



TBI Newsletter **December 3, 2013**

Welcome to the Thermal Biology Institute Newsletter. We will be regularly updating colleagues, collaborators and friends of TBI with pertinent information. Please let us know if you have any information to share regarding:

- Seminars, meetings, workshops, conferences
- Employment opportunities
- Faculty & relevant publications
- Faculty & student awards
- Faculty & student presentations
- Outreach activities
- Funding opportunities

Items you wish to include in the newsletter can be sent to heather.rauser@montana.edu

Best regards,
Brent Peyton
Director, TBI

Outreach Opportunity

Brian McGeehan of CJMS is seeking mentors for gifted students; many TBI members have participated in the past:

*My name is Brian McGeehan and I teach math and science at Chief Joseph Middle School. One of my classes targets gifted and talented students that are also motivated to learn more about science. We are currently looking for folks in the community that have expertise in various fields of science including life science, physics, chemistry, and engineering that would be willing to donate time to help mentor some very talented young people on science fair projects. Chief Joseph students have placed 1st 3 of the last 4 years at the state science fair in Missoula! Feel free to forward this email to students, staff and anyone else that may be interested in mentoring a middle school student. **Please forward this request to anyone you think may be interested!***

Science Fair Mentoring

Students compete in the science fair as both individuals and partners. We have just introduced the science fair to our students and work will be completed by the end of February. Last year several of our students worked with professors, graduate students on science fair projects and gained it was an amazing learning experience for them. Time commitments as a mentor can vary from simply providing some consultation via phone or email to inviting students into labs to experience authentic research. This year most of our students will be using Google Docs for their projects to facilitate collaboration with mentors. If you are interested in helping someone in the science fair let me know (along with your area of expertise).

Thanks!

Brian McGeehan, Science Teacher, Chief Joseph Middle School

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Seminars, Meetings & Workshops

Chemistry & Biochemistry

12/4 Josh Heinemann, MSU Bothner Lab, Kopriva Graduate Student Seminar, *Development of Microfluidics Technology for "Real-Time" Analysis of Metabolites* 4:10pm Byker Auditorium

12/6 Juli Gibbs-Davis, University of Alberta, TBA, 3:10pm Byker

12/12 Dr. Yuichi Shimazaki, Ibaraki University "Oxidation Chemistry of M(II)-Salen Complexes (M = Ni, Pd, Pt and Cu); Their Electronic Structures and Reactivities" Byker Auditorium 2pm

12/13 Michelle Tigges, MSU Bothner Lab/ Foreman Lab, Third Year Seminar, TBA, 3:10pm Byker

[TBI Seminar Schedule](#) (Seminar is at 3:10pm, 108 Plant Bioscience Building)

Spring Semester Seminars:

3/3 Steve D'hondt, University of Rhode Island

4/21 Trent Northern, Lawrence Berkeley National Lab

National Meetings

[The 3rd International Conference of Geobiology](#), June 8-10, 2014, [Wuhan, China](#)

Registration deadline is **Feb 28, 2014**.

Funding Opportunities

NSF just announced DEB grant

The Division of Environmental Biology (DEB) supports fundamental research on populations, species, communities, and ecosystems. Scientific emphases range across many evolutionary and ecological patterns and processes at all spatial and temporal scales. Areas of research include biodiversity, phylogenetic systematics, molecular evolution, life history evolution, natural selection, ecology, biogeography, ecosystem structure, function and services, conservation biology, global change, and biogeochemical cycles. Research on organismal origins, functions, relationships, interactions, and evolutionary history may incorporate field, laboratory, or collection-based approaches; observational or manipulative experiments; synthesis activities; as well as theoretical approaches involving analytical, statistical, or computational modeling.

Current date: Aug 4, 2014 Preliminary Proposal Due Date(s) (required) (due by 5 p.m. proposer's local time): January 23, 2014 January 23, Annually Thereafter Full Proposal Deadline(s): August 04, 2014 August 2, Annually Thereafter <http://www.nsf.gov/pubs/2014/nsf14503/nsf14503.htm>

Employment opportunities

Announcing a job opportunity for an Assistant Professor of Microbial Genomics. The School of Life Sciences at [Arizona State University](#) invites applications for a tenure-track faculty position at the level of Assistant Professor in the area of microbial genomics including metagenomics. Anticipated start date is August 16, 2014. We encourage applications from outstanding candidates who employ an integrated and innovative basic or applied research approach leading to important contributions related to Microbial Genomics. Candidates who focus on a relevant area within Microbial Genomics, including metagenomics, physiology, genetic engineering, biotechnology, bioinformatics, bioprospecting, evolution, microbial interactions, or microbial ecology are preferred. The successful candidate will be expected to develop a strong, extramurally funded independent research program; teach at the undergraduate and graduate levels; successfully mentor undergraduate and/or graduate students, and postdoctoral associates; and actively engage in outreach and service within and outside the University. A competitive start-up package and teaching load compatible with high research productivity will be provided.

Arizona State University has a vibrant, interdisciplinary research and education community that the successful candidate will become part of. Examples of relevant centers and initiatives include the Bioenergy and Photosynthesis Center (<http://bioenergy.asu.edu>), Biodesign (<http://www.biodesign.asu.edu>), and Astrobiology (<http://astrobiology.asu.edu>). Candidates must have a Ph.D. (or equivalent) in microbiology, genomics or another appropriate field. Two years of postdoctoral training, teaching experience, and a record of accomplishment that illustrates strong preparedness for establishing an excellent, independent research program in Microbial Genomics is preferred.

To apply, send a cover letter, curriculum vitae, three representative publications, contact information for at least three references, and separate statements of future research plans and teaching philosophy interests in a single pdf file to solsfacultysearch2@asu.edu. The initial closing date for receipt of applications is December 1, 2013; applications will be reviewed weekly thereafter until the search is closed. A background check is required for employment. Arizona State University is an equal opportunity/affirmative action employer committed to excellence through diversity. Women and minorities are encouraged to apply. For more information on the School of Life Sciences, please visit <http://sols.asu.edu>.

ExxonMobil: Postdoctoral Fellow - Microbiology To view posting and/or apply, go to www.exxonmobile.com/ex and search for Microbiology

Ocean Sciences Postdoctoral Research Fellowships (OCE-PRF)

The Division of Ocean Sciences (OCE) offers postdoctoral research fellowships to provide opportunities for scientists early in their careers to work within and across traditional disciplinary lines, develop partnerships, and avail themselves of unique resources, sites and facilities. Full proposal target date: **January 13, 2014**.

Faculty & relevant publications & presentations

[Expanding the paradigm of thiol redox in the thermophilic root of life.](#)

Heinemann J, Hamerly T, Maaty WS, Movahed N, Steffens JD, Reeves BD, Hilmer JK, Therien J, Grieco PA, Peters JW, **Bothner B**.

Biochim Biophys Acta. 2013 Aug 17;1840(1):80-85. doi: 10.1016/j.bbagen.2013.08.009. [Epub ahead of print]

[Archaeal and bacterial communities in three alkaline hot springs in Heart Lake Geyser Basin, Yellowstone National Park.](#)

Bowen De León K, Gerlach R, Peyton BM, Fields MW.
Front Microbiol. 2013 Nov 12;4:330.