



IGBNEWS

Achievements, awards, and information about the IGB community

Volume 6, Number 6



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Upcoming Events

IGB Halloween Party

October 30, 2013

4:00 p.m.

Array Cafe

IGB Students, Faculty, Affiliates, Staff,
and Families

Prizes for Best Costumes

EBI Seminar Series

November 1, 2013

3:00 p.m.

612 Institute for Genomic Biology

Maria G. Salas Fernandez, PhD

Department of Agronomy, Iowa State University

"Title to be announced"

Genome Day

November 2, 2013

1:00 p.m. — 5:00 p.m.

Orpheum Children's Science Museum

Genome Day is an opportunity for the community to learn about DNA, genes, genomes, and evolution in an approachable manner for all ages.

Join us for our second year, as always the event is free and open to the public so we will see you there!

IGB Seminar (GNDP)

November 5, 2013

12:00 p.m.

612 Institute for Genomic Biology

Anna V. Kukekova, PhD

Assistant Professor, Animal Sciences
University of Illinois, Urbana-Champaign

**"What Can Tame and Aggressive Foxes Tell
Us About the Genetics of Interactive Social
Behavior?"**

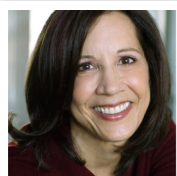
Special Seminar

November 15, 2013

3:00 p.m.

Alice Campbell Alumni Center

601 S. Lincoln Avenue, Urbana



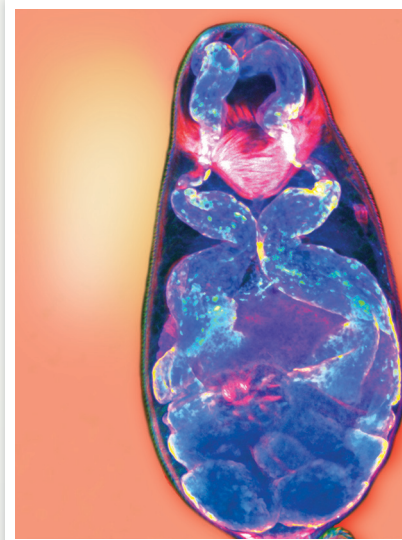
Gina Kolata

Science Journalist
The New York Times

**"How to Misread the
Science of Health"**

Sponsored by Institute for Genomic Biology,
College of Law, Office of the Vice Chancellor
for Research, College of Media, and Center for
Advanced Study

Image of the Month



This month's image, "Confocal micrograph of the head of a *Schistosoma mansoni* cercaria" was provided by Jim Collins and Phil Newmark of the Newmark Lab. Shown in blue are glands that release chemicals, which allow the worm to penetrate human skin. In red are the parasites muscles.

IGB News

Share your news with the IGB. Send your story ideas to nvasi@illinois.edu

IGB Biologists and Bioinformaticians Unite to Explore the Origins of Social Behavior

An animal's success in nature depends in part on its ability to navigate social situations—to find a mate, defend a territory, or work with others to obtain a meal. Social interactions are also crucial for humans, not only for survival, but for the exploration of space or the complex systems within our own bodies.

A new \$3 million grant from the Simons Foundation to the Institute for Genomic Biology will fund a multidisciplinary collaborative effort by Gene Networks in Neural & Developmental Plasticity (GNDP) theme members to search for similarities in the ways that the brains of many different species, including our own, produce social behavior. “Our goal,” said GNDP Theme Leader and Principal Investigator Lisa Stubbs, “is to tie the truths we extract from each species together, into a fundamental model of how animal brains respond to social stimulus.” Stubbs is a Professor of Cell and Developmental Biology.

The project arose naturally from the varied areas of strength and common interests of GNDP. Theme members Alison Bell, Jian Ma, Yoshi Oono, Gene Robinson, Saurabh Sinha, and Fei Wang are also co-investigators. “Our theme was brought together originally because of our shared interest in what regulatory network architecture can teach us about biology,” said Stubbs. “We are especially excited about how conserved network[s] of genes are reused, and reshaped, throughout evolution.” Now, theme members will be working together to understand how gene networks in the brains of animals respond to social stimuli, and develop new ways to compare those network responses.

