

IGB NEWS

Upcoming Events
Monthly Profiles
Happenings at IGB

Image Of The Month
IP @ IGB
Administrative News

Volume 7, Number 3

UPCOMING EVENTS

IGB/ChBE Seminar (ReBTE)

*Managing Cells with
Synthetic Supramolecular Matrices*
April 15, 2014, 12:00 p.m.
612 Institute for Genomic Biology

Samuel I. Stupp, PhD
Professor, Biomedical Engineering
Northwestern University

IGB Seminar (EBI)

*Systems Biology Approaches to Understand-
ing Plant Cell Wall Deconstruction by a Model
Filamentous Fungus*
April 22, 2014, 12:00 p.m.
612 Institute for Genomic Biology

N. Louise Glass, PhD
Professor, Plant & Microbial Biology
University of California, Berkeley

Sixth Annual Energy Biosciences Institute Biofuels Law and Regulation Conference

Re-imagining Policy Incentives for Biofuels
May 2, 2014, 8:00 a.m.
I Hotel and Conference Center

The Conference will focus on exploring new
ways that biofuel policies can be re-imag-
ined in order to continue promoting growth
in the developing biofuel industry. Register at
<http://www.biofuellawconference.org/>

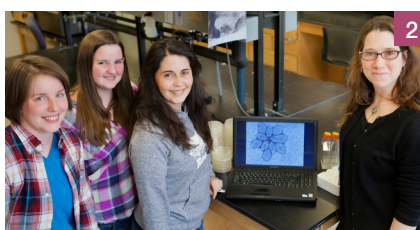
2014 IGB Fellows Symposium

*The Success Strategies of Transposable
Elements that Rapidly Diversify Genomes*
May 8, 2014, 8:30 a.m.
612 Institute for Genomic Biology

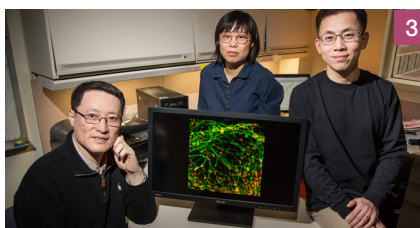
Susan R. Wessler
University of California President's Chair
Distinguished Professor of Genetics
University of California, Riverside

Register for free at
<http://conferences.igb.illinois.edu/fellows/>

FEATURED NEWS



**New Research Seeks
Beneficial Qualities of Viruses**



**Better Way to Grow Motor
Neurons from Stem Cells**

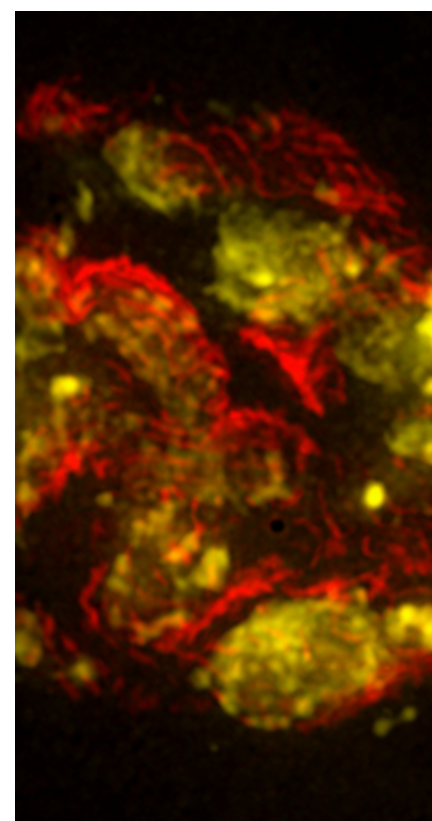


**Profile:
Amy Wagoner Johnson**



**On the Grid:
Happenings at IGB**

IMAGE OF THE MONTH



This month's image, "Neuromuscular junction on a rat larynx muscle," shows the interface between a neuron and a muscle cell. By examining the laryngeal muscles in aging rats, researchers are able to investigate the effects of increased and decreased voice use on laryngeal neuromuscular mechanisms.

This image was captured with the SR-SIM Four laser structured illumination system, and is provided courtesy of Aaron Johnson of the Aaron Johnson Lab.

IGB News

Share your news with the IGB. Send ideas on stories, articles, and features to nvasi@illinois.edu.



