



LIFE SCIENCE NEWS

Published by the Institute of Arctic Biology

Monday, 4 April 2016

Announcements

Midnight Sun Science Symposium. Showcasing innovative biology research of UAF graduate and undergraduate students.

Congratulations to graduate student Katie Rubin (Link Olson's lab) on receiving a [National Science Foundation Graduate Research Fellowship](#) - among the highest distinction attainable by early-career graduate students. Taylor Gofstein (Mary Beth Leigh's lab) and Anna Rix (Kristin O'Brien's lab) both received Honorable Mention. In 2016, NSF received more than 17,000 applications, awarded only 2,000 fellowships (an 11.8% success rate), and made 2,908 honorable mentions. Graduate students are encouraged to apply!

Faculty candidates for the integrative vertebrate physiologist position begin arriving April 5. You're invited to the candidate's research seminars - calendar information [here](#).

Career Planning Workshop for STEM grads and post-docs. Registration deadline April 8.

Seasonal Time Keeping Mechanisms in Mammals Seminar by Ben Saer, Tuesday 4/5

11:00am, Murie 105

UAF Authors Reception. Call for submissions and invitation to reception.

NIH Annual Student Visit Week program for Alaska Native, Native American, and Native Hawaiian students interested in biomedical research and healthcare careers. Deadline April 22, 2016.

UA Foundation open house. Multiple dates in April

Events and Seminars

5 April 2016

• **Seminar: Seasonal Timekeeping Mechanisms in Mammals**

Ben Saer

Research Technician

University of Manchester, England

11:00AM - 12:00PM

Murie Bldg. Room 105

6 April 2016

• **Teaching Lecture: Teaching lecture: Proximate mechanisms of thermoregulation and**

LIFE SCIENCE HOUR SEMINAR

Friday, 8 April 2016

3:00 PM - Murie Life Science Bldg, Murie Auditorium.

Science, Adventure, Family, and Friends

Joseph Roman Dial, Professor of Biology and Mathematics
Alaska Pacific University

evolution of homoeothermy in vertebrates

Cory Champagne

Research Scientist

Department of Biological Sciences, Old Dominion University, Norfolk, Virginia

2:30PM - 3:30PM

Murie Bldg, rm 107

7 April 2016

• Symposium: Midnight Sun Science Symposium

Midnight Sun Science Symposium

9:00AM - 4:00PM

Murie Life Science Bldg, 1st Floor

• Faculty Candidate Seminar: Metabolic Adaptations to Fasting

Cory Champagne

Research Scientist

Department of Biological Sciences, Old Dominion University, Norfolk, Virginia

2:30PM - 3:30PM

Murie Life Science Bldg, Murie Auditorium.

8 April 2016

• Symposium: Midnight Sun Science Symposium

Midnight Sun Science Symposium

9:00AM - 3:00PM

Murie Life Science Bldg, 1st Floor

• Thesis Defense: Traditional Food Security and Diet Quality in Alaska Native Women

Amanda Walch

9:00AM - 10:00AM

Akasofu Bldg, rm 401 (IARC)

Travel

• **Bellmore, Rebecca**, 4/8/16 - 4/28/16, Phoenix, AZ, Field Work

• **Bret-Harte, Donie**, 4/4/16 - 4/9/16, Woods Hole, MA, Attend annual Arctic LTER planning meeting.

• **Brian Barnes**, 4/7/16 - 4/8/16, Anchorage, AK, INBRE meetings at UAA

• **Julie Benson**, 4/7/16 - 4/8/16, Anchorage, AK, INBRE meetings at UAA

Grants and Awards

Go to the IAB funding opportunities webpage, www.iab.uaf.edu/research/funding_opps.php, for the latest on available grants, scholarships, fellowships, and awards.

New IAB Publications

Legend: **f**=faculty, **r**=research scientist, **s**=staff, **e**=emeritus, **a**=affiliate, **g**=grad student, **p**=post-doc, **u**=undergrad student, **h**=high school student

West, George C. (e) (2015). North American Hummingbirds; An Identification Guide. North American Hummingbirds; An Identification Guide [IAB 4217].

Warren, Andrew D., Nakahara, Shinichi, Lukhtanov, Vladimir A., **Daly, Kathryn M. (f)**, Ferris, Clifford D., Grishin, Nick V., Cesanek, Martin, and Pelham, Jonathan (2016). chryxus complex (Lepidoptera: Nymphalidae: Satyrinae). The Journal of Research on the Lepidoptera 49:1-20 [IAB 4218].

Ferrante, A. (f), Templeton, M. (g), Hoffman, M., and Castellini, M.J. (2015). The Thermodynamic Mechanism of Peptide-MHC Class II Complex Formation Is a Determinant of Susceptibility to HLA-DM. Journal of Immunology (Baltimore, Md. : 1950) 195:1251-1261 [IAB 4219].