Stubbs, Bell, and Robinson and their laboratories will be primarily responsible for conducting experiments in mice, stickleback fish, and honey bees, respectively; these animals exhibit interesting social behaviors that are easy for researchers to manipulate. Oono, as well as Ma, Sinha, and their teams will be innovating novel ways to analyze the genomic data produced by the experimental work. Wang and his research group will begin to forge experimental links between new findings and their relevance in the human brain.

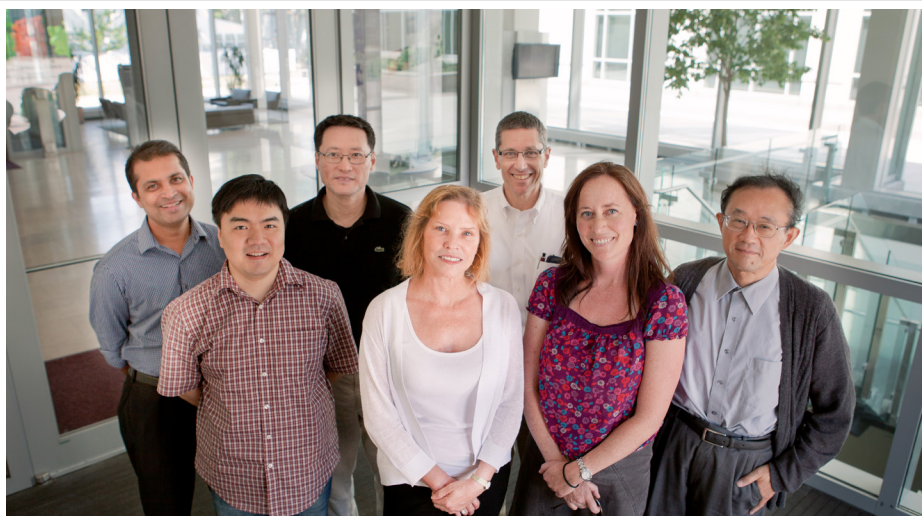
Why do GNDP researchers believe that diverse animal species, even humans, may share molecu-

lar mechanisms that direct sociality? Inspiration for the project comes from the highly successful efforts of the past several decades to understand how genes direct anatomical development.

The remarkable outcome of this work was the realization that underlying the anatomical diversity observed across animal species are shared sets of genes that direct development. These sets of genes are conserved across many different species. Morphological differences between species are directed by differences in their spatial

there are in anatomy. Animals rely on information from others to guide their behavior during social interactions, and that information, received as primary input, is processed by sets of connected neurons that operate via molecular actions that are deeply conserved, even if the identities of those sets of neurons are not.

IGB researchers will be taking advantage of these commonalities—shared categories of social interactions, and conserved brain biochemistry—to ask whether there are also shared gene actions



» GNDP members (left to right) Saurabh Sinha, Jian Ma, Fei Wang, Lisa Stubbs, Gene Robinson, Alison Bell, and Yoshi Oono.

and temporal patterns of gene expression, rather than differences in gene sequence. This shared genetic “toolkit” directs development of common structures underlying anatomical diversity, such as body segments and appendages.

Just as there is diversity in the physical structure of animals, there is great variation in the structure of their social interactions with other members of their own species. These interactions can often be grouped into the same broad categories—aggression, mate selection, care of young—but the dynamics vary widely between species. A female prairie vole mates with one male for life; in contrast, a female mouse shows no such fidelity, while a female stickleback fish allows herself to be chased away by her mate, and a praying mantis female might make a meal of hers.

On a basic level, though, there are shared principles of social behavior across species, just as

that guide social behavior. Alison Bell, Associate Professor of Animal Biology, described the planned study: “we will measure the response to what we think are comparable behaviors in honey bees, stickleback fish, and mice, and look for responses in the same genes, networks, or pathways in each of these organisms.”

The study will initially focus on the brain genomic response to aggressive social encounters. Researchers will expose individual bees, mice, or fish to an intruder, an unfamiliar individual of the same species. They will then use high-throughput RNA sequencing methods to quantify gene expression in brain regions that based on prior work are believed to be involved in producing social behavior. Similarities in the molecular response within the brain of all three species would suggest that the social behaviors of each, although quite distinct, may have evolved from the traits of an

Matt Wheeler Modeling for Success

Creating animal models is one of the messier aspects of life-saving research, but it is a vital step in the approval process for new treatments and therapies.