What Won't Kill You, Might Make You Stronger

Viruses are responsible for much more than sore throats and stuffy noses. Researchers now believe that some viruses may protect hosts from competitors and help them survive. Despite the fact that viruses are practically everywhere and affect every living thing, scientists know very little about their positive impact on their hosts.

The National Science Foundation awarded a five-year, \$2-million grant to Rachel Whitaker, a microbiologist at the Institute for Genomic Biology at the University of Illinois, and an interdisciplinary, multi-institutional team to explore the idea of viruses and their hosts coevolving together in the lab in the model system of hot springs at Yellowstone National Park.

"I hope to find that viruses are not just pathogens—that they are influencing dynamics in a bigger way," said Whitaker, who is leading the Illinois team. "Sometimes they are good for their hosts, acting as symbionts or mutualists. I think it would be really neat if there were little infectious particles that could help the organisms they infect to survive and compete against their foes."

Preliminary data has already shown that if an organism survives infection, it can use the virus to kill its competitors in the environment.

"It was once thought that viruses infect a microbe and kill it, or they don't infect at all," Whitaker said. "We have realized, given genomics and metagenomics, that it is a much more complex dynamic. Now we are asking, if hosts can use their viral infection as

a weapon against their competitors, how does that affect these populations and their ecosystems? It's a new way of looking at things."

Through laboratory experiments, Whitaker's team will study host-viral interactions, including the costs and benefits of chronic (long-term) infections. Mark Young, a professor of virology at Montana State University, will study these interactions in a natural hot spring using a device developed by Sascha Hilgenfeldt, a professor in the Department of Mechanical Science and Engineering at Illinois.

(above, L to R) Researchers Elizabeth Rowland, Samantha Dewerff, and María Bautista with Associate Professor of Microbiology Rachel Whitaker.

Evolutionary ecologist Joshua Weitz from Georgia Tech University will use Whitaker and Young's findings to develop a theoretical and computational eco-evolutionary model of how viruses and microbes interact.

"We are figuring out the parameters that will go into the model, then using the model to project what's happening in nature, and finally going into nature to see if it works," Whitaker said. "We will also learn things about natural populations that we didn't know and that we can test in the lab then apply in our models. It will be an iterative process."

To study the natural populations systematically, a method is needed to separate the host cells from the viruses. Hilgenfeldt has developed a device that currently separates particles by size that are between two to ten micrometers in diameter. In comparison, a human hair is about 75 micrometers wide. Archaeal cells, however, are just one micrometer wide and viruses are about 10 times smaller.

Hilgenfeldt says he will have to use some "fluid-dynamical tricks" on his device to make it work for such small particles: the larger archaeal cells are captured in a tiny vortex caused by an oscillating bubble, while the smaller viruses are able to pass unhindered through the channel ([see video](#)).

"It's a tunable size filter because the strength of the transport flow and the bubble vibration strength decide what particle size gets through and what particle size is retained," Hilgenfeldt said. "We are excited to apply this principle to the samples from hot springs to figure out how the population dynamics can change."

Through this grant, Whitaker also plans to study microbial adaptive immunity, where a host is able to recognize infectious particles (like viruses) and degrade them if they are infected again.

"This work is pretty important because there is not a very good understanding of how adaptive immunity affects the evolution of pathogens," Whitaker said. "We are hoping to apply some of the things we learn by looking at this simple adaptive immunity system and its diversity in order to understand the evolu-

tionary impacts of diversified adaptive immunity in general.”

Through a SEED project funded by the IGB, Whitaker is also using a similar approach to examine how bacterial adaptive immunity and virus infection

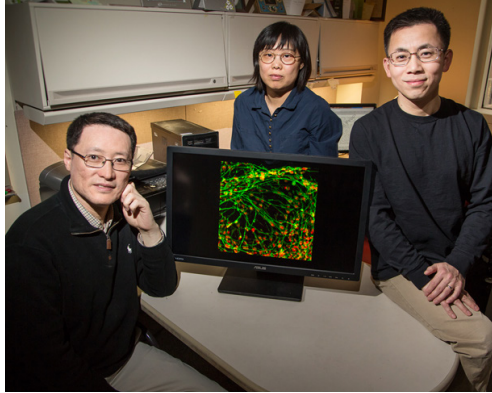
affects population dynamics of human pathogens. “Every organism on Earth gets infected by viruses. Understanding these dynamics will have a great impact on our understanding of the microbial world.”

