



LIFE SCIENCE NEWS

Published by the Institute of Arctic Biology in cooperation with the Department of Biology & Wildlife, College of Natural Science and Mathematics.

April 9, 2007

ANNOUNCEMENTS

The third annual **University of Alaska Biomedical Research Conference (UABRC)** will be held at the Museum of the North, Arnold Espe Auditorium. The UA Biochemistry and Molecular Biology program sponsors the UABRC each year to bring student and faculty researchers together for scientific discussion.
Information: fyabnp@uaf.edu

Thursday, April 12

9 a.m.-Noon: Environmental Health Science, Keynote address by Dr. Gerald Mohatt, Director, CANHR;
1-4 p.m.: Cell Biology and Biochemistry, Keynote address by **Dr. Carol Lewis**, Dean, SNRAS;
4:30-6 p.m.: Poster session all topic areas

Friday, April 13

9 a.m.-Noon: Toxicology and Infectious Disease, Keynote address by **Dr. Jasper Rine**, Univ. of California Berkeley;
1-4 p.m.: Neuroscience, **Dr. Troy Zarcone**, University of Rochester, School of Medicine and Dentistry.

Science Café is a series of informal presentations and discussions that will take place during the International Polar Year (IPY), March 2007 through February 2009. The UA IPY Young Researchers' Network is soliciting presentations for the series on topics from any polar discipline, including arts, lifestyle, engineering and natural sciences. Scientific and traditional speakers from any perspective are welcome. Science Café will take place throughout Fairbanks in coffee houses, pubs,

restaurants and in the public library to bring together people of various backgrounds. This is a great way to get word about your research efforts out to the community. If you would like to share your research or expertise in a thought-provoking manner then please contact Chris Petrich (chris.petrich@gi.alaska.edu).

INBRE Supported Faculty and Graduate Students will be hosting a **National Center for Biotechnology Information (NCBI) training course**, "*Field Guide to GenBank and NCBI Molecular Biology Resources.*" The one day course is scheduled for May 31, 2007 at the UAF campus. Pre-registration is required. For technical information contact Heather Huson at fnhjc@uaf.edu. For general information, and Registration contact the Alaska INBRE office at inbre@alaska.edu or fnclc3@uaf.edu DEADLINE **May 1, 2007**

"Field Guide to Genbank and NCBI Molecular Biology Resources" is a lecture and hands-on computer workshop on GenBank and related databases covering effective use of the Entrez databases and search service, the BLAST similarity search engine, genome data and related resources. Now featuring the NCBI assembly and annotation of human, mouse and rat genomes, the updated map viewer genome displays, the new genome-specific BLAST pages and the new NCBI curated conserved domains. Instructor for the course will be Simin Assadi, biologist on the User Services Staff of NCBI, a division of the National Institutes of Health.

Course Schedule: Date: Thursday May 31, 2007
Morning Session: 9 a.m. to Noon – Lecture – Elvey Aud.

LIFE SCIENCES SEMINAR

Steve MacLean

The Nature Conservancy

Polar Marine Conservation: The Nature Conservancy's Bering Sea Program

Elvey Auditorium

Friday, April 13, 2007, 3:30 p.m.

Lunch Break: Noon to 1 p.m.

Afternoon Session: 1 to 3 and 3:15 to 5:15, Hands On
Computer Lab – Gruening Building

TUESDAY, APRIL 10

1-2 p.m. - 201 Irving I

Biobites--Biology Graduate Student Assoc. Seminar

“Effects of Fire Severity on Site Moisture, Species
Composition, and Functional Properties of Black Spruce
Forests in Interior Alaska”

Emily Bernhardt, graduate student in Biology and
Wildlife

Information: ftjds2@uaf.edu

1:15-2:15 p.m. - Elvey Auditorium, 214 Elvey Building

AQC Bering Sea Seminar Series, sponsored by the
Alaska Quaternary Center, College of Natural Sciences
and Mathematics, and the Chapman Professorship
“Late Pleistocene Large Mammals: Troubles on the
Bering Land Bridge”