It's an important (did we mention, messy?) job.

In Matt Wheeler's lab at the University of Illinois, pigs undergo surgery to replicate a birth defect



» Professor of Animal Sciences Matt Wheeler uses animal models for translational research.

that causes infants' airways to collapse, and everyone waits until the pig takes the inevitable turn for the worse.

"Then somebody who has got a vested interest has to do the resuscitation," Wheeler said. "There is only one person on my team that will do that."

And, yes, that person is Wheeler—an extremely dedicated Professor of Animal Sciences and member of the Regenerative Biology and Tissue Engineering research theme at the IGB.

He keeps the pig alive long enough to get it back on the anesthesia machine so that they can insert a 3D-printed splint that will keep the airway open, like patching a hole in a garden hose.

This work began when a baby, named Kaiba Gionfriddo, was born with this disorder, and doctors decided to test the efficacy of these airway splints

ancient common ancestor.

It is possible that some of the same genes, or genes with similar functionality, will be responsive to social stimuli in all three species. Because of the known complexity of brain genomic responses to behavior, however, researchers will probably need more sophisticated ways to identify similarities. Said Associate Professor of Computer Science Saurabh Sinha, "We will probably realize that the shared molecular basis across the different species is not as simple as a gene or a set of genes being common to all of them and playing a big role, but that there is a more complex notion of molecular similarity."

To do this, researchers will combine experimental data about gene expression and the structure of the genome with computational and statistical methods. Genes called transcription factors produce proteins that work within the cell to help control the activity of many other genes. Sophisticated analyses that take into account experimental data, along with prior knowledge about how genes are regulated, will produce a model of which transcription factors are most important for directing gene activity after a social encounter. These models, called gene regulatory networks, will be developed for the brain genomic response to aggression in mice, fish and bees.

A novel and valuable aspect of the study will be the innovation of new computational methods that allow the comparison of gene regulatory networks of different species. Sinha identified such methods as one of the important outcomes of the project: "Tools to compare this basic construct of a regulatory network across different species will play a huge role in that act of comparative genomics."

These novel computational methods will enable researchers to detect conservation of molecular mechanisms on a yet-unexplored level of analysis, the level of gene regulatory networks. "The possibility that the same gene networks have been involved in multiple and independent evolutions of social behavior is very exciting because it would provide a new appreciation of the unity of life," said IGB Director and Professor of Entomology Gene Robinson. Professor of Physics Yoshi Oono also emphasized the potential power of the study to yield major evolutionary insights: "The molecules and their organizations responsible for sociality will be recognized to be much older than we now naively expect; [they] could be older than Metazoa, could go back at least to Filozoa," that is, several hundred millions of years old.

Discovering deeply conserved mechanisms of social response will also further efforts to under-

stand human brain function and social behavior. "The findings would also provide new insights into human neurobiology and mental illnesses," said Assistant Professor of Bioengineering Jian Ma. Associate Professor of Cell and Developmental Biology Fei Wang noted the role of his lab in the project, "to use human stem cell-based neural differentiation models to validate and confirm the findings from the animal models," which will begin to test the connection between study results and potential biomedical applications.

The Simons Foundation, in addition to funding basic life and physical science studies, supports a funding initiative for autism research, making the GNDP study with its potential connections to human social behavior particularly aligned with the Foundation's aims. Said Robinson, "If there are gene networks that play a strong role in social responsiveness in different species, these networks might be the ones that get perturbed in mental illnesses that involve social behavior."

Theme members are energized by the freedom and exploration the grant will support: "Here the focus is on the grander vision of getting insights by comparing whatever we learn from each species . . . [the grant] allows us some breathing space to really think on a grand scale, which normal projects don't often do," said Sinha.

This energy, and the strong collaborative aspect of the project, will help GNDP continue to establish itself as a theme. "The Simons proposal grew directly out of discussions we had last summer to formulate the focus of our new theme," said Stubbs. "This project is an almost perfect embodiment of our theme."