Devor, D.P., Kuhn, D.E., **O'Brien, K.M. (f)**, and Crockett, E.L. (2016). Hyperoxia Does Not Extend Critical Thermal Maxima (CT_{max}) in White- or Red-Blooded Antarctic Notothenioid Fishes. Physiological and Biochemical Zoology 89:1-9 [IAB 4220].

Philip, J. (s), Ford, T., Henry, D., **Rasmus, S. (f)**, and Allen, J. (2016). Relationship of Social Network to Protective Factors in Suicide and Alcohol Use Disorder Intervention for Rural Yup'ik Alaska Native Youth. Psychosocial Intervention 25:45-54 [IAB 4221].

Mann, D.H. (r), Groves, P. (r), Reanier, R.E., Gaglioti, B.V., Kunz, M.L., and Shapiro, B. (2015). Life and extinction of megafauna in the ice-age Arctic. Proceedings of the National Academy of Sciences 112:14301-14306 [IAB 4222].

- Huettmann, Falk (ed) (f)** (2015). Central American Biodiversity. Central American Biodiversity [IAB 4223].
- Niedzialkowska, M., **Hundertmark, K.J. (f)**, Jedrzejewska, B., Sidorovich, V.E., Zalewska, H., Veeroja, R., Solberg, E.J., Laaksonen, S., Sand, H., Solovyev, V.A., Sagaydak, A., Tiainen, J., Juskaitis, R., Done, G., Borodulin, V.A., Tulandin, E.A., and Niedzialkowski, K. (2016). The contemporary genetic pattern of European moose is shaped by postglacial recolonization, bottlenecks, and the geographical barrier of the Baltic Sea. *Biological Journal of the Linnean Society* 117:879-894 [IAB 4224].
- Goldsmith, E.W., Renshaw, B., Clement, C.J., Himschoot, E.A., **Hundertmark, K.J. (f)**, and Hueffer, K. (2016). Population structure of two rabies hosts relative to the known distribution of rabies virus variants in Alaska. *Molecular Ecology* 25:675-688 [IAB 4225].
- Metzgar, Jordan, Stamey, Mackenzie, and **Ickert-Bond, Stefanie (r)** (2015). Genetic partitioning and polyploid formation within the *Cryptogramma crispa* (Polypodiales: Pteridaceae) complex. *Turkish Journal of Botany* 39: [IAB 4226].
- Hoffman, M., **Taylor, B.E. (f)**, and **Harris, M.B. (f)** (2016). Evolution of lung breathing from a lungless primitive vertebrate. *Respiratory Physiology & Neurobiology* 224:11-16 [IAB 4227].
- Campioli, M., Vicca, S., Luysaert, S., Bilcke, J., Ceschia, E., **Chapin III, F.S. (e)**, Ciais, P., Fernandez-Martinez, M., Malhi, Y., Obersteiner, M., Olefeldt, D., Papale, D., Piao, S.L., Penuelas, J., Sullivan, P.F., Wang, X., Zenone, T., and Janssens, I.A. (2015). Biomass production efficiency controlled by management in temperate and boreal ecosystems. 8:843-846 [IAB 4228].
- Chapin III, F.S. (e)** and Knapp, C.N. (2015). Sense of place: A process for identifying and negotiating potentially contested visions of sustainability. *Environmental Science & Policy* 53, Part A:38-46 [IAB 4229].
- Rozzi, R., **Chapin III, F.S. (e)**, Callicott, J.B., Pickett, S.T.A., Power, M.E., Armesto, J.J., and May Jr., R.H. (eds) (2015). *Earth Stewardship: Linking Ecology and Ethics in Theory and Practice*. Earth Stewardship [IAB 4230].
- Chapin III, F.S. (e)**, Pickett, S.T.A., Power, M.E., Collins, S.L., Baron, J.S., Inouye, D.W., and Turner, M.G. (2015). Earth stewardship: An initiative by the Ecological Society of America to foster engagement to sustain Planet Earth. In: R Rozzi, FS Chapin, III, JB Callicott, STA Pickett, ME Power and JJ Armesto (eds.), *Earth Stewardship: Linking Ecology and Ethics in Theory and Practice*. Earth Stewardship [IAB 4231].
- Fernandez-Martinez, M., Vicca, S., Janssens, I.A., Sardans, J., Luysaert, S., Campioli, M., **Chapin III, F.S. (e)**, Ciais, P., Malhi, Y., Obersteiner, M., Papale, D., Piao, S.L., Reichstein, M., Roda, F., and Penuelas, J. (2015). Reply to 'Uncertain effects of nutrient availability on global forest carbon balance' and 'Data quality and the role of nutrients in forest carbon-use efficiency'. 5:960-961 [IAB 4232].
- Hewitt, R.E., Bennett, A.P., Breen, A.L., **Hollingsworth, T.N. (s)**, Taylor, D.L., **Chapin III, F.S. (e)**, and Rupp, T.S. (2015). Getting to the root of the matter: Landscape implications of plant-fungal interactions for tree migration in Alaska. *Landscape Ecology* 31:895-911 [IAB 4233].
- Chapin III, F.S. (e)**, Sommerkorn, M., Robards, M.D., and Hillmer-Pegram, K. (2015). Ecosystem stewardship: A resilience framework for arctic conservation. *Global Environmental Change* 34:207-217 [IAB 4234].
- Grunzweig, J.M., Valentine, D.W., and **Chapin III, F.S. (e)** (2015). Successional changes in carbon stocks after logging and deforestation for agriculture in Interior Alaska: Implications for boreal climate feedbacks. *Ecosystems* 18:132-145 [IAB 4235].
- Jansson, R., Nilsson, C., Kesitalo, E.H., Vlasova, T., Sutinen, M-L, Moen, J., **Chapin III, F.S. (e)**, Brathen, K., Cabeza, M., Callaghan, T.V., Van Oort, B., Dannevig, H., Bay-Larsen, I.A., Ims, R.A., and Aspholm, A. (2015). Future changes in the supply of goods and services from natural ecosystems: prospects for the European north. *Ecology and Society* 20: [IAB 4236].
- Knapp, C.N., **Chapin III, F.S. (e)**, and Cochran, J.O. (2015). Ranch Owner Perceptions and Planned Actions in Response to a Proposed Endangered Species Act Listing. *Rangeland Ecology & Management* 68:453-460 [IAB 4237].
- McKinley, D.C., Miller-Russing, A.J., Ballard, H.L., Bonney, R., Brown, H., Evans, D.M., French, R.A., Parrish, J.K., Phillips, T.B., Ryan, S.F., Shanley, L.A., Shirk, J.L., Stepenuck, K.F., Weltzin, J.F., Wiggins, A., Boyle, O.D., Briggs, R.D., **Chapin III, F.S. (e)**,