R. Dale Guthrie, Professor Emeritus, IAB, UAF

Information: ffnhb@uaf.edu, 474-5433;

<http://www.uaf.edu/aqc/bss.htm>

5:30 p.m. - 138 Irving II

Sponsored by the Fairbanks student subunit of the
American Fisheries Society

“Career Street Smarts for Working as a Natural Resource
Professional”

Michael Fraidenburg, author of the forthcoming book
"Intelligent Courage--Natural Resource Careers That
Make a Difference"

(<http://www.IntelligentCourage.com>)

Information/RSVP: fbafs@uaf.edu

7 p.m. - UA Museum of the North Auditorium

International Polar Year (IPY) Museum Lecture

“Alaskan Climate Change in a Global Context”

John Walsh, President's Professor of Global Climate
Change, UAF

Information: 474-7505, <http://www.uaf.edu/museum>

WEDNESDAY, APRIL 11

3:30 p.m. - Location TBD (see
www.cgc.uaf.edu/calendar.html)

Freshwater Ecosystems Seminar Series

“Careers That Make a Difference”

Michael Fraidenburg, author of the forthcoming book
"Intelligent Courage--Natural Resource Careers That
Make a Difference"

(<http://www.IntelligentCourage.com>)

Information: mark.wipfli@uaf.edu, 474-6654

3:30 p.m. - Elvey Auditorium, 214 Elvey Building

Institute of Marine Science Seminar

“Bottom-up Influences on Intertidal Infaunal Clams in
Kachemak Bay, Alaska”

Carrie Parris, M.S. student in Marine Biology, SFOS,
Information: www.sfos.uaf.edu/events/ or
m.scholl@sfos.uaf.edu, 474-6786

4-7 p.m. - UA Museum of the North Auditorium

Flint Hills Undergraduate Research Competition

Ten finalists of the 2006-07 Flint Hills Undergraduate
Research Competition will present their work to a panel
of judges, competing for one of three top prizes. The
event is free and open to the public.

Information: 474-6264, <http://www.alaska.edu/ipy>

THURSDAY, APRIL 12

10:30 a.m. - 304 Eielson Building

Department of Anthropology Thesis Defense

“Whence These Farmers? El Patano Bioarchaeology and
the Advent of Agriculture in West Mexico”

Nicholas Corduan, M.A. candidate

Information: fyanth@uaf.edu, 474-7288

12:30-5 p.m. - 401 IARC

Sponsored by the Fairbanks student subunit of the
American Fisheries Society

“Project Planning Bootcamp: Tools and Techniques for
Getting the Right Things Done as well as Getting Things
Done Right”

Michael Fraidenburg, author of the forthcoming book
"Intelligent Courage--Natural Resource Careers That
Make a Difference" (<http://www.IntelligentCourage.com>)
There is a \$5 registration fee.

Information/RSVP: fbafs@uaf.edu

3:40-5 p.m. - 183 Arctic Health Research Building

Natural Resource Management Seminar Series--

Impacts of a Warming Climate on Natural Resource
Management in Alaska (also NRM 692)

“State and Fate of Permafrost in a Warming World”

Vladimir Romanovsky, Geophysical Institute and
Department of Geology and Geophysics, UAF

Information: ffsr@uaf.edu, 474-7535

FRIDAY, APRIL 13

1:00 p.m. - 136 Irving II

Physiology Seminar

“Maintenance of copper homeostasis: Effects of Cup1p
overexpression, Mac1p-dependent gene expression and
survival of *S. Cerevisiae*”

Summer Engel, UAA graduate student

Cory Williams, UAF Graduate student

Information: Cord Brundage, x5024, ftcmb3@uaf.edu,

1:30 p.m. - 136 Irving II

Physiology Seminar

“The effect of nutritional status on adipose tissue fatty acids in tufted puffins: Implications for diet assessment using quantitative fatty acid signature analysis(QFASA)”
Cory Williams, UAF Graduate student
Information: Cord Brundage, x5024, ftcmb3@uaf.edu,

SATURDAY, APRIL 14

Noon-5 p.m. - Natural Sciences Facility

Fourteenth Annual Open House for the College of Natural Sciences and Mathematics

Science Potpourri

This year's highlights include hands-on activities for all, plus presentations in Science Theater. All are invited!
Information: Marlys Schneider (fnmes@uaf.edu, 474-6287) or Jeff Drake (474-7077)

NEW PUBLICATIONS

The lowercase letters following IAB authors identify that author as (f) - faculty, (pd) - post doc, (g) - graduate student, (e) - emeritus, (ra) - research associate, (af) - affiliate faculty, (s) - staff, (ug) - undergrad, and (hs) - high school.