In addition to the faculty mentioned, many other theme members are playing important roles in the project. Annie Weisner contributed to pilot studies in mice, and Derek Caetano-Anolles will conduct ongoing mouse behavioral and molecular work. Dr. Clare Rittschof contributed to pilot studies in bees, and will be joined by Drs. Hagai Shpigler and Matt McNeill for ongoing bee behavioral and molecular work. Abbas Bukhari may assist in conducting behavioral experiments in stickleback fish, in addition to his main role performing bioinformatics analyses. Joe Troy will also contribute bioinformatics analyses. IGB Fellow Dr. Ken Yokoyama, Charles Blatti, Laura Sloofman, and Yang Zhang will be involved in computational aspects of the project. Former IGB Fellow Dr. Qiuhaio Qu will help direct work in human stem cells, and Drs. Huimin Zhang and Amy Cash-Ahmed will oversee molecular experiments. ■

on his tiny bronchus.

University of Michigan's associate professor of pediatric otolaryngology Glenn Green asked Scott Hollister, a professor of biomedical engineering at the University of Michigan, "Do you think we can do this?"

Then Hollister called Wheeler. "Do you think it will work in a pig?" Hollister asked. "I don't know," Wheeler replied. "Let's give it a try."

So Wheeler made a pig model.

Although Kaiba's surgery was a success, much more data from Wheeler's animal trials will be essential to show the long-term viability of this procedure before it can be used to save the lives of more children born with this disorder, an estimated 1 in 2,100 births.

"If the promise of tissue engineering is going to be realized, our research must be 'translated' from

our laboratory and experimental surgery suite to the hospital and clinic," Wheeler said. "The large-animal model is the roadway to take this device from the bench top to the bedside."

Using animal models, like Wheeler's, researchers are able to perfect drugs, techniques, and materials before new treatments are approved for human trials and general use. Essentially all human clinical medicine breakthroughs have been initially tested or perfected in animal models, he said.

Today Wheeler is working to make Illinois the Midwest regional center for large animal biomedical models. Already, he has achieved a reputation for excellence by capitalizing on the university's expertise and facilities coupled with his "let's try it" attitude.

Collaborators from Harvard, University of California-San Francisco, Northwestern, Georgia Institute of Technology and other top-notch insti-

tutions are coming to Wheeler with more projects.

"This is something that, at this point in time, we're 'the guys,'" Wheeler said. "That's what we try to be—the folks that can make large animal models and push the envelope."

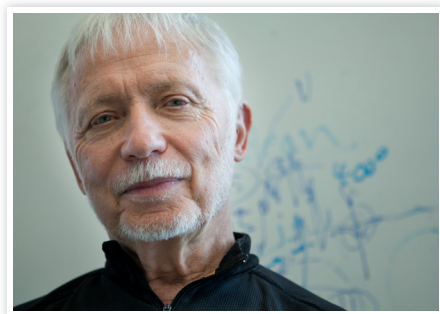
Wheeler never imagined he would do this type work when he earned his doctorate in Physiology and Biophysics from Colorado State University in 1986.

"I've had the opportunity to work with world-class researchers," Wheeler said. "That's what the IGB is all about, putting animal scientists, physicians, and engineers together to solve problems."

And after more than 25 years of research on embryo biology, stem cell biology, cloning, transgenic livestock, and microfluidics and tissue engineering—Wheeler is ready for the next challenge. ■

Research

Cracking How Life Arose on Earth May Help Clarify Where Else It Might Exist



➤ Affiliate faculty member Elbert Branscomb

Does life exist elsewhere or is our planet unique, making us truly alone in the universe? Much of the work carried out by NASA, together with other research agencies around the world, is aimed at trying to come to grips with this great and ancient question.

"Of course, one of the most powerful ways to address this question, and a worthy goal in its own right, is to try to understand how life came to be on this planet," said Elbert Branscomb, an affiliate faculty member at the Institute for Genomic Biology. "The answer should help us discover what is truly necessary to spark the fateful transition from the lifeless to the living, and thereby, under what conditions and with what likelihood it might happen elsewhere."

While many ideas about this fundamental question exist, the real challenge is to move beyond speculation to experimentally testable theories. A novel and potentially testable origin-of-life theory—first advanced more than 25 years ago by Michael Russell, a research scientist in Planetary Chemistry and Astrobiology at the NASA Jet Propulsion Laboratory—was further developed in a recent paper published in *Philosophical Transactions of the Royal Society B* (PTRSL-B), the world's first science journal, by Russell, Wolfgang Nitschke, a team leader at the National Center for Scientific Research in Marseille, France, and Branscomb.