This grant also supports various outreach and ed-

ucation efforts, including Project MICROBE that will develop age appropriate curriculum materials for K-12 classrooms based on current research in microbiology. ■

Written by Claire Sturgeon. Photo by Kathryn Coulter.

RESEARCH



Professor of cell and developmental biology Fei Wang, left, with visiting scholar Qiu hao Qu and materials science and engineering professor Jianjun Cheng, with colleagues improved the process of converting stem cells into motor neurons.

Team Finds A Better Way to Grow Motor Neurons from Stem Cells

Researchers report they can generate human motor neurons from stem cells much more quickly and efficiently than previous methods allowed. The finding, described in *Nature Communications*, will aid efforts to model human motor neuron development, and to understand and treat spinal cord injuries and motor neuron diseases such as amyotrophic lateral sclerosis (ALS).

The new method involves adding critical signaling molecules to precursor cells a few days earlier than previous methods specified. This increases the proportion of healthy motor neurons derived from stem cells (from 30 to 70 percent) and cuts in half the time required to do so. In the image above, neurons are represented by the green color, while motor neurons are red.

“We would argue that whatever happens in the human body is going to be quite efficient, quite rapid,” said University of Illinois cell and developmental biology professor Fei Wang, who led the study with visiting scholar Qiu hao Qu and materials science and engineering professor Jianjun Cheng. “Previous approaches took 40 to 50 days, and then the efficiency was very low – 20 to 30 percent. So it’s unlikely that those methods recreate human motor neuron development.”

Wang serves as a faculty member in multiple themes at the IGB, including Regenerative Biol-

ogy & Tissue Engineering, Biosystems Design, and Gene Networks in Neural & Developmental Plasticity. The study builds on the work that Qu was involved with during her time as an IGB Fellow.

Qu’s method produced a much larger population of mature, functional motor neurons in 20 days.

The new approach will allow scientists to induce mature human motor neuron development in cell culture, and to identify the factors that are vital to that process, Wang said.

Stem cells are unique in that they can adopt the shape and function of a variety of cell types. Generating neurons from stem cells (either embryonic stem cells or those “induced” to revert back to an embryo-like state) requires adding signaling molecules to the cells at critical moments in their development.

Wang and other colleagues previously discovered a molecule (called compound C) that converts stem cells into “neural progenitor cells,” an early stage in the cells’ development into neurons. But further coaxing these cells to become motor neurons presented unusual challenges.

Previous studies added two important signaling molecules at Day 6 (six days after exposure to compound C), but with limited success in gen-

erating motor neurons. In the new study, Qu discovered that adding the signaling molecules at Day 3 worked much better: The neural progenitor cells quickly and efficiently differentiated into motor neurons.

This indicates that Day 3 represents a previously unrecognized neural progenitor cell stage, Wang said.

The new approach has immediate applications in the lab. Watching how stem cells (derived from ALS patients’ own skin cells, for example) develop into motor neurons will offer new insights into disease processes, and any method that improves the speed and efficiency of generating the motor neurons will aid scientists. The cells can also be used to screen for drugs to treat motor neuron diseases, and may one day be used therapeutically to restore lost function.

“To have a rapid, efficient way to generate motor neurons will undoubtedly be crucial to studying – and potentially also treating – spinal cord injuries and diseases like ALS,” Wang said.

The paper, “High-Efficiency Motor Neuron Differentiation From Human Pluripotent Stem Cells and the Function of Islet-1,” is available on the *Nature Communications* site. ■

Written by Diana Yates. Photo by L. Brian Stauffer.

PROFILE



Amy Wagoner Johnson is an Associate Professor of Mechanical Science and Engineering, whose research interests include synthetic biomaterials and bone regeneration.

Amy Wagoner Johnson: Generating New Connections

Interdisciplinary collaboration is a fundamental tenet of the IGB, and also central to the work of Mechanical Science and Engineering Professor Amy Wagoner Johnson, a faculty member of IGB's Regenerative Biology & Tissue Engineering (ReBTE) theme. The pursuit of new opportunities to work alongside world-class researchers will soon take her to Grenoble, France during a yearlong sabbatical.

The NanoSciences Foundation awarded Wagoner Johnson a Chair of Excellence, an award program that attracts talented researchers to collaborate with laboratories on progressive research projects in Grenoble.

"More and more, it's important to have research collaborations not just outside the University of Illinois, but outside of the United States," Wagoner Johnson said. "It will be exciting to be involved with work going on in Europe and I look forward to expanding my network of collaborators."