2362. Chapin III, F. S., (f), A. L. Lovecraft, E. S. Zavaleta, J. Nelson, **M. D. Robards, G. P. Kofinas**, (f), **S. F. Trainor**, (pd), G. D. Peterson, H. P. Huntington, and R. L. Naylor. 2006. Policy strategies to address sustainability of Alaskan boreal forests in response to a directionally changing climate. *Proceedings of the National Academy of Science* 103, no. 45: 16637-43.

2364. Chapin III, F. S., (f), G. M. Woodwell, J. T. Tanderson, G. M. Lovett, E. B. Rastetter, D. D. Baldocchi, D. A. Clark, M. E. Harmon, D. S. Schimel, R. Valentini, C. Wirth, J. D. Aber, J. J. Cole, M. L. Goulden, M. E. Harden, M. Heimann, Howarth R.W., P. A. Matson, **A. D. McGuire**, (f), J. M. Melillo, H. A. Mooney, J. C. Negg, R. A. Houghton, M. L. Pace, M. G. Ryan, S. W. Running, O. E. Sala, W. H. Schlesinger, and E. D. Schulze. 2006. Reconciling carbon-cycle concepts, terminology, and methodology. *Ecosystems* 9, no. 7: 1041-50.

2365. Randerson, J. T., H. Liu, M. Flanner, S. D. Chambers, Y. Jin, P. G. Hess, G. Pfister, K. K. Treseder, M. C. Mack, L. Welp, **F. S. Chapin III**, (f), J. W. Harden, E. Goulden, E. Lyons, J. C. Neff, E. A. G. Schuur, and C. Zender. 2006. The impact of boreal forest fire on climate warming. *Science* 314: 1130-1132.

2366. Zimov, S. A., S. P. Davydov, G. M. Zimova, A. I. Davydova, E. A. G. Schuur, K. Dutta, **F. S. Chapin III**,

(f). 2006. Permafrost carbon: Stock and decomposability of a globally significant carbon pool. *Geophysical Research Letters* 33, no. L20502 .

2367. Spackman, E., **K. G. McCracken**, (f), **K. Winker**, (f), and D. E. Swayne. 2006. H7N3 avian influenza virus found in a South American wild duck is related to the Chilean 2002 poultry outbreak, contains genes from equine and North American wild bird lineages, and is adapted to domestic turkeys. *Journal of Virology* 80: 7760-7764.

2368. Johnson, K. P., M. Kennedy, **K. G. McCracken**, (f). 2006. Reinterpreting the origins of flamingo lice: Cospeciation or host-switching. *Biology Letters* 2: 275-78.

2369. Kulikova, I. V. , S. V. Drovetski, D. D. Gibson, R. J. Harrigan, S. Rohwer, M. D. Sorenson, **K. Winker**, (f), Y. N. Zhuravlev, and **K. G. McCracken**, (f). 2005. Phylogeography of the Mallard (*Anas platyrhynchos*): Hybridization, dispersal, and lineage sorting contribute to complex geographic structure. *The Auk* 122: 949-65.

2370. Peters, J. L., **K. G. McCracken**, (f), R. E. Wilson, Y. N. Zhuravlev, Y. Lu , K. P. Johnson, and K. E. Omland. 2005. Phylogenetics of wigeons and allies (Anatidae: *Anas spp.*): The importance of sampling multiple loci and multiple individuals. *Molecular Phylogenetics and Evolution* 35: 209-24.

