



IGB NEWS

Upcoming Events

Monthly Profiles

Happenings at IGB

Image Of The Month

IP @ IGB

Department Announcements

Volume 10 Number 5

IF YOU ARE NEW TO THE IGB THIS SEMESTER, WELCOME. IF YOU'VE BEEN AWAY FROM THE IGB FOR THE SUMMER, WELCOME BACK!

UPCOMING EVENTS

Fox Family Innovation and Entrepreneurship Lecture

Innovation, Culture and You

September 19, 2017, 12:00 p.m.

612 Carl R. Woese Institute for Genomic Biology

Lucy Sanders
CEO and Co-Founder
National Center for Women and Information Technology

Lunch with the Core

Computer Networking Resource Group (CNRG) - Services

September 9, 2017, 12:00 p.m.

612 Carl R. Woese Institute for Genomic Biology

Lunch and learn with members of IGB Core Facilities.

Fox Family Innovation and Entrepreneurship Lecture

Product Development in a Regulated Industry

September 26, 2017, 12:00 p.m.

612 Carl R. Woese Institute for Genomic Biology

Edwin Moore
President and Principal Consultant,
BioPhia Consulting, Inc.
Visiting Scientist, University of Illinois,
Department of Chemistry

IGB Seminar (ACPP)

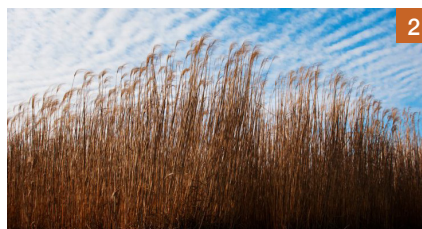
Drug Repurposing and Novel Compounds for Cancer Therapy and Prevention

October 3, 2017, 12:00 p.m.

612 Carl R. Woese Institute for Genomic Biology

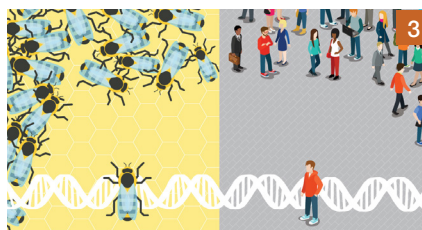
Gregory J. Riggins, MD, PhD
Johns Hopkins University School of Medicine
Department of Neurosurgery