Hewitt, D.A., Preuss, P.W., and Soukip, M.A. (2015). Investigating in citizen science can improve natural resource management and environmental protection. *Issues in Ecology* 19: [IAB 4238].

Schmidt, J.I., Kellie, K.A., and **Chapin, F.S. (e)** (2015). Detecting, estimating, and correcting for biases in harvest data. *The Journal of Wildlife Management* 79:1152-1162 [IAB 4239].

Xu, C., Holmgren, M., Van Nes, E.H., Hirota, M., **Chapin, F.S., III (e)**, and Scheffer, M. (2015). A Changing Number of Alternative States in the Boreal Biome: Reproducibility Risks of Replacing Remote Sensing Products. *PLoS ONE* 10:e0143014 [IAB 4240].

Chapin III, F.S. (e), Knapp, C.N., **Brinkman, T.J. (f)**, Bronen, R., and Cochran, P. (2016). Community-empowered adaptation for self-reliance. *Current Opinion in Environmental Sustainability* 19:67-75 [IAB 4241].

Hansen, W.D., **Chapin III, F.S. (e)**, Naughton, H.T., Rupp, T.S., and Verbyla, D. (2016). Forest-landscape structure mediates effects of a spruce bark beetle (*Dendroctonus rufipennis*) outbreak on subsequent likelihood of burning in Alaskan boreal forest. *Forest Ecology and Management* 369:38-46 [IAB 4242].

Toien, O. (r), Blake, J., and **Barnes, B.M. (f)** (2015). Thermoregulation and energetics in hibernating black bears: metabolic rate and the mystery of multi-day body temperature cycles. *Journal of Comparative Physiology. B, Biochemical, Systemic, and Environmental Physiology* 185:447-461 [IAB 4244].

Tachinardi, P., **Toien, O. (r)**, Valentinuzzi, V.S., Buck, C.L., and Oda, G.A. (2015). Nocturnal to Diurnal Switches with Spontaneous Suppression of Wheel-Running Behavior in a Subterranean Rodent. *PLoS ONE* 10:e0140500 [IAB 4245].

Fohner, A.E., Wang, Z., Yracheta, J., **O'Brien, D.M. (f)**, **Hopkins, S.E. (r)**, **Black, J. (s)**, **Philip, J. (s)**, Wiener, H.W., Tiwari, H.K., Stapleton, P.L., Tsai, J.M., Thornton, T.A., **Boyer, B.B. (f)**, and Thummel, K.E. (2016). Genetics, Diet, and Season Are Associated with Serum 25-Hydroxycholecalciferol Concentration in a Yup'ik Study Population from Southwestern Alaska. *The Journal of Nutrition* 146:318-325 [IAB 4246].

Schaefer, Kevin, Lantuit, Hugues, **Romanovsky, Vladimir E. (f)**, Schuur, Edward A.G., and **Witt, Ronald (r)** (2014). The impact of the permafrost carbon feedback on global climate. *Environmental Research Letters* 9:085003 [IAB 4247].

See the [UAF Cornerstone](http://uafcornerstone.net/) for more news and events (http://uafcornerstone.net/).

Quote of the Day

Quick decisions are unsafe decisions.

[Sophocles](#)