Russell's hypothesis proposes that the transition to life was brought about by a peculiar geophysical and geochemical process called serpentinization—a process that played out on and just beneath the surface of our very young planet's ocean floor in the "Hadean" epoch more than 4 billion years ago.

One attractive aspect of the Russell hypothesis is that it provides potential explanations for several seemingly arbitrary and puzzling aspects of how all life on Earth works, including, most notably, how it taps into and exploits sources of energy. This process, quite oddly, involves constantly filling up and depleting a kind of chemical reservoir that is created by pushing a lot more protons onto one side of a membrane than the other—just like pumping water uphill to fill a lake behind a dam.

Then, mimicking how hydroelectric turbines are driven by water flowing downhill, these protons are only allowed to flow back "downhill" through the membrane by passing through a turbine-like molecular "generator," which creates, instead of high-voltage electricity, a chemical fuel called ATP, the cell's "gasoline." All cells then "burn" ATP in order to power their vital processes. The cells of air-breathing organisms, like us, "burn" ATP by ultimately converting oxygen to CO₂.

Furthermore, while every bacterial cell has its own proton reservoir system, our bigger cells contain and cultivate herds of "ex-bacteria" (called mitochondria) that maintain their own reservoir, ATP-producing turbines, etc.—a trick of "agricultural domestication" at the cellular level that makes it not only possible for multi-cellular organisms to exist but to be huge, fast, and dangerous.

This "reservoir-mediated energy business" is not a minor undertaking of life, Branscomb notes. Every day our bodies produce and consume their weight in ATP molecules. In seconds, each newly made ATP molecule is used. In minutes, the body's entire ATP energy reserve is consumed and regenerated. "That's why you can't stand to be without oxygen for more than a few minutes," Branscomb said. "We live on a thin, desperate edge to keep our metabolic motors running full blast. Yet in spite of this desperation, the process isn't carried out by using our energy sources directly, but by using the indirect, proton reservoir method. It's an arrestingly strange way of doing business that has made many scientists question why it is this way."

Read the full story at <http://bit.ly/163KggT> ■

What is the Office of Technology Management?

The Office of Technology Management (OTM) is responsible for managing the intellectual property generated by research and educational activities at the University of Illinois.

The office's missions are to encourage innovation, enhance research, and facilitate economic development through the transfer of intellectual property.

The office has developed a documented, systematic, and timely process for the analysis, protection, and commercialization of intellectual property.

Intellectual Property Disclosures/Reports of Research Discoveries

The OTM actively tries to reach out to faculty to encourage disclosures of new innovations. A disclosure is a written statement outlining a new innovation and documenting the circumstances of its development. The disclosure also identifies potential applications and what companies might be interested in licensing the IP if that information is known. Forms can be found on the OTM's website.

Disclosure forms help the OTM begin the process

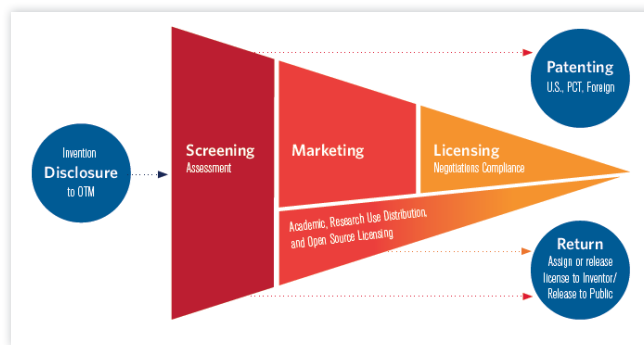
of evaluating the technology transfer potential for the intellectual property. A technology manager is assigned to guide a disclosure through the technology transfer process.

Submitting a disclosure form to your OTM does not by itself protect the intellectual property. Only a patent or a copyright can do that. Also, disclosure to the OTM is confidential. It is not considered a public disclosure under patent law. A disclosure to someone outside the University is a public disclosure unless you have a confidentiality agreement.

Screening Evaluation/Assessment

Through the screening review process, the decision to pursue or abandon commercialization efforts for a technology is made.