FEATURED NEWS



2

DOE Funds Major Bioenergy Research Center



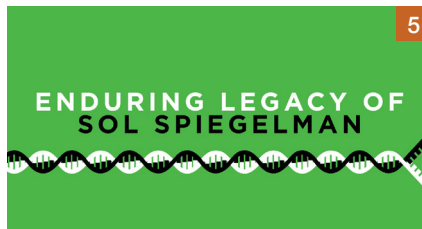
3

Study Finds Parallels Between Unresponsive Honey Bees, Autism



4

Monthly Profile: Carla Cáceres

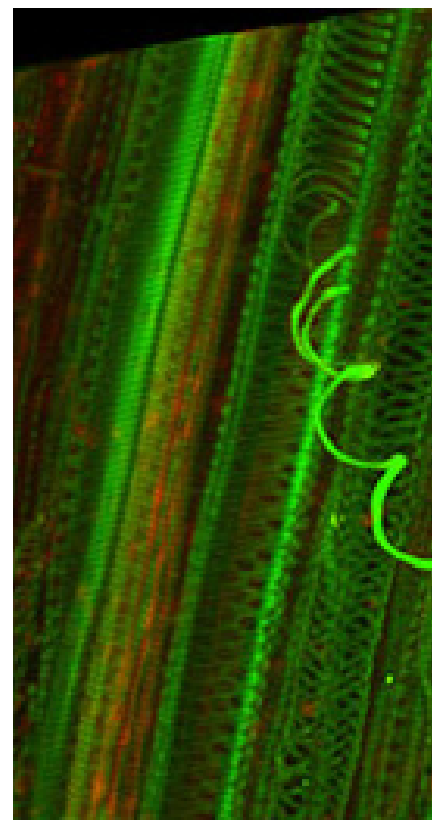


5

ENDURING LEGACY OF SOL SPIEGELMAN

On the Grid: Happenings at IGB

IMAGE OF THE MONTH



This month's image features Eastern Filbert Blight, a fungal disease, that attacks European hazelnut trees. The red spine-like structures in this image are the growing filaments of the fungus invading a plant stem, shown in green. Imaged on the Multiphoton Confocal Microscope Zeiss LSM 710 with Mai Tai eHP Ti: sapphire laser, provided by Ronald Revord, Santiago Mideros, Mayandi Sivaguru, and Frank Zhao of the Sarah Lovell Laboratory.

IGB News

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



DOE Funds Major Bioenergy Research Center Through IGB and iSEE

The U.S. Department of Energy (DOE) is doubling down on energy research at the University of Illinois at Urbana-Champaign, funding a multi-million dollar Bioenergy Research Center to provide scientific breakthroughs for a new generation of sustainable, cost-effective biofuels and bioproducts.

The DOE announced the \$104 million Center for Advanced Bioenergy and Bioproducts Innovation (CABBI), pending Congressional appropriation, a collaboration between Illinois' Institute for Sustainability, Energy, and Environment (iSEE) and the Carl R. Woese Institute for Genomic Biology (IGB). CABBI includes 16 partner institutions. Evan H. DeLucia, the G. William Arends Professor of Plant Biology and Baum Family Director of iSEE, will serve as CABBI Director.

"As the United States seeks energy independence, we need to look at the most efficient ways to grow, transform, and market biofuels," DeLucia said. "This grant is a game-changer, and CABBI will be at the forefront as we press toward a new bio-based economy. Our Center's holistic approach will generate new products directly from biomass, reducing our nation's dependence on fossil fuels and making us more secure."

One of the major challenges the world faces is how to provide sustainable sources of energy that meet societal needs as the population continues to grow. DeLucia said Illinois is uniquely qualified to address the challenge with a world-class facility at IGB, which will oversee and integrate CABBI's core science team under one roof.

Said IGB Director Gene E. Robinson: "The IGB, now with over a decade of experience in successfully addressing grand challenges by transdisciplinary integration of the life sciences, physical sciences, social sciences, and engineering, will provide an outstanding environment

for the talented CABBI team. We are delighted to partner with iSEE to lead this important new Center."

DeLucia said iSEE will coordinate and integrate field work off campus and at the Illinois Energy Farm — "a globally unique, 320-acre site that enables researchers to trial promising biofuel feedstocks at scale.

"And we will use another state-of-the-art facility of national importance: the nearly complete, \$32 million Integrated Bioprocessing Research Laboratory (IBRL), which is a direct result of state investment in the future of bioenergy research."

"We look forward to a day when we will have sustainable and economically sound production of fuels and chemicals from plants," DeLucia said. "A vibrant bioeconomy based on plant products will enhance the economic and ecological resilience of U.S. agriculture."

The Feedstocks theme will be at the cutting edge of bioenergy crop production, said Kimberlee K. Kidwell, Dean of the College of Agricultural, Consumer and Environmental Sciences (ACES) at Illinois, which is providing significant field space, lab space, and researchers for CABBI.

"We have truly set our sights on the future of agriculture, from the genomic level to crops in the field to final products that will play a significant role in our nation's energy profile," Kidwell said.

Peter Schiffer, Vice Chancellor for Research at Illinois, noted that iSEE was founded to facilitate exactly these kinds of interdisciplinary research projects.

"We are deliberately building the infrastructure that will enable our researchers to do what they do best: solve complex problems that cross disciplinary boundaries," he said. "iSEE was launched to conduct actionable research that addresses some of the biggest challenges in energy and the environment, and the CABBI

team is noteworthy for its strengths in agriculture, engineering, genomics, biology, chemistry, economics, and more."