From June 2014 to August of 2015, Wagoner Johnson will live and work in Grenoble, nicknamed the "Capital of the Alps," before returning home to finish the three-year project on how 3D microenvironments in artificial bone implants influence bone regeneration.

"In the big picture, we want to help people who have large bone defects," Wagoner Johnson said. "For example, if they were in a car accident and lost part of their jaw, our work could help those people get function and form back. To do that, we need to come up with new materials that the body likes and that will help regenerate bone. And to do that, we need to understand how cells interact with those materials."

To date, her research team has discovered that multiscale porosity in the scaffold of an artificial implant significantly enhances bone regeneration. The scaffold, they found, generates capillary forces that are able to draw cells from larger pores into micropores, where the cells produce bone.

"We can describe the physics and show that the

cells go into the micropores, but we haven't done the study yet that makes that direct link between the cells being in the micropores and the bone growth," Wagoner Johnson said. "We think having these cells in the micropores is important, but we don't know why."

Using a special 3D printer, Wagoner Johnson and her collaborators plan to print scaffolds with irreg-

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ularly shaped pores to study how the cells react to different microenvironments inside the scaffolds.

These new scaffolds may eliminate or reduce the need for costly growth factors that have been known to cause adverse side effects in patients.

Wagoner Johnson will work closely with her program host Catherine Picart, a biomedical engineering professor at the Grenoble Institute of Technology. She will also work with three additional research groups, which all together include an expert in polyelectrolyte films, cell mechanics, and biology as well as a researcher whose work involves the 3D printer that will be used to modify the microstructures within the scaffold.

The award also supports a post-doctoral associate for two years and provides some funds for a sabbatical salary, travel, and materials and supplies. She

is in the process of identifying a post-doc for this position.

This won't be her first time living abroad. Wagoner Johnson also lived in France during her junior year in high school while her father, a material scientist at The Ohio State University, was on sabbatical.

"That's when I decided that I wanted to be an engineer," she said. "So I know that living abroad can be a completely life changing experience. It puts you out of your comfort zone. I think that is always a time that you can grow."

It's an experience that she is excited to share with her family who will join her on sabbatical, including her husband Harley Johnson, Professor of Mechanical Science and Engineering at Illinois, and her two children ages 7 and 11.

The NanoSciences Foundation advances nanoscience research by supporting for collaborative and multidisciplinary projects throughout its network, which includes 32 laboratories, 1,000 researchers and 9 technological platforms. ■

Written by Claire Sturgeon. Photo by L. Brian Stauffer.



The Nanosciences Foundation main goal is to foster world-class nanosciences research within their laboratory network, by encouraging collaborative and multidisciplinary projects.

ON THE GRID HAPPENINGS AT THE IGB

SYMPOSIUM



2014 IGB FELLOWS SYMPOSIUM

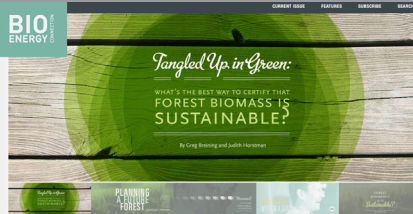
Registration is now open for the 8th Annual IGB Fellows Symposium.

Join us to hear the latest IGB research, connect with colleagues, and share your work during the poster session. This year will include talks from current Fellows as well as IGB faculty and theme leaders.

Our keynote speaker this year is Susan Wessler from the University of California, Riverside.

To register please visit
<http://conferences.igb.illinois.edu/fellows>

WEBSITE



BIOENERGY CONNECTION MAGAZINE LAUNCHES SITE

The new website for Bioenergy Connection, the Energy Biosciences Institute's magazine forum for discussion of issues relevant to the future of the field from all perspectives, has been officially launched.

Browse articles from the current issue as well as new content exclusive to the website.

Please take a moment to visit at
<http://www.bioenergyconnection.org/>

BIOFUELS



SIXTH ANNUAL ENERGY BIOSCIENCES INSTITUTE BIOFUELS LAW AND REGULATION CONFERENCE

"Re-imagining Policy Incentives for Biofuels"

A one-day conference bringing together the field's leading experts to explore the challenges in creating a bioenergy-based future.

The Conference will focus on exploring new ways that biofuel policies can be re-imagined in order to continue promoting growth in the developing biofuel industry.