2371. McCracken, K. G., (f), M. D. Sorenson. 2005. Is Homoplasy or lineage sorting the source of incongruent mtDNA and nuclear gene trees in the stiff-tailed ducks (*Nomonyx-oxyura*)? *Systematic Biology* 54: 35-55.

2372. Callaghan, D., **K. G. McCracken**, (f). 2005. Musk Duck: taxonomy. *Bird Families of the World, Ducks, Geese, and Swans*. J. KearOxford University Press.

2373. McCracken, K. G., (f). 2005. Musk Duck *Biziura lobata*. *Bird Families of the World, Ducks, Geese, and Swans*. J. KearOxford University Press.

\$\$ GRANTS AND AWARDS \$\$

<p>Naoki Takebayashi and Diana Wolf National Science Foundation \$126,053</p>

“Collaborative Research: Diversification of the Self-Incompatibility Locus in the Papaveraceae”
3/15/07-2/28/09

Mark Lindberg and Perry Barboza
USGS
\$17,632

“Relationship between Physiological Condition and Reproduction of Lesser Scaup”
3/15/07-2/28/09

NEW FUNDING OPPORTUNITIES

FYI...New FY08 Provision Fringe Benefit Rates are out and applicable to all new Proposals. See Proposal coordinators for new rate.

Applications are being accepted for the **Jack R. Luick Memorial Travel Fund** for travel through October 31, 2007. Deadline for application is April 30. See the IAB Director's Office for further details.
Information: Kim Davis, UAF Advancement Services, x6402.

The Animal Welfare Institute (AWI) is accepting applications for its 2007 **Christine Stevens Wildlife Award** program. This award program provides \$10,000 grants to help defray the costs of innovative and creative research on non-lethal tools and techniques for wildlife management and research. Deadline for application is May 31, 2007. See the IAB Director's Office for further details. Information: D.J. Schubert at (609) 334-1378
dj@awionline.org

TIP OF THE WEEK

Computer Tip of the Week: Setting up a Mac/Windows network: Many computer users have both Windows and Macintosh computers, because some software is written only for Windows, and other software is written only for Macs. Users that need to be in both the Mac and the Windows worlds often need a way for their computers to talk to each other. One simple way is to set up shared folders that can be accessed across the network. You just mount the remote shared folder as a network drive, and it shows up in Finder (Mac) or Windows Explorer/My Computer (Windows). If you want to mount a Mac folder on your Windows PC, check out this tutorial: <http://lifehacker.com/software/mac-os-x/how-to-access-a-macs-files-on-your-pc-247541.php>. If you want to mount a Windows folder on your Mac, check out this tutorial: <http://lifehacker.com/software/mac-os-x/how-to-mount-a-windows-shared-folder-on-your-mac-247148.php>. Either way, it will require a bit of tweaking

on both computers to get it set up, but it will make your life easier in the long run.

NEW DATABASE

CSA Illustrata: Natural Sciences
Looking for a picture, table, chart or graph? Try out CSA Illustrata: Natural Sciences.
This database indexes illustrations from more than 1000 scholarly publications and will continue to grow. Topics covered include biology, environmental studies, fish and fisheries, water resources, conservation, and forestry, among others. To access this database, click on Article Indexes and Collections on the UAF's Library home page. Click on C and then on CSA. CSA Illustrata: Natural Sciences is at the top of the list.

TRAVEL

- Meagan Boltwood, 4/2-6/07, Portland, OR Resilience OSU Conference
- Dave Gustine, 4/4-4/12, Nome, AK, Fieldwork and Seattle, WA
- Dave McGuire, 4/10-4/14, Abisko Station, Sweden, CLASSIC Workshop
- Dave McGuire, 4/14-4/19, Wageningen, Netherlands, Peatlands Carbon Symposium
- Gerald Mohatt, 4/19/07, Anchorage to attend ATNHC
- Kristin O'Brien, 4/7-6/8, Antarctica, Fieldwork
- Brian Riordan, 4/8- 4/13, Seattle, Washington, for red hat training

Quote of the week:

If we had no winter, the spring would not be so pleasant; if we did not sometimes taste of adversity, prosperity would not be so welcome.

~Anne Bradstreet