Illinois has been one of the DOE's top six funding partners over the last five years. Pending Congressional appropriation, CABBI will receive \$4 million in fiscal year 2018, then \$25 million a year in 2019-22. The Center is one of four DOE Bioenergy Research Centers (BRCs), joining the Great Lakes Bioenergy Research Center led by the University of Wisconsin, the Center for Bioenergy Innovation led by the DOE's Oak Ridge National Laboratory, and the Joint Bioenergy Institute led by the DOE's Berkeley National Lab.

"The University of Illinois at Urbana-Champaign offers the strong leadership and research capabilities to help the Department of Energy foster the production of specialty biofuels and other bioproducts from plants to support a more bio-based economy," said U.S. Sen. Richard J. Durbin, D-Ill. "Federal investment in projects like this increases our energy security and grows our economy."

Said U.S. Rep. Rodney L. Davis, R-Ill.: "Agriculture research like that done at the University of Illinois at Urbana-Champaign is important to the future of farming and feeding the world. I'm excited about this grant and the new research and developments it will lead to. As Chair of the Agriculture Subcommittee on Research and the Co-chair of the Congressional Agricultural Research Caucus, I continue to work with the University of Illinois to ensure agriculture research is a national priority."

The BRC Program was established in 2007 and has led to 2,630 peer-reviewed publications, 607 invention disclosures, 378 patent applications, 191 licenses or options, 92 patents, and 14 start-up companies. Learn more at science.energy.gov. ■



Study finds parallels between unresponsive honey bees, autism in humans

Honey bees that consistently fail to respond to obvious social cues share something fundamental with autistic humans, researchers report in a new study. Genes most closely associated with autism spectrum disorders in humans are regulated differently in unresponsive honey bees than in their more responsive nest mates, the study found.

The findings, reported in the *Proceedings of the National Academy of Sciences*, appear to be unique to genes associated with autism and not to other behavioral disorders in humans. The study offers an early glimpse of the molecular heritage shared across the animal kingdom, the researchers say, and offers tantalizing clues about the evolution of social behavior.

“Some honey bees are more active than others, and some appear indifferent to intruders that threaten the hive. This, in itself, is not unusual,” said University of Illinois entomology professor Gene Robinson, who led the new analysis. “Honey bees take on different roles at different stages of their lifecycle, and not every bee can – or should – function as a guard,” he said.

But when postdoctoral researcher Hagai Shpigler observed that some of those same bees also were unmoved by the presence of a queen larva – a stimulus that typically spurs diligent action in nurse bees – it suggested something unusual was going on, said Robinson, who directs the Carl R. Woese Institute for Genomic Biology at the U. of I.

“For any given task, most honey bees fall somewhere in the highly engaged to moderately engaged camp,” Robinson said. “Typically, honey bees will respond more robustly to one stimulus than to another.”

But a small subset of bees tested by Robinson and his colleagues were either always on – energetically responding both to intruders and to queen larvae – or always off, he said.

The unresponsive bees’ lack of social awareness might be seen as similar to the social difficulties faced by some people with autism, Robinson said. But comparing behavior is not enough, he said. Analyzing the genes that drive behavior and how those genes are regulated is key to understanding whether the two phenomena are related.

To get at this question, the team analyzed 246 groups of bees from seven genetically distinct honey bee colonies, carefully testing each bee in various social contexts, then analyzing levels of gene expression in their brains. They found that more than 1,000 genes were regulated differently between unresponsive bees, nurse bees and guards.

The researchers next turned to a list of genes and gene expression profiles associated with autism in humans. Their goal was to determine whether a significant proportion of the autism-related genes also played a role in the unresponsive bees.

“We figured out a way to make an unbiased statistical test that will tell us whether a human gene list and a honey bee gene list overlap more or less than expected by chance,” said Michael Saul, a postdoctoral researcher who led the statistical analysis with statistics professor Sihai D. Zhao.

That test revealed significant overlap between the unresponsive honey bees’ gene expression profile and genes closely associated with autism in humans. Further analyses found no significant overlap with human genes associated with depression, schizophrenia or several other mental disorders, or with other bee gene lists.

