Entomology
Newsletter 2009-2010

Photo by Fred Delcomyn

Department of Entomology University of Illinois at Urbana-Champaign

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Message from the Head

To say 2009 and 2010 have been tumultuous years is an understatement. As you probably heard, the university received national attention thanks largely to the Chicago Tribune's fixation on some dubious admissions decisions, which led to very public hearings and the resignations of President White and Chancellor Herman. So, we started 2009 along with the rest of Illinois with an impeached ex-governor and ended the year on campus with an ex-University President, 7 ex-members of the University of Illinois Board of Trustees and an ex-Chancellor. The Provost also left, for reasons unrelated to the admissions situation. So, for much of 2010, the campus has functioned with an Interim President and an Interim Chancellor/Provost. We also closed AY2010 with $381 million in unpaid appropriations from the state (although the state did, in its infinite wisdom, passed legislation allowing the university to borrow money to cover the state's shortfall). Remarkably, the department survived both the furlough program and the voluntary retirement program (instituted to help deal with the budget crisis) more or less intact.

. Of course, not all of the news was depressing--in 2009 we celebrated our 100th birthday in December with a terrific Centennial symposium, featuring a wonderful all-alumni program and a fantastic dinner with dishes inspired by faculty publications (providing possible Classic Events Catering's only buffet menu with a bibliography). And in August 2010, I became the second-longest-serving head in department history, besting Stanley Friedman's 17-year stint by a year, but falling far short of Clell Metcalf's 26 years (9 more years to go!). And hiring Dr. Brian Allan, from Washington University, not only restores medical entomology to our roster (from which it has been conspicuously absent since 1985—a quarter century!), it also assures us of some kind of future, given that as of August 2010 he became our only assistant professor in the department (thanks to the promotion of Charlie Whitfield to associate professor).

A few planned retirements did affect our roster. Fred Delcomyn retired in Fall 2008, as both longtime faculty member (36 years) and School director. Although faculty members have retired before, I think was the first for which remarks at the retirement party were delivered by a talking cockroach (courtesy ventriloquist Hannah Leskosky). But not to worry—our connections with vermin were quickly restored with the appointment of Dr. Barry Pittendrigh, the Metcalf Flint and Kearns Chair of Insect Toxicology and co-director of the body louse genome project (unfortunately, no talking lice were available to make remarks at the spring 2009 investiture ceremony). Karen Pruiett retired in spring 2009, so the UI bees now have a new keeper, Charley Nye.

We also expanded our affiliate ranks with collembologist Felipe Soto joining us from the former INHS, now part of the University's Institute of Natural Resource Sustainability. INRS. All I had to say in the petition for Felipe's appointment is that he is a graduate of one of the most distinguished entomology programs in the U.S.—our own! Barry Alto, by the way, also joined and left the INHS since the last newsletter, resigning his position in 2010 to move to Florida, which I guess has considerably more to offer in the way of arthropod-borne diseases. Another alumnus, Juma Muturi, was promoted from postdoctoral researcher to interim director to run the medical entomology program (professional home of yet another alumnus, Richard Lampman).

Our Individual Plan of Study enrollments continue to grow; to the ranks of our three IPS students—Allen Lawrance, Alan Yanahan, and Robert Orpet—we can add Rachel Kirchoefer. Oddly, we were featured in a Daily Illini article as one of the "larger" IPS programs on campus. Entrepreneurial Allen started an official undergraduate student organization, Club Insecta. The club's Facebook page has over two dozen members—the students serve as Pollinatarium docents, help out with insect wrangling at the IFFF, and go on field trips and collecting trips.

In terms of teaching, the Department, in its long tradition of stretching the limits of entomology, assumed responsibility for half of the core Integrated Biology genetics course and Jim Whitfield has put together a proposal to teach Marine Biology (a stretch for an entomologist given the virtual absence of insects from most marine habitats and the complete absence of marine habitats in Illinois). Brian will be resurrecting Biology of Disease Vectors and, in addition, developing a new course in "Ecology and Human Health" in an effort to keep our IU/FTE ratio robust by attracting pre-med students. And, in summer 2010, we were able to offer a course in

beekeeping, for the first time in at least 30 years. The instructor, postdoctoral researcher Alex Wild, received a perfect 5.0 on his ICES evaluation forms, a feat that has escaped me over the entire three decades I've been teaching here.

