examination no later than 28 months after their initial registration (36 months for students who have transferred from a M.Sc. program). A student is expected to complete their course requirements prior to undertaking her/his Candidacy Examination (or at least at the end of the same term as the Examination). Note that a student is assessed program fees until the term after successful completion of the Candidacy Examination, after which she/he is assessed continuing fees (a reduction of approximately 70%).

- 2) The Candidacy Examination should serve two purposes:
- assess the student's background knowledge of their discipline;
 - evaluate the student's preparedness to conduct high-quality research in their particular field of study.
- 3) The Candidacy Examination will include a written and 2-hour oral component, all of which will be conducted within a one-month period. The written component will be completed during the first three weeks of the examination period to allow examiners one week to evaluate the resulting documents before the oral examination.
- 4) The written component will involve two documents (i and ii below) that address topics within the student's Area of Specialization, as identified when the student's Research Proposal is accepted by her/his Supervisory Committee (within 12 months of initial registration):

i. Critical review essay – This review should address a topic that is more restricted than the student's area of specialization, but is sufficiently broad to allow synthesis of related subjects, issues and perspectives. Recent reviews in "Critical Reviews in ..." or "Trends in ..." journals provide examples of the expected scope of such reviews. Such a review should: include a historical overview; explain essential concepts and critically evaluate contemporary perspectives; appraise the empirical support for the guiding concepts, including apparent inconsistencies; and identify topics that warrant specific attention to advance the field of study. (minimum length – 20 pages, double spaced, excluding title page, references and illustrative material).

ii. Either:

a. Simulated research proposal – This proposal should address a hypothesis concerning a specific subject that is not the topic of the student's own research. The proposal will begin by identifying the scientific rationale for the proposed research that motivates a specific hypothesis, which in turn will generate the prediction(s) to be tested. Then, a description of the proposed research will characterize the study design and the specific methods that would be used to conduct the research. The scope of the proposed research, were it to be conducted, should be sufficient to produce a single publication in a top-ranking journal in the field of study. (Maximum length – 10 pages, double spaced, excluding title page, references and illustrative material)

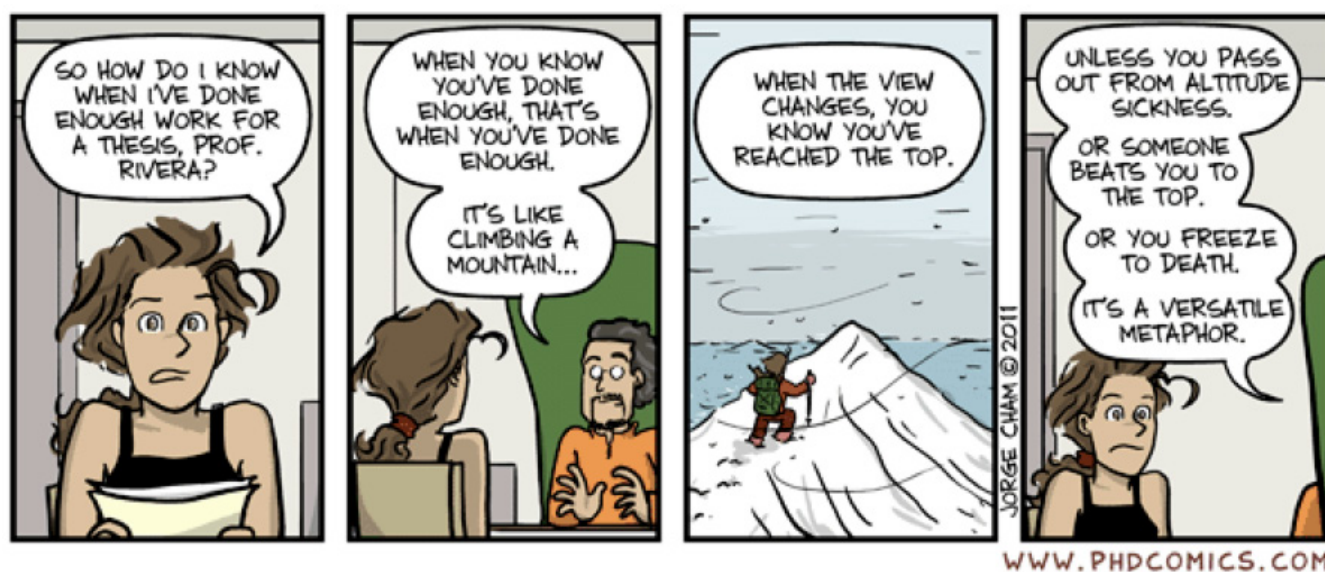
b. Essay on focused topic – This essay will address current perspectives on a specific phenomenon, hypothesis, or protocol. The topic of this essay should be more limited than would be addressed by a review, allowing the student to examine it in greater detail. (Length [double spaced], excluding title page, references and illustrative material: minimum – 10 pages; maximum – 20 pages)