“Our data are telling us that social unresponsiveness does have some common molecular characteristics in these distantly related species,” Robinson said.

“It’s important to point out some caveats,” he said. “Humans are not big bees and bees are not little

humans. The social responsiveness depends on context, and is different in the two cases. Autism spectrum disorder is very complex, and unresponsiveness is not the only behavior associated with it.”

While social behavior likely evolved independently in honey bees and humans, Robinson said, “our data reveal that they make use of common toolkits, common building blocks.”

“What really excites me about this study is that there appears to be this kernel of similarity between us and honey bees, a common animal inheritance that potentially drives social behavior in similar ways,” Saul said. “We haven’t proven this, but this work is telling us where to look for that in the future.”

The Simons Foundation and the National Science Foundation supported this research. ■

Written by Diana Yates. Photo by L. Brian Stauffer. Graphic by Mirhee Lee.



Postdoctoral researcher Michael Saul, left, IGB director and entomology professor Gene Robinson and their colleagues found that genes that are closely associated with autism spectrum disorders in humans are regulated differently in the brains of socially unresponsive honey bees than in bees that behave more typically.

MONTHLY PROFILE



Carla Cáceres and her lab focus on questions at the interface of population, community, and evolutionary ecology, with research into how biodiversity arises, how it is maintained, and what its functional significance is from the scale of organismal traits to ecosystems.

Carla Cáceres

Uncovering the complexities of disease ecology

When Carla Cáceres first came to the University of Illinois in 1996, disease ecology was just emerging as a subdiscipline of ecology.

Cáceres has always been fascinated by lakes and the interactions that occur within them. So disease ecology—the study of interactions between pathogens, their hosts, and the environment—has been a core part of her research.

But at that time, disease ecology was something new for aquatic ecologists like Cáceres.

“Even though I was interested in how hosts and parasites interacted in these aquatic systems, there really wasn’t the literature or the community that there is now,” she said.

Then came another turning point that changed the field—genomics. Over the years, Cáceres has seen how the tools and perspectives of genomics have helped ecologists follow genotypes through time and track traits within populations.

What Cáceres finds most exciting about this integration is the ability to collaborate across fields—something she also hopes to gain as a new faculty member in the Infection Genomics for One Health (IGOH) theme at the IGB.

As a professor in the Department of Animal Biology, her research focuses on interactions in aquatic systems, ranging from the dynamics between predators and their prey to the ecology of infectious diseases.

Most of her work has focused on studying *Daphnia*, a genus of small crustaceans that lives in lakes and ponds.

“Everything gets sick,” Cáceres said. “And *Daphnia* get infected by bacteria, viruses, and fungal infec-

tions, just like any vertebrate would.”

When it comes to explaining how infection spreads, disease ecology takes the entire ecosystem into account—the immune system, other species in the food web, the environment. All of these ecological interactions influence how disease moves through populations.

“What disease ecologists do is they take this very long-standing field of epidemiology and these long-standing studies in predator/prey dynamics, competitive interactions, ecosystem ecology, and ask how those are integrated,” Cáceres said.

But it’s a complex network, and some ecological interactions may be more important in certain situations. The challenge comes in figuring out which interactions mean something.

Cáceres gave an example in how predators can sometimes control disease. Often, predators may target sick individuals and contain the spread of disease by removing these individuals from the population. Other times, their targeting of sick individuals spreads disease even more.

“With so many ecological interactions, there are some general rules, but there are also some things that are context dependent,” she said. “That’s one of the challenges—figuring out what are the commonalities and what are the unique features.”

Genomics provides an additional dimension that must be considered, as it adds new insight on what these interactions mean.

“The advance of the theory has actually been really exciting, because then there’s predictions made about how disease is spread,” Cáceres said. “As you change the genetic structure of a population, not

only are some individuals going to be more susceptible to the next round of disease, but because many of these traits are correlated, these changes may influence how they interact with their predators or resources differently.”

Disease has the potential to change populations significantly, but for some time, its role in aquatic ecology was ignored.