Outreach efforts continue apace. The UI Pollinatarium officially opened to the public in June 2009 and since then we've had over 2000 visitors, including every second grade class in Champaign, home schoolers, Urbana school district fourth graders, Parkland College classes, visiting beekeepers (one of whom donated a 19th century Dadant beekeeping supply catalogue), Girl Scouts, Boy Scouts, passers-by, master gardeners, master naturalists, an agricultural tour group from Montana, and a few bee biology celebrities. There's finally an official sign on Windsor Road, the installation of which required about a year of effort (just a little bit less time than renovating the entire building) and approval by the University Board of Trustees. Since the last newsletter, we've hosted two Insect Fear Film Festivals, We also now have a complete gallery of images of the entire run of 26 IFFF t-shirts (there were no shirts the first year) on the IFFF webpage. You can also see the originals sitting in a large garment bag in my department head office.

Probably the best department news lately came from the National Research Council. The NRC conducts reviews of research-doctorates programs around the country at irregular intervals; the discipline of entomology wasn't evaluated in the 1996 review due to sample size issues (there weren't enough programs nationally to rank). In the intervening decade, the NRC worked out its statistical challenges and included entomology among the disciplines it reviewed. In this round, the NRC used two methods for assessment—one ranking was based purely on quantitative measures and the second ranking was based on survey data, including subjective assessments. Suffice it to say that our program ended up ranked as #1 in both the regression-based quantitative assessment and the survey-based subjective assessment. So, basically, we're Number 1 twice over! We outscored our closest competitor, University of California Riverside, on virtually all scholastic metrics, including number of publications, number of citations, and number of awards; time to degree was our lowest ranking metric but I'm not sure that shorter is always better (you could probably get a PhD in Entomology from some of the online diploma mills in six weeks, but would that be a good thing?).

Rankings and Ratings for Closely Ranked Programs in Entomology

		Regression-Based				Survey-Based			
		Ranking		Rating**		Ranking		Rating**	
Institution	Program	5th Percentile	95th Percentile	5th Percentile	95th Percentile	5th Percentile	95th Percentile	5th Percentile	95th Percentile
UNIVERSITY OF CALIFORNIA-DAVIS	Entomology	2	10	0.71	0.22	1	7	0.72	0.28
UNIVERSITY OF CALIFORNIA-RIVERSIDE	Entomology	1	9	0.73	0.19	1	7	0.81	0.27
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN	Entomology	1	8	0.94	0.39	1	6	0.85	0.41
UNIVERSITY OF KENTUCKY	Entomology	5	22	0.30	-0.14	1	9	0.55	0.18
KANSAS STATE UNIVERSITY	Entomology	6	26	0.37	-0.39	2	11	0.64	0.13
PENN STATE UNIVERSITY	Entomology	4	21	0.46	-0.12	2	13	0.62	0.16

https://www.grad.illinois.edu/nrc/results/index.cfm?&CFID=375773&CFTOKEN=67041732

So, we're starting out our second century on a high note! Speaking of the 21st century, thanks to all of our alumni who have friended me on Facebook—it's a great way to keep in touch! I'm also on Twitter, but I tweet infrequently—those who know me won't be surprised that I find it difficult to say much in only 140 characters!

So, alumni and friends—write, call, post, or tweet, but keep in touch!

David Stone receives the Forbes Centennial Award

UI Entomology 1908

L-R: Gene Kritsky, David Denlinger, Judy Willis. John Willis

W. Steve Sheppard, WSU

Undergraduate and graduate students

Louis Jackai NC A&T State

Andy Suarez, UIUC

Chris Wagener, Yehuda Ben-Shahar, Tugrul Giray

May Berenbaum, Bridget O'Neill, Ellen Green, Eric McCloud

Close to 200 people including both alumni and current faculty, students and friends, came to campus (actually, the I-Hotel) to celebrate 100 years of entomological excellence at the University of Illinois at Urbana-Champaign. We had alumni representing every decade since World War II—Tom Moore, from University of Michigan, began his undergraduate program here in 1947 (and stayed for two more degrees), and we had new graduate students who joined the program in August 2009. Speakers came from 8 states and two countries, representing public and private universities, industry, government laboratories, and experiment stations. Also in attendance were former faculty members from as far back as 50 years ago. All told, a good time was had by all…

PROGRAM—Schedule of Events

7:55-8:00 **May Berenbaum**, Welcome

SESSION 1 **Lee Solter**, Illinois Natural History Survey, Moderator

Stephen A. Forbes: The Humanizing of Ecology (Applied Ecology)

8:00-8:05: **Andrew Suarez**, University of Illinois, Background and Speaker Introduction

8:05-8:30: **Louis Jackai**, North Carolina A&T State University: ***"The humanizing of ecology: are there implications for tropical environments?"***

Gottfried Fraenkel: The Raison d'être of Plant Secondary Substances

8:30-8:35: **May Berenbaum**, University of Illinois, Background and Speaker Introduction

8:35-9:10: **Arthur Weis**, University of Toronto: ***"The structure of plant defense systems: Context for chemistry"***