Which of options ii.a or ii.b will apply for a specific examination must be decided by the Examination committee and communicated to the student at least two months prior to the one-month examination period. For each written component, a student will be provided with a choice of two topics decided by the Examination Committee. The student will be informed of these topics four weeks before the date of the oral examination. The written components of the Examination are expected to be a student's own work, so that a student is required to complete this component independently.

5) The oral examination assesses a student's knowledge of her/his Area of Specialization and preparedness to conduct high-quality research, and should not be limited to elaboration or scrutiny of the written components. Although the student's written components may form the basis of some questions, typically early during the oral examination, exploration of additional topics within the student's Area of Specialization is expected.

6) The Examination Committee includes all members of a student's Supervisory Committee, plus one member from a University unit other than the Department of Biological Sciences and one additional member, who may be from the Department of Biological Sciences. All members of the Examination Committee propose and agree on the questions that comprise the written component of the Examination. In addition, they participate in questioning during the oral component. The oral component will be overseen by a Neutral Chair, who is not involved in the student's project.

7) **The Examination format described above is required of all students who register on or after July 1, 2012. This format may also be used by students who registered before July 1, 2012, if their Examination period begins no earlier than February 2, 2012 (i.e., oral**



examination scheduled no earlier than March 1, 2012).

Research Proposals

The M.Sc. Research Proposal for Shaelen Korschuh entitled "Thyroid Hormone control of development and angiogenesis in zebrafish", will be held on February 13, 2012 at 1:30 pm. in Biological Sciences room 186C.

The Ph.D. Research Proposal for Gareth Jones entitled "Identification and characterization of lignocellulosic degrading microorganisms from geothermal springs located in the Canadian Western Cordillera", will be held on February 14, 2012 at 9 a.m. in Biological Sciences room 312.

The M.Sc. Research Proposal for Isha Nasa, in the area of “Protein Biochemistry”, was accepted by her Supervisory Committee on February 3, 2012.

Ph.D. Candidacy Oral Examinations - Candidacy Exams are Closed Exams.

Anastassiia Moussatova (Supervisor: P. Tieleman), will be holding her Ph.D. Candidacy Examination, in the area of “Computational Biochemistry”, on February 22, 2012 at 9:00 a.m. in BioSciences room 499. (Neutral Chair: R.J. Turner)

Thesis Oral Examinations - Exams are “Open” unless otherwise noted.

Please note: *Pre-defense seminars are a degree requirement for all M.Sc. and Ph.D. students in Biological Sciences. Typically, the seminar will take place immediately preceding the Oral Defense Exam.*

It is the student’s responsibility to book the necessary com-media equipment with either Christine (220-3578) or David (220-8307) for their examination. Please book the equipment as soon as you have the date set for your exam/proposal meeting. (defense seminars are held one hour before the stated defense time in BI 211 unless noted otherwise)

Lorraine Johnston Adderley (Supervisor: J. Vamosi), will be defending her M.Sc. Thesis, in the area of “Plant Reproductive Ecology” on February 29, 2012 at 10:00 a.m. in BioSciences room 499. (Neutral Chair: C. Shemanko).