Many diseases are obligate killers, meaning that the pathogen has to kill the host in order to be transmitted. If a population is infected by even 50 percent by such a disease, the population dynamics can change significantly.

She has seen this in her study of *Daphnia*, which is a key player in aquatic systems because it can control the amount of algae in lakes.

“I think, in hindsight, what’s been surprising is that it took us so long to start thinking about these things,” she said.

When evolution is brought into the equation, things become even more complex. Diseases often change a population’s genetic structure as they move through the population, so another factor to consider is the impact of this rapid evolution.

“You have an already complex network, and then you add evolution into it,” Cáceres said. “I think that’s one of the aspects that’s most exciting but also the most challenging to answer.”

Cáceres said she’s interested in several ecological questions—ones that span fields and spawn research from multiple disciplines.

“Most of my research has been interdisciplinary, and I really enjoy that, because I’m interested in many, many fields, but I know that I don’t have the

MONTHLY PROFILE

expertise,” she said. “What I’ve found in working with this new theme is that IGB facilitates this interdisciplinary research.”

Through the IGOH theme, Cáceres hopes to find collaborators that can help answer the questions that interest her.

“Having the facilities and support of IGB . . . allows these questions to be addressed that wouldn’t be addressed otherwise,” she said.

She sees the value in gaining these varied perspectives. After all, an aquatic ecologist might approach a question in an entirely different way than a microbiologist would.

“Each discipline has its own way of addressing questions. Sometimes what’s very standard in one field is very novel to another field,” Cáceres said. “Thinking about what’s at that interface and how we can use these different approaches to make rapid progress, I think that’s what’s exciting.”

Cáceres said disease ecology still has a lot to learn when it comes to understanding how the various parts of ecosystems influence the spread of infection.

“I don’t know that I know 10 years from now what I will be working on,” she said. “The field is advancing so quickly.”

She remembers sitting in a conference room at the IGB years ago, listening to a talk about the microbiome, a term used to describe all the microbes and genes in a community.

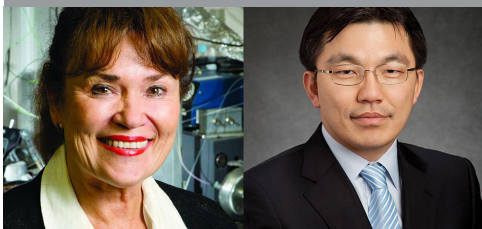
When Cáceres was in graduate school, the microbiome wasn’t discussed in ecological research. But now, she and other ecologists are thinking about how it might influence countless ecological interactions.

“Ten years from now, what will we have learned that we don’t know now that will revolutionize the way we think about these interactions?” ■

Written by Emily Scott. Photo courtesy of SIB.

ON THE GRID HAPPENINGS AT THE IGB

AWARD



NSF AWARDS ILLINOIS \$3M FOR INTERDISCIPLINARY GRADUATE STUDENT TRAINING

The National Science Foundation recently granted the University of Illinois \$3 million for an interdisciplinary graduate student training program to help form new insight on the brain—and to expand participation in the field of brain science itself.

Sixty graduate students from across campus will participate in the five-year National Science Foundation Research Traineeship, led by Martha Gillette, Professor of Cell and Developmental Biology and director of the Neuroscience Program (GNDP). HyunJoon Kong, Professor in Chemical and Biomolecular Engineering (RBTE), is the lead co-principal investigator. The U of I project was one of only three proposals aimed at understanding the brain selected for this particular NSF project.

PODCAST



PRINCESS IMOUKHUEDE ON “PEOPLE BEHIND THE SCIENCE” PODCAST

Princess Imoukhuede, Assistant Professor in Bioengineering (RBTE) was recently featured on the podcast “People Behind the Science,” which showcases top scientists speaking about their life and career in the sciences and is hosted by Dr. Marie McNeely.

Dr. Imoukhuede discusses her motivations, challenges, and successes as well as sharing insights into both her personal and professional pursuits. The podcast can be heard directly from the [People Behind the Science](#) website, or downloaded from iTunes [here](#) (Episode 410: Dr. Princess Imoukhuede: Making Sense of the Signaling Networks that Stimulate Blood Vessel Formation).