Within 6-8 weeks of receiving a disclosure, OTM's staff completes a business-case analysis, called a screening evaluation, with a recommended course of action on commercialization. The results of the screening evaluation, which include patent searches, marketplace analysis, and identi-



cation of possible licensees, are then shared with the inventors.

"A New Landscape: How the Myriad Decision Affects University Patents"

November 1

1090 Lincoln Hall

11:45-1PM

(Lunch will be provided)

Featuring leading Intellectual Property lawyers and professors

Please RSVP to Nicole Nair, nnair@illinois.edu ■

Around the IGB

Patent

First Patent Granted for Research at Energy Biosciences Institute

Research on improved sugar transport for biofuel production has been recognized with the first patent to be granted to the Energy Biosciences Institute (EBI) since the collaboration's establishment in 2007.

The EBI received U.S. Patent No. 8,431,360 titled "Methods and Compositions for Improving Sugar Transport, Mixed Sugar Fermentation, and Production of Biofuels." The breakthrough discovery resulted from the work of teams at Berkeley and Illinois to optimize sugar conversion yields by yeast to produce bioethanol.

Inventors include Illinois faculty members Hui-min Zhao and Yong-Su Jin, UC Berkeley faculty members N. Louise Glass and Jamie Cate, BP scientist Xiaomin Yang, former Berkeley graduate students William Beeson and Jonathan Galazka, former Berkeley postdoctoral researcher Chaoguang Tian, Illinois graduate student Sijin Li, and Illinois postdoctoral researchers Jing Du, Jin Ho Choi, Suk-Jin Ha, and Soo Rin Kim. ■

Computing

Illinois Bringing Next-Gen Genomics Computing to India

IGB Director Gene Robinson, with Professor of Engineering Ravishankar K. Iyer, recently spoke in Bangalore, India on a next-generation computing project to allow the analysis of large amounts of genomic sequence data, as reported in the September 25 issue of *Current Science*.

"The genomic data is doubling every 1.5 years," says Robinson. "The current methods are unable to handle large datasets. Therefore, a new technology framework is required."

The Tata Institute of Fundamental Research (TIFR) of Mumbai, and its Bangalore-based center, the International Centre for Theoretical Sciences (ICTS), joined the Illinois members in proposing a next-generation scalable computing system. This system would 'enable biologists to analyze huge genomics sequence data and foster a two-way relationship between computing and genomics.' ■

IGB Fellowship

Become an IGB Fellow

The Institute for Genomic Biology offers a number of fellowships for truly exceptional young scholars who have completed their Ph.D. within the last several years, and are looking for a stimulating and supportive interdisciplinary environment to carry out independent and collaborative research in the field of genomic biology.

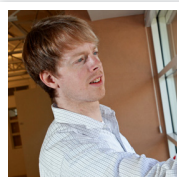
IGB Fellows will typically spend two years conducting research in one of several research themes in the Institute, and ideally this research will also overlap with two or more of these thematic areas. A personalized mentoring plan will be developed for each Fellow.

We are now accepting applications for new Fellows. The closing date for all positions is December 1, 2013. Fellows will be announced on or about January 15, 2014.

Please fill out the application form at <http://www.igb.illinois.edu/content/fellows-application> ■

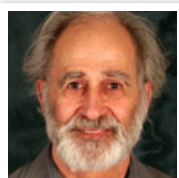
New Arrivals

James O'Dwyer



Professor James O'Dwyer has joined the IGB as an affiliate in the Biocomplexity (BCXT) Research Theme. Professor O'Dwyer is an Assistant Professor in the Department of Plant Biology. He received his Ph.D. from Cambridge University. ■

Eric Jakobsson



Professor Eric Jakobsson has joined the IGB as an affiliate in the Gene Networks in Neural and Developmental Plasticity (GNDP) Research Theme. Professor Jakobsson is a Professor in the Department of Molecular and Integrative Physiology. He received his B.A. and B.S. degrees from Columbia University and his Ph.D. degree from Dartmouth College. ■

Ralph (Tommie) Sturgeon



Ralph (Tommie) Sturgeon has joined the IGB as a Research Programmer, supporting faculty and staff's computers and assisting with other Information Technology needs. Tommie received his bachelor's degree from Southern Illinois University Carbondale with a degree in Information Systems Technologies and a minor in Computer Science. ■

Survey

Genomics Privacy Perceptions Survey

You are invited to participate in an online research study on perceptions about genomic privacy research. This study will take approximately 10 minutes. If you have questions about this project, you may contact Muhammad Naveed, PhD student at the Department of Computer Science (naveed2@illinois.edu) or Carl Gunter, Professor in the Department of Computer Science and College of Medicine (cgunter@illinois.edu).