To register please visit
www.biofuellawconference.org

CEM

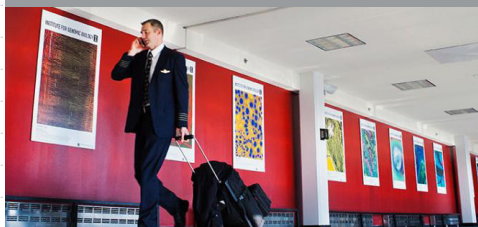


CERTIFICATE IN ENTREPRENEURSHIP AND MANAGEMENT

Please join the IGB Certificate in Entrepreneurship and Management (CEM) program Graduation, Pitch Presentations, and Reception on April 22, 2014 in Conference room 612 IGB.

For more information on the CEM program visit
<http://www.igb.illinois.edu/cem>

EXHIBIT



ART OF SCIENCE AT O'HARE

Travelers passing through O'Hare International Airport can now enjoy beautiful imagery from the pioneering research taking place at the IGB.

Located in Terminal 3, 24 works showcase a variety of subjects from kidney stones to bee brains to plant cell walls.

O'Hare travelers who take a photo in front of the artwork and tweet it to @IGBillinois with the tags #scienceselfie #IGB #ILLINOIS have a chance to win free items from our cafe!

Read the full story at <http://bit.ly/1fo4gxz>

CAMP



POLLEN POWER! SUMMER CAMP RETURNS

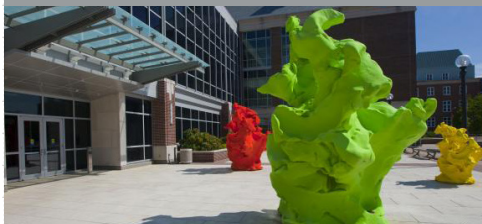
Once again the IGB will be hosting Pollen Power!, a week-long day camp for talented girls who are interested in the biological sciences.

This year's camp will take place July 7-11, 2014. Save the date and register early!

For more information please visit
<http://pollensummercamp.illinois.edu>

ON THE GRID HAPPENINGS AT THE IGB

FELLOWS



IGB 2014 FELLOWSHIPS

The IGB is proud to announce our new Fellows for 2014:

Seema Ehsan (ReBTE)

Seema is interested in how to better diagnose and treat human diseases, particularly cancer. She believes that improved tumor models could cut the costs to develop cancer drugs. For her doctoral research, she developed a multicellular model of vascularized human tumor tissue to explore mechanisms of angiogenesis and colon cancer. To date, her research has focused on how cells actively remodel their environment. At the IGB, she plans to investigate the opposite: how the environment impacts cellular function. She looks forward to integrating the expertise of ReBTE and MDMC in her work here. Ehsan earned her doctorate in chemical engineering from the University of California, Irvine.

Dipti Nayak (BCXT)

Dipti uncovered the physiology of a poorly-characterized pathway with very slow kinetics for single-carbon metabolism in methylotrophs. Her research led to other discoveries that created a better understanding of regulation in methylotrophs. She plans to continue this line of research at the IGB to find unknown aspects of physiology that control methanogenesis. She will also engineer strains of anaerobic methanogens to cost-effectively harness methane energy from waste materials. She would also like to continue the work of Carl Woese and Nigel Goldenfeld by using experimental evolution to better understand the evolution of genetics. Nayak earned her doctorate in Organismic and Evolutionary Biology from Harvard University.

Brian San Francisco (MMG)

Brian gained experience in biochemistry, genetics, pathway engineering, and more during his graduate research on the assembly of cytochrome c, an essential protein in the electron

transport chain. His graduate work prepared him to discover novel microbial pathways at the IGB, where his work will span multiple themes. He plans to use pathway engineering to improve the plant-microbe interactions between alfalfa, a popular feedstock, and its nitrogen-fixing bacteria. He is also interested in the microbial communities that inhabit the human gastrointestinal tract that influence cardiovascular events and other health issues such as obesity and the immune system function. San Francisco earned a doctorate in plant and microbial biosciences from Washington University.

Michael Saul (GNBP)

Michael employs systems biology to understand biological processes that are influenced by human mental health problems such as postpartum depression, autism and bipolar disorder. For his doctoral work, he developed new ways to find commonalities between molecular pathways disrupted in mice with a manic phenotype and discovered a chromatin remodeling gene network disrupted in the limbic brains of patients with bipolar disorder and the mice models. He looks forward to using his knowledge to explore natural genetic variation and behavioral phenotypes, especially those that may contribute to an animal's disposition or "personality," in new animals at the IGB. Saul earned his doctorate in zoology at the University of Wisconsin-Madison.