LECTURE



GOTTLIEB MEMORIAL LECTURE

Join us for the 2017 David Gottlieb Memorial Lecture, held in honor of Dr. David Gottlieb, a professor of plant pathology at the University of Illinois at Urbana-Champaign (1946–1982) who was a pioneer in the field of fungal physiology and antibiotics for plants.

“The Regulation of Antibiotic Production in Actinobacteria—an Interesting Role for Immunity”

Mervyn Bibb, PhD
John Innes Centre
Department of Molecular Microbiology

Thursday, October 05, 2017 - 4:00 pm
Charles G. Miller Auditorium Room
B102 Chemical & Life Sciences Building
601 South Goodwin Avenue

ON THE GRID HAPPENINGS AT THE IGB

NEW ARRIVALS



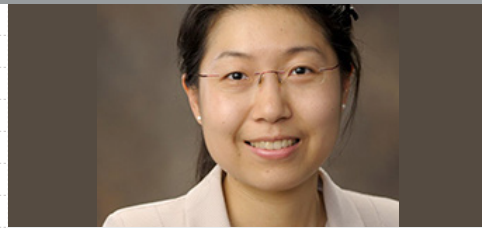
BRIAN ALDRIDGE

Professor Brian Aldridge has joined the IGB as an affiliate in the Infection Genomics for One Health (IGOH) research theme. He received his PhD from the University of Wisconsin Madison, and is currently a Clinical Professor in the Department of Veterinary Clinical Medicine in the College of Veterinary Medicine. His research focuses on large animal internal medicine.



KATY HEATH

Professor Katy Heath has joined the IGB as a faculty member in the Infection Genomics for One Health (IGOH) research theme. She received her PhD from the University of Minnesota and was a postdoctoral fellow at the University of Toronto. Professor Heath is a faculty member in the Department of Plant Biology. Her research focuses on the evolution of mutualisms which is defined as species interactions that increase the fitness of both partners.



YUJIE MEN

Professor Yujie Men has joined the IGB as an affiliate member in the Infection Genomics for One Health (IGOH) research theme. Professor Men received her PhD from the University of California, Berkeley. Before joining the Department of Civil and Environmental Engineering, she was a postdoctoral research associate, also at the University of California, Berkeley. The main focus of her research is to promote the development of sustainable biotechnologies for cleaner water and a safer environment by advancing the fundamental knowledge of microbial metabolic diversities and microbe-microbe interactions in built and natural environments.



CHRISTOPHER BROOKE

Professor Christopher Brooke has joined the IGB as a faculty member in the Infection Genomics for One Health (IGOH) research theme. He received his PhD from the University of North Carolina, and subsequently was a postdoctoral research associate in the Laboratory of Viral Diseases at NAID. Professor Brooke is currently an Assistant Professor in the Department of Microbiology. His research focuses on the mechanisms of influenza virus adaptation.



JAMES LOWE

Professor James Lowe has joined the IGB as an affiliate in the Infection Genomics for One Health (IGOH) research theme. He received his DVM from the University of Illinois and is a faculty member in the Department of Veterinary Clinical Medicine in the College of Veterinary Medicine. Professor Lowe's research focuses on the interactions between management strategies and infectious disease occurrence and outcomes in feed animal production systems.



MICHAEL MILLER

Professor Michael Miller has joined the IGB as an affiliate member in the Infection Genomics for One Health (IGOH) research theme. He is a faculty member in the Department of Food Science and Human Nutrition. He received his PhD from North Carolina State University and joined the faculty at the University of Illinois in 2006. His research interests focus in several areas including the functional genomics of lactic acid bacteria, and the relationship between gut microbiota and health.



CARLA CACERES

Professor Carla Caceres has joined the IGB as a faculty member in the Infection Genomics for One Health (IGOH) research theme. She is a professor in the Department of Animal Biology. Her research focuses on questions at the interface of population, community, and evolutionary ecology.