Take the survey at <http://goo.gl/ZiCTTT> ■

CEM

The Kauffman FastTrac TechVenture Course

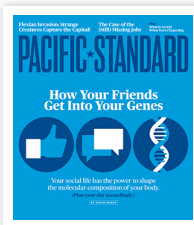
While the complete CEM program is recommended, students who choose not to apply for the full academic year can enroll in the spring semester Kauffman FastTrac TechVenture program. Choose the Kauffman FastTrac TechVenture course option when completing the application.

- Kauffman FastTrac TechVenture Tuition \$575 for one semester.

Scholarships are available. For more information, visit <http://www.igb.illinois.edu/ce/> ■

Media

IGB Director Featured in Cover Article in *Pacific Standard*



IGB Director Gene Robinson is featured in a recent *Pacific Standard* article by David Dobbs, entitled "The Social Life of Genes."

The article details the impacts that Robinson's

work with honey bees can have on sociality and genetic expression.

Read the full article on the Pacific Standard magazine website - <http://bit.ly/1dCY7S9>. ■

Center

New members join Center for a Sustainable Environment

Two members have joined the newly formed Center for a Sustainable Environment (CSE) at the University of Illinois to help jumpstart this exciting initiative.

CSE's newly appointed Director, Evan DeLucia, Director of the School of Integrative Biology and faculty member of the IGB and EBI, will be joined by Jenny Kokini, former Sr. Deputy Program Manager of the EBI.

As the first Director of the CSE, DeLucia will work with many individuals and campus organizations to address environmental sustainability as part of the Visioning Future Excellence at Illinois process. ■

Sustainability

Deputy Commissioner of Sustainability for the Chicago Department of Aviation Visits UIUC

Amy Malick, Deputy Commissioner of Sustainability for the Chicago Department of Aviation, visited the UIUC campus as part of a mission to find ways to utilize biofuels in jet fuel.

Jet fuel has important chemical differences from the gasoline used in automobiles, but the environmental and economic motivations to develop biofuel alternatives for each are similar. Some of the same crops that can be converted into biofuels to power cars—Miscanthus, switchgrass, algae—have potential as a fuel source for airplanes.

During her visit, Malick toured EBI lab and field sites, and met with faculty members. Some of the breakthroughs that EBI has made in biofuel development and production may provide insight into the challenges surrounding jet biofuels. ■

iGEM Team

iGEM Competition

Congratulations to this year's iGEM team for earning the Gold Medal at the North America Regional Jamboree. They have been invited to advance to the international competition November 1-4 in Cambridge, MA. The iGEM team's genetically engineered approach to cardiovascular health was well received at the Jamboree. Congratulations! ■

Party

Halloween Party

Join the IGB for a halloween celebration on Wednesday, Oct. 30, starting at 4:00 pm in Array Cafe.

All IGB Students, Faculty, Affiliates, Staff, and families are welcome. And don't forget there will be prizes for Best Costumes! ■

Awards

Paul Kenis



Paul Kenis (Regenerative Biology & Tissue Engineering) was selected by the University of Illinois as the William H. and Janet G. Lycan Professor of Chemistry. ■

Hyunjoon Kong



Hyunjoon Kong (Regenerative Biology & Tissue Engineering) has been named a Centennial Scholar by the College of Liberal Arts and Sciences. ■

Sua Myong



Sua Myong (Cellular Decision Making in Cancer) received the National Medical Scholars Program's 2013 Outstanding Advisors of the Year Award. ■

ADMINISTRATIVE NEWS

University Library

Open Access Week

Open Access Week (October 21-27, 2013) is a global event promoting open access as a new norm in scholarship and research. The University Library and the Scholarly Commons will mark the event with a variety of activities, including a guest speaker and Savvy Researcher workshops.

Victoria Stodden, Assistant Professor of Statistics at Columbia University and affiliate of Columbia University's Institute for Data Sciences and Engineering, will be the guest speaker. She will discuss reproducible science and open data and code in the computational sciences.