Positions / Opportunities



Sessional Teaching positions available - SPRING 2012

BIOL 205, Spring 2012 Sessional Lecturer – Biology 205, The Organization and Diversity of Life
An instructor is required to teach this half course, which will be offered during the Spring 2012 session. Biology 205 provides a study of biological concepts and mechanisms for non-majors, illustrated by current examples of medical and environmental problems. Preferred qualifications include a Ph.D. in one of the Biological Sciences, and previous teaching experience. The base salary is \$5930. Interested persons should apply to Dr. Michael Hynes, Associate Head (undergraduate programs), Dept. of Biological Sciences, University of Calgary, 2500 University Drive NW, Calgary, AB, T2N 1N4 (email: biosci@ucalgary.ca). The deadline for submission of an application letter and resumé is February 27, 2012.

BIOL 305, Spring 2012 Sessional Lecturer – Biology 305, The Human Organism
An instructor is required to teach this half course, which will be offered during the Spring 2012 session. Biology 305 introduces human biology to non-majors, leading to an appreciation of how the human body maintains itself and carries out the functions necessary to sustain any organism. Preferred qualifications include a Ph.D. in one of the Biological Sciences, and previous teaching experience, ideally in this course. The base salary is \$5930. Interested persons should apply to Dr. Michael Hynes, Associate Head (undergraduate programs), Dept. of Biological Sciences,

University of Calgary, 2500 University Drive NW, Calgary, AB, T2N 1N4 (email: biosci@ucalgary.ca). The deadline for submission of an application letter and resumé is February 27, 2012.

BCEM 393, Spring 2012 Sessional Lecturer – Biochemistry 393, Introduction to Biochemistry
An instructor is required to teach and coordinate labs for this half course, which will be offered during the Spring 2012 session. Biochemistry 393 introduces the structure and function of carbohydrates, amino acids, proteins, lipids, and (co)enzymes, and also provides an introduction to metabolism. Preferred qualifications include a Ph.D. in one of the Biological Sciences, and previous teaching experience in Biochemistry. The base salary is \$5930 for lectures, with an additional \$1000 for lab coordination. Interested persons should apply to Dr. Michael Hynes, Associate Head (undergraduate programs), Dept. of Biological Sciences, University of Calgary, 2500 University Drive NW, Calgary, AB, T2N 1N4 (email: biosci@ucalgary.ca). The deadline for submission of an application letter and resumé is February 27, 2012.

BIOL 243, Spring 2012 Sessional Lecturer – Biology 243, DNA, Inheritance, and Evolution.
An instructor (or several instructors) is required to teach and coordinate labs for this half course, which will be offered during the Spring 2012 session. Biology 243 is one of our two new introductory courses in Biology. It provides an introduction to central concepts in evolution and biodiversity, as well as the role of DNA as a vehicle for inheritance of genetic information. Preferred qualifications include a Ph.D. in one of the Biological Sciences, and previous teaching experience. Since this is a new course taught with a new philosophy, previous experience teaching BIOL 243 is highly desirable. It may be possible for two instructors to cover the two halves of the lecture material. The lab coordination could be done by the lecturer(s), or by a different person. The base salary is \$5930, with an additional \$1000 for lab coordination. Interested persons should apply to Dr. Michael Hynes, Associate Head (undergraduate programs), Dept. of Biological Sciences, University of Calgary, 2500 University Drive NW, Calgary, AB, T2N 1N4 (email: biosci@ucalgary.ca). The deadline for submission of an application letter and resumé is February 27, 2012.

BIOL 311, Spring 2012 Sessional Lecturer – Biology 311, Principles of Genetics
An instructor is required to teach and coordinate labs for this half course, which will be offered during the Spring 2012 session. Biology 311 introduces topics of Mendelian inheritance, allelic relationships, genetic and sex linkage, sex determination, chromosome structure, segregation and recombination, structure and function of genetic material, molecular genetics, genetics of bacteria and viruses, gene function, complementation, and regulation of gene expression. Preferred qualifications include a Ph.D. in one of the Biological Sciences, and previous teaching experience. It may be possible to hire separate instructors for the lab and lecture components. The base salary is \$5930, with an additional \$1000 for lab coordination. Interested persons should apply to Dr. Michael Hynes, Associate Head (undergraduate programs), Dept. of Biological Sciences, University of Calgary, 2500 University Drive NW, Calgary, AB, T2N 1N4 (email: biosci@ucalgary.ca). The deadline for submission of an application letter and resumé is February 27, 2012.