ZOI RAPTI

Professor Zoi Rapti has joined the IGB as a faculty member in the Infection Genomics for One Health (IGOH) research theme. She is a faculty member in the Department of Mathematics. Her principal research interests lie in Differential Equations, Dynamical Systems, and Mathematical Biology.

ON THE GRID HAPPENINGS AT THE IGB

NEW ARRIVALS

YANYAN WANG

Dr. Yanyan Wang has joined the IGB as an affiliate member in the Gene Networks in Neural and Developmental Plasticity (GNDP) research theme. She is currently a research associate professor in the Department of Medical Information Science at the University of Illinois College of Medicine. Previously she was research associate at the Howard Hughes Medical Institute and Salk Institute in San Diego. Her research interests focus in the areas of neuropsychology, clinical psychology and biological psychology.



ANGELA GOLZ

Angela Golz has joined the IGB as a Research Support Specialist, working with the CNRG Group. She graduated from Illinois State University in August of 2016 with a BS in Finance. Angela has most recently worked as the Store Manager at Subway for 1 year before joining the IGB. Prior to that, she worked 5 years as an Assistant Manager for the same company.

EMILY SCOTT

Emily Scott has joined the IGB as a Science Writer and Outreach Specialist, working in the Communications Group. She graduated from the University of Illinois at Urbana-Champaign with a bachelor's degree in journalism and agricultural communications.



REBECCA SMITH

Professor Rebecca Smith has joined the IGB as a faculty member in the Infection Genomics for One Health (IGOH) research theme. She received PhD and DVM from Cornell University. She is an assistant professor in the Department of Pathobiology in the College of Veterinary Medicine. Her research interests are in the areas of infectious disease control and mathematical modeling of infectious diseases.



ERIN LOUER

Erin Louer has joined the IGB as a Visiting Educational Coordinator, working with the Outreach Group. She graduated from the University of Illinois at Urbana-Champaign with a BS and received her MAT while teaching with Teach For America-Chicago. Erin previously worked at Overgrad, a Chicago based EdTech company.



JESSICA RUBIO

Jessica Rubio has joined the IGB as an Outreach and Communications Specialist. She recently graduated from the University of Illinois with a Bachelor of Arts in English. She previously worked as a tutor with the America Reads/America Counts program here at the University and has held administrative roles at various companies in the Chicagoland area.



CARLA DICKEY

Carla Dickey has joined the IGB as a Business and Policy Specialist, working in the Business office. Carla transferred from the System Office of Administrative Information Technology Services. She received her BA from Eastern Illinois University in 2003 and has worked for the University for more than 12 years.



ADRIENNE GULLEY

Adrienne Gulley has joined IGB as an Outreach and Communications Specialist, working with the Outreach Group. She received her BA in English and MS in Agricultural Communications from Southern Illinois University Carbondale. She previously worked as an Outreach Specialist for the Illinois-Indiana Sea Grant office on the UIUC campus and as an Academic Advisor at SIUC.



JILLIAN NICKELL

Jillian Nickell has joined the IGB as a Graphic Design Specialist working in the Communications Group. Previously, she taught graphic design, photography and drawing at the high school level. She also has background in scientific illustration and creates screen printed posters in her free time. She graduated from the University of Illinois with a BFA in art education.

ON THE GRID HAPPENINGS AT THE IGB

NEW ARRIVALS



JOHN KIM

John Kim has joined the IGB as a Research Programmer. John will be working with the CNRG group supporting user needs within the IGB. He previously worked as a Repair Technician and Sales Manager at Verizon Wireless for the past twelve years. He graduated from Eastern Illinois University with a BS in Organizational and Professional Development.



KRIS ENGELKING

Kris Engelking has joined the IGB as an Account Technician II, working in the Business office. Kris transferred from the College of Veterinary Medicine Business office where her main duties were to procure the equipment and supplies for the college, hospital and clinic. She has worked with the University for more than 16 years.