Schedule of activities:

- Monday, October 21 | 11:00-11:50am | 314 Main Library
Savvy Researcher: Create and Manage an Online Scholarly Presence
- Monday, October 21 | 1:00-1:50pm | 314 Main Library
Savvy Researcher: Your Research Rights: Ownership Awareness to Maximize the Impact
- Tuesday, October 22 | 2:00-2:50pm | 314 Main Library
Savvy Researcher: The Changing Publishing Environment

- Thursday, October 24 | 10:00-11:30am, refreshments at 9:30am | Alice Campbell Hall Ballroom
Guest Speaker: Victoria Stodden
- Thursday, October 24 | 3:00-3:50pm | 314 Main Library
Savvy Researcher: Your Research Rights: Ownership Awareness to Maximize the Impact

For more information and updates about Open Access Week, visit the Scholarly Commons website (<http://www.library.illinois.edu/sc/>). ■

Business

Campus Charitable Fund Drive



The 2013 Campus Charitable Fund drive is underway. Please consider contributing! Take a moment to read the brochure by visiting the website at www.ccf.illinois.edu.

A few things you might want to remember:

We encourage everyone to give by on-line payroll deduction.

If you are giving by payroll deduction, please remember to type in the annual amount you wish to donate.

There is no limit to the number of agencies that you may select, but the minimum ANNUAL donation is \$24.00 (\$2 per month).

When making a one-time donation, make your check(s) payable to the umbrella organization(s) listed on the Pledge Form, not to designations within the umbrella.

If you have any questions throughout the campaign, please contact either Jacinda King at 244-2276 or jkking@illinois.edu or Dale Johnston at 244-5595 or dkjohnst@illinois.edu.

The deadline is November 8, 2013. ■

Communications

Speaking to the Media

A short guide is available to assist you on interacting with the media, regarding interviews or news coverage. View the guide [here](#).

Sections include preparation tips, actions to take during the interview, and a list of important information to relate.

Clearly convey your name, home department, and connection to the Institute for Genomic Biology (faculty member, affiliate).

If you will be conducting research and it will take place at the IGB, make that statement.

Adding your connection to the IGB in your author byline will greatly help track potential newsworthy publications and increase the possibility of coverage, so please do so! ■

Safety

Emergency Eyewash Maintenance and Use

Laboratories within the IGB are responsible for ensuring that access to emergency eyewashes are kept free of clutter and ensuring the eyewash nozzle dust covers are kept in place. If nozzle dust covers are not kept on the eyewash nozzles, dust or other particles can clog the nozzles and result in poor or no water flow. This can also result in dust or other particles being forced into the eyes when the eyewash is used.

Testing

Eyewashes should be activated weekly for a period long enough to verify operation and ensure that flushing fluid is available and clean. This flushing helps clean out any rust, scale deposits, or bacteria that may accumulate and cause additional eye injury.

The weekly inspections should include, at a minimum, the following:

- Ensure that access to the eyewash is unobstructed.
- Visually inspect the eyewash to ensure that there are no broken parts, leakage etc.
- Verify that protective eyewash covers are properly positioned, clean, intact and operate properly when activated.
- Activate eyewash unit - flush pipes: check that the spouts are clean and that the water flow is effective and continuous
- The unit must deliver low-pressure "soft" flow to both eyes so it does not injure the open eyes.
- Check that the unit's valve activator remains open without the use of the operator's hands.
- Ensure each station has a highly visible emergency sign.
- Ensure that problems identified during the weekly inspection are turned in to Facilities and Services immediately.
- Maintain an inspection tag or computer spreadsheet to document your weekly inspections. An inspector may ask to see these during an inspection.

Using an Emergency Eyewash

1. If you get a chemical in your eyes, ask for help if someone else is in the lab.
2. Immediately go to the nearest eyewash and push the activation handle all the way on.
3. Put your eyes or other exposed area in the stream of water and begin flushing.
4. Open your eyelids with your fingers and roll your eyeballs around to get maximum irrigation of the eyes.
5. Keep flushing for at least 15 minutes or until help arrives. The importance of flushing the eyes first for at least 15 minutes cannot be overstated!
6. Seek medical attention.
7. Complete an accident report. ■

Recent Publications

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