Tong "Tony" Si (BSD)

Tony is interested in integrating genetics with metabolomics to understand and engineer biological systems in a high throughput manner. At the IGB, he plans to integrate microfluidics technology, mass spectrometry detection, recombinant strain creation, and metabolomics screening to develop mass spectrometry-based microfluidic systems to enable high throughput synthetic biology research. He will construct a new metabolomics platform to screen microbial hosts for new compound discovery and target compound overproduction. He will also develop lab-on-a-chip technology for large-scale genome editing, differentiation, and analysis in stem cells. Si earned his doctorate in chemical and biomolecular engineering at the University of Illinois. He was advised by Huimin Zhao.

IP @ IGB

UNIVERSITY OF ILLINOIS
at URBANA-CHAMPAIGN
OFFICE OF TECHNOLOGY MANAGEMENT

POSTDOC WORKSHOP

Introduction to Commercialization of IP

(Free lunch provided)

Thursday, May 8th, 12-1:30PM

304 Coble Hall, (corner of Wright and John St)

Any interested Postdocs are invited!

The Office of Technology Management will hold a workshop for postdocs entitled "How to Commercialize Your Scientific Research and Innovations". OTM will provide an introduction to intellectual property (IP), patents, and technology transfer. The workshop will entail a brief presentation that will cover Technology Transfer at Illinois, an introduction to patents and the patent process, explain how universities manage IP, and will define tech transfer success. This will be followed by a case study where attendees will break into small groups and identify all potential IP in the given case. After this workshop, attendees will know how to identify IP coming out of their research at the University and know when and how to engage with the OTM on campus. The workshop will last approximately 90 minutes and pizza will be served!

For more information, and to RSVP, please visit
<https://illinois.edu/fb/sec/7553070>



WALK OF LIFE

Contributing to the Walk of Life is a unique opportunity to simultaneously support our mission and become a permanent part of IGB history.

More information can be found at
www.igb.illinois.edu/about/giving

ADMINISTRATIVE NEWS

OPERATIONS & FACILITIES

PAVERS CONSTRUCTION

We are happy to announce the work to replace the white pavers on the IGB plaza was begun at the end of March. The new pavers should provide a less slippery surface. Please be mindful of the replacement process and avoid any construction work and traffic by using alternative entrances such as:

- Enter via the dock door, use the freight elevator to concourse level
- Enter through the north gatehouse door.
- If you are entering or exiting the plaza from the north, use hand rails to assist you on the steps.
- Travel through the tunnel from ERML

During the replacement process signs will be posted directing you away from the work zone. The replacement process is expected to last 4 weeks.

CONSTRUCTION

In other construction news there will be work in the lab building atrium in April to attach artwork to the metal projection screen. There may be some construction noise and increased traffic associated with this work.

ARRAY CAFE

Thank you to everyone who had filled out our survey. We have made several changes based on the feedback we've received.

- **Prices have been reduced** – check out the new Array menu to see the changes! Even token prices are lower!!
- We have a new Array Blend coffee from Columbia Street Roastery!
- We have bagels and cream cheese from Einsteins Bagels!
- We have new salads, sandwiches and wraps from Michaels' Catering, including the popular Cuban sandwich on Tuesdays!
- We have new menu items including baked potatoes, baked sweet potatoes, mac & cheese and more!

Check out the entire menu in the café or **online**. While you're there, keep filling out the short survey – we value your feedback!

<http://www.igb.illinois.edu/content/array-cafe-survey>

Need coffee, cookies, bagels or pastries for your meeting? We can help! Fill out our catering form Array catering form, **located here**. ■

UNIVERSITY LIBRARY

DATA CITATION INDEX

The University Library has recently subscribed to the Data Citation Index from Thomson Reuters (which also provides Web of Science). You can access the Data Citation Index by searching for it in the Library's Online Journals & Databases system.

The goal of the Data Citation Index is to support data discovery, reuse and interpretation. To achieve this, the Data Citation Index brings together results from data repositories across disciplines. About 48% of the repositories cover the life sciences, including Gene Expression Omnibus, WormBase, and GigaDB. The Data Citation Index provides suggested citations for the data, based on the data citation recommendations of DataCite.org.