BIOL 313, Spring 2012 Sessional Lecturer – Biology 313. An Introduction to Ecology and Evolution

An instructor is required to teach and coordinate the labs for this half course, which will be offered during the spring 2012 session. Biology 313 introduces ecological processes and evolutionary principles that explain the origin, maintenance, and dynamics of biological diversity, including population dynamics and communities, the evolution of traits, and mechanisms of genetic change of populations. Preferred qualifications include a Ph.D. in one of the Biological Sciences, and previous experience teaching in the field of Ecology. The base salary is \$5930, with an additional \$1000 for lab coordination. Interested persons should apply to Dr. Michael Hynes, Associate Head (undergraduate programs), Dept. of Biological Sciences, University of Calgary, 2500 University Drive NW, Calgary, AB, T2N 1N4 (email: biosci@ucalgary.ca). The deadline for submission of an application letter and resumé is February 27, 2012.

SUMMER 2012

BIOL 331, Summer 2011 Sessional Lecturer – Biology 331, Introduction to Cellular and Molecular Biology

An instructor is required to teach this half course, which will be offered during the Summer 2012 session. Biology 331 introduces principles of cellular structure and function, including molecular organization and function of membranes, organelles, the nucleus and cytoplasmic structures, regulations of cell proliferation, assembly of organelles, and cell interactions. Preferred qualifications include a Ph.D. in one of the Biological Sciences, and previous teaching experience in Cell and Molecular Biology. The base salary is \$5930. Interested persons should apply to Dr. Michael Hynes, Associate Head (undergraduate programs), Dept. of Biological Sciences, University of Calgary, 2500 University Drive NW, Calgary, AB T2N 1N4 (email: biosci@ucalgary.ca). The deadline for submission of an application letter and resumé is February 27, 2012.

Nominate someone who makes you proud- 2012 Arch Award nominations open at www.archawards.com

The University of Calgary Alumni Association is accepting nominations for its highest honour—the Arch Awards. Do you know an outstanding alumni donor who is making an impact in their community? Why not nominate them for a 2012 Arch Award!

Last year we honoured legal trailblazer Madam Justice Patricia Rowbotham BEd'75, LLB'85—our Distinguished Alumna; Olympian and humanitarian Kristina Groves, BSc'04—our Graduate of the Last Decade; and Alyx Nanji, BSW/BComm student—our Future Alumnus.

University of Calgary alumni and students are changing the world. Nominate someone who makes you proud at archawards.com by Feb. 29, 2012 at 4:30 p.m.

Thank you for your ongoing support of the Arch Awards program and please share this information with your network.

Please contact Erin Mason eamason@ucalgary.ca or 220-7108 if you have any questions.



Please find a summary of volunteer activities going on in Kananaskis.

Though most of these programs are busiest in the summer, a couple offer opportunities in the winter too. Students may peruse this list to line things up for Spring, when activities rev up again.

If you are interested in any of these volunteer opportunities please feel free to call.

Marie-Pierre Chappeland
Office Manager, Bow Valley Provincial Park
Box 280
Exshaw, Alberta T0L 2C0
Phone: 403-673-3663 ext 201 Fax: 403-673-3587
http://tpr.alberta.ca/parks/kananaskis/parks_bow.asp

document link: http://www.bio.ucalgary.ca/events/volunteer_k_country.pdf

Biotech Job Bank (www.bhrc.ca) has current employment opportunities in the biotechnology industry in Canada. The Biotech HR Pulse is available in PDF format at: www.bhrc.ca/Pulse/index.html. Phone 519-457-1470, Ext 268, Fax 519-457-3997.

University Affairs Career Ads. Current employment opportunities, including all facets of the biological sciences, in Canadian universities may be found at the University Affairs website: www.universityaffairs.ca. Career ads are available in HTML format at: http://www.universityaffairs.ca/career_ads/index.html

8th International Symposium on Bioinformatics Research and Applications - May 21-23, 2012, Dallas, Texas
<http://www.cs.gsu.edu/isbra/>

Conferences / Workshops / Courses



The International Symposium on Bioinformatics Research and Applications (ISBRA) provides a forum for the exchange

of ideas and results among researchers, developers, and practitioners working on all aspects of bioinformatics and computational biology and their applications. Submissions presenting original research are solicited in all areas of bioinformatics and computational biology, including the development of experimental or commercial systems.