WORKSHOP



CLIMATE IMPACT WORKSHOP

Researchers from the University of Illinois, the University of Birmingham, and other institutions around the world gathered at the IGB this summer for a set of intense discussions on how to improve the capacity to predict the impact of climate on future crop yield. The workshop was supported by a seed grant from the Birmingham-Illinois Partnership for Discovery, Engagement and Education (BRIDGE).

Co-organizers included Associate Professor of Plant Biology Andrew Leakey (GEGC), scientific advisor for Climate Analytics Delphine Deryng, and Lecturer in Environmental Science from University of Birmingham Tom Pugh.

SYMPOSIUM

ENDURING LEGACY OF SOL SPIEGELMAN



THE ENDURING LEGACY OF SOL SPIEGELMAN

In honor of University of Illinois microbiologist Sol Spiegelman and his work with recombinant DNA technology, the IGB is hosting the symposium "The Enduring Legacy of Sol Spiegelman." We are featuring a public lecture and a series of plenary talks from October 20-22, 2017.

Our national panel of speakers, including two Nobel Laureates, encompasses diverse disciplines such as microbiology, biochemistry, cellular and development biology, neuroscience, and biomolecular engineering, and will be presenting on current and future work in their respective fields. Register now at <http://spiegelman2017.igb.illinois.edu/>.



LARRY JUKES

Larry Jukes joined the IGB as a Senior Research Programmer. Larry will be working with the CNRG group supporting user needs within the IGB. Larry has worked in IT for 30 years. He was previously a programmer and network manager at Hobbico. Larry attended Parkland and was a part-time instructor for 10 years. Larry has a BA and Associates degree.



DARREN WRIGHT

Darren Wright has joined the IGB as a BAA-Business and Procurement Specialist. Darren will be responsible for the ledger 3 accounts as well as assisting with department procurement in the IGB Business Office. Darren comes to us after being in the Department of Physics, where he started his UIUC employment 15 years ago.

CAFE



ARRAY CAFE

Serving hot and cold lunch, coffee drinks, wraps, breakfast sandwiches, soups, salads, and desserts, Array Cafe is now open for the semester with a new menu.

We now offer gluten free, vegetarian, and vegan choices, in addition to the standard range of food and drink items.

Array Café is open daily from 8:00 a.m. to 3:30 p.m. in the lower level of the IGB Gatehouse.

RECENT PUBLICATIONS

Please include your connection to the IGB in your author byline when submitting publications, as it will greatly help track potential newsworthy items and increase the possibility of coverage.

Khan, S. J., Abidi, S. N. F., Skinner, A., Tian, Y., & Smith-Bolton, R. K. (2017). The *Drosophila* Duox maturation factor is a key component of a positive feedback loop that sustains regeneration signaling. *PLoS Genetics*, 13(7), [e1006937]. DOI: 10.1371/journal.pgen.1006937

Shi, P., & Qu, A. (2017). Weak signal identification and inference in penalized model selection. *Annals of Statistics*, 45(3), 1214-1253. DOI: 10.1214/16-AOS1482

West, C. E., Kvistgaard, A. S., Peerson, J. M., Donovan, S. M., Peng, Y. M., & Lönnerdal, B. (2017). Effects of osteopontin-enriched formula on lymphocyte subsets in the first 6 months of life: A randomized controlled trial. *Pediatric Research*, 82(1), 63-71. DOI: 10.1038/pr.2017.77

Chaudhary, R., Gryder, B., Woods, W. S., Subramanian, M., Jones, M. F., Li, X. L., ... Lal, A. (2017). Prosurvival long noncoding RNA PINCR regulates a subset of p53 targets in human colorectal cancer cells by binding to Matrin 3. *eLife*, 6, [e23244]. DOI: 10.7554/eLife.23244

Cole, N. C., An, R., Lee, S. Y., & Donovan, S. M. (2017). Correlates of picky eating and food neophobia in young children: A systematic review and meta-analysis. *Nutrition Reviews*, 75(7), 516-532. DOI: 10.1093/nutrit/nux024

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