The Data Citation Index also provides links between the data and the articles that cite it. For example, search for "GSE2814" to see mouse liver tissue expression data that has been cited by 6 articles in Web of Science. Because data citation is not standardized or standard practice, most data in the Data Citation Index has not been cited very often. So currently, this is not a very robust feature, but it has interesting potential.

If you have questions about data citation or the Data Citation Index, please contact Sarah Williams, the Life Sciences Data Services Librarian, at scwillms@illinois.edu. ■

CNRG

BIOCLUSTER CLASSES

CNRG recently held a three-hour tutorial and information session led by Dan Davidson, director of the CNRG group that maintains the biocluster. The tutorial, "High-Performance Computing Using the IGB Biocluster," served as an introduction to the compute cluster environment, specifically the biocluster at IGB. Participants learned the differences between the various submission queues on the biocluster, how much they cost, and how to pick the most appropriate queue for the analysis on hand. A hands-on section of the tutorial covered how to write a submission script to submit jobs to the biocluster, both single jobs and job arrays.

This class will be offered regularly in the future, and will be announced via the IGB weekly update, newsletter, and other avenues. A prerequisite for the course is basic working knowledge of the Linux command line (if you don't know what the commands `cd`, `ls`, `mkdir`, `rm`, `head`, `tail`, `vi` are and what they do, you will not get anything out of this tutorial). ■

ADMINISTRATIVE NEWS

BUSINESS / COMMUNICATIONS

IGB GRANT AND PROPOSAL PROCESSING SUPPORT

The business office and communications group are available to provide a variety of support services for grants and proposals. The business office will provide proposal submission training, or serve as a resource for training, when necessary and when requested. The business office is available to meet with the PI to discuss proposal guidelines, deadline, and requirements. The communications group can provide editing services for grant and proposal documents, and website creation and support when required.

The business office will serve as the liaison between OSPRA and the Sponsor Grants Management Office. They also provide the following services:

- Provide and/or prepare correct forms/documents:
 - Transmittal Forms (Signatures)
 - Cover page and cover page supplement
 - Project/Performance site location component
 - Budget (Budget Forms)
 - NIH ICR Checklist
 - Biosketches
 - Current and Pending forms (when required)
 - Collect cover letter component for NIH
 - Collect Research Plan components from PIs
 - Collect other project information components from PIs
 - Project summary/abstract, narrative, bibliography, facilities and other resources, etc.
 - Format all documents with correct font, font size, margins, paper size,
 - Review and edit as necessary to conform with sponsor guidelines
- Collects Subcontract Documents
 - Letter of Commitment
 - Scope of Work
 - Budget
 - Project Performance Site location information
 - Biosketches
 - and Current and Pending forms (when required)
- Upload forms/documents listed above into application package or sponsor website

- Assemble paper Proposals
 - Page Numbering and Table of Contents
- Review Proposal prior to submission to OSPRA
- Submit Proposal to OSPRA
 - In the case of paper proposals, will transport completed proposal to OSPRA
 - In the case of NSF Fastlane, will inform PI when to allow SRO access
 - In the case of Grants.gov, will submit final proposal to OSPRA
- Serves as liaison with OSPRA for any necessary last minute changes/corrections
- Forward final copy of proposal to PI

The communications group is available to provide the following services:

- Review and editing of grant and proposal documents
- Science writing for generic sections
- Website design and support
 - Draft sample site plans and mock site structure documents
 - Create simple templated websites (including basic registration functionality), as listed here:
 - EBI Biofuels Law and Regulation Conference (<http://www.biofuellawconference.org/>)
 - IGB Fellows Symposium (<http://conferences.igb.illinois.edu/fellows/>)
 - IGB Pollen Power Summer Camp, an outreach component of the NSF Grant “Genetic and Genomic Approaches to Understand and Improve Maize Responses to Ozone” (<http://pollensummercamp.illinois.edu/>)
 - More advanced websites may require compensation, typically as a percentage payment of communication staff salary. This can be included as part of the budget when the proposal is submitted, examples include:
 - Enzyme Function Initiative (<http://enzymefunction.org/>)
 - Energy Biosciences Institute (<http://www.energybiosciencesinstitute.org/>)
 - Center for Nutrition, Learning, and Memory (<http://cnlm.illinois.edu/>) ■



IGB News is published by the IGB Communications Office.
Contact Nicholas Vasi (nvasi@illinois.edu)
www.igb.illinois.edu 14.030