We seek two categories of submissions: extended abstracts of up to 12 pages in Springer LNCS format, and short abstracts of up to 4 pages. Both types of submissions must be made electronically by following the instructions at <http://www.easychair.org/conferences/?conf=isbra2012>. Submission implies willingness of at least one author to register and present at the symposium.

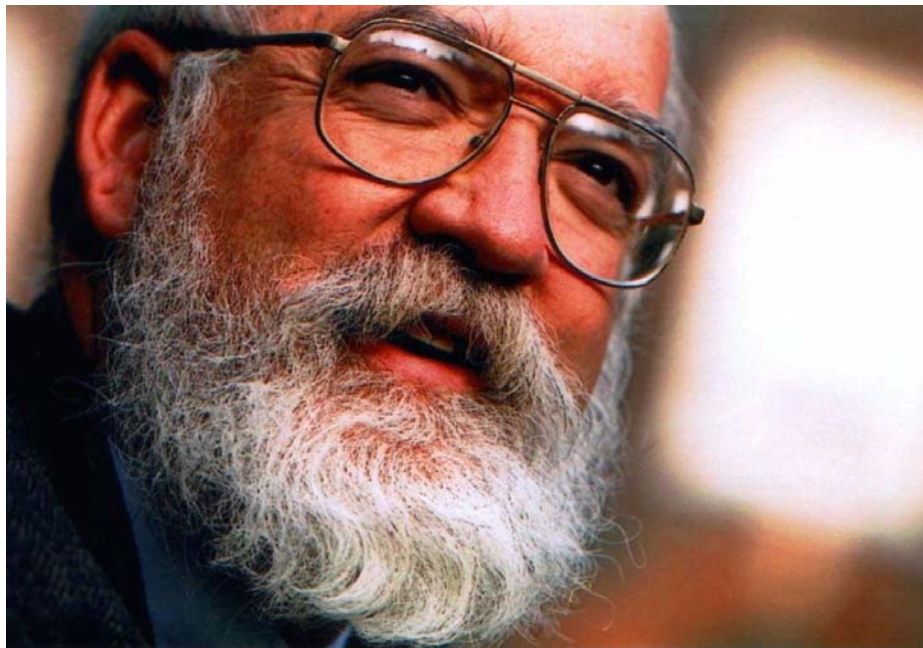


The 27th Annual

Darwin Lecture

“The Evolution of Reasons”

Dr. Daniel C. Dennett



Friday 4:30pm, Feb 10th, ST140

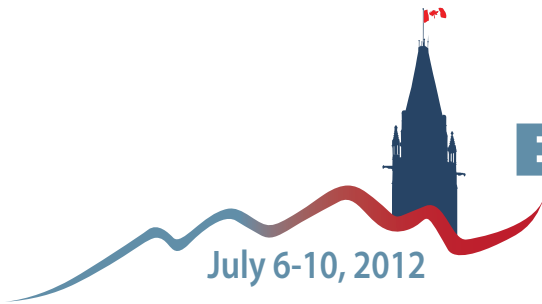
Dr. Dennett is a philosopher, writer and scientist whose research centers on the philosophy of biology, particularly as related to the field of evolutionary biology. He is co-director for the Center for Cognitive Studies and the Austin B. Fletcher Professor of Philosophy at Tufts University. He is also the author of several popular books, including **Breaking the Spell** (2006), **Freedom Evolves** (2003) and **Darwin's Dangerous Idea** (1995)



Co-hosted by the Biological Sciences and Philosophy Departments. Lecture is Free. Catered Dinner to follow, for tickets write Matthew mr.morris@ucalgary.ca or Jobran jmchebib@ucalgary.ca



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EVOLUTION OTTAWA

1st Joint Congress on Evolutionary Biology



**A congress on ecology and evolution
through a partnership of:**

- American Society of Naturalists
- Canadian Society for Ecology and Evolution
- European Society for Evolutionary Biology
- Society for the Study of Evolution
- Society of Systematic Biologists