Gilbert Waldbauer: The Hungry Caterpillar

9:10-9:15: **Larry Hanks**, University of Illinois, Background and Speaker Introduction

9:15-9:50: **Chris Maier**, Connecticut Agricultural Experiment Station: ***"Hungry caterpillars: Wonderful research animals, awful agricultural pests"***

BREAK: 9:50-10:30

SESSION 2 **Gene Robinson**, University of Illinois, Moderator

Stanley Friedman: La Fixité du Milieu Interieur

10:30-10:35: **Marianne Alleyne**, University of Illinois, Background and Speaker Introduction

10:35-11:00: **Diana Cox-Foster**, Penn State University: "***Unraveling host/pathogen interactions in insects (Or-- Using what I learned at the U of I)"***

Judith Willis: The Status of the Status Quo Hormone

11:00-11:05: **James Nardi**, University of Illinois, Background and Speaker Introduction

11:05-11:30: **David Denlinger**, Ohio State University: ***"A tribute to Judy Willis and mosquitoes"***

Vern Milum: The Individual and the Colony

11:30-11:35: **Charles Whitfield**, University of Illinois, Background and Speaker Introduction

11:35-12:00: **W. Steve Sheppard**, Washington State University, ***"Vern Milum, night golf and honey bee research"***

LUNCH: 12:00-12:30

PUBLIC LECTURE **Sam Beshers**, University of Illinois, Moderator

Clell Metcalf: "If high schools wish to have such talks..." Public Engagement

12:30-1:30: **Gene Kritsky**, College of Mount St. Joseph: ***"The tangled history of Darwin, Lincoln, and Illinois entomology"***

Centennial Award: David Stone, University Laboratory High School

SESSION 3 **Richard Lampman**, Illinois Natural History Survey, Moderator

Robert Metcalf: Illinois Farm Pond in a Box

1:30-1:35: **Bettina Francis**, University of Illinois, Background and Speaker Introduction

1:35-2:00: **Susan Fisher**, Ohio State University: ***"The invention of environmental toxicology: A tribute to Robert L. Metcalf"***

James Sternburg: Toxicity and Resistance

2:00-2:05: **Barry Pittendrigh**, University of Illinois, Background and Speaker Introduction

2:05-2:40: **Bruce Stanley**, DuPont: ***"A tribute to Professor James G. Sternburg 'Toxicity and resistance'"***

DATA BLITZ EGSA, Moderator

2:40-3:00: Faculty, Student, Alumni (1 min, 1 image, 1 question)

BREAK: 3:00-3:30

SESSION 4 **Stewart Berlocher**, University of Illinois, Moderator

William Horsfall: Thinking Like a Mosquito

3:30-3:35: **Hugh Robertson**, University of Illinois, Background and Speaker Introduction

3:35-4:00: **Eddie Cupp**, Auburn University: ***"Hiding in plain sight: Culex erraticus and mosquito-borne encephalitis in the eastern USA"***

Alexander MacGillivray and the Classification of Insects

4:00-4:05: **Sydney Cameron**, University of Illinois, Background and Speaker Introduction

4:05-4:30: **Andrew Deans**, North Carolina State University: ***"Leveraging ontologies and insights from A. D. MacGillivray to transform hymenoptera systematics"***

Peter Price and Sawflies (gallers, herbivores and parasites)

4:30-4:35: **James Whitfield**, University of Illinois, Background and Speaker Introduction

4:35-5:00: **Nathan Schiff**, USDA Forest Service: ***"In honor of Peter Price: Contributions on sawflies"***

EVENING PROGRAM Carol Anelli, WA State University, Moderator

6:30: ***Dinner*** at Forbes Building, 1816 S. Oak, Champaign, IL, Registration Required

7:00: **May Berenbaum**, University of Illinois: ***"A termite walked into a bar: a century of entomological humor"***

Dinner Buffet Menu

Robert Metcalf roasted butternut squash soup

Metcalf, R. L., A. M. Rhodes, R. A. Metcalf, J. Ferguson, E. R. Metcalf, and P.-Y. Lu. 1982. Cucurbitacin contents and Diabroticite (Coleoptera: Chrysomelidae) feeding upon *Cucurbita* spp. Environ. Entomol. 11: 931–37.

Black bean soup with toasted ancho peppers and roasted poblano peppers and Stephen A. Forbes cornbread

Forbes, S.A., 1909. The general entomological ecology of the Indian corn plant. Amer. Natur. 43: 286-301.

Bill Ruesink's sourdough wheat bread

Tummala, R. L., W. G. Ruesink, and D. L. Haynes. A discrete component approach to the management of the cereal leaf beetle ecosystem. Environ. Entomol 175–186. 4.1975.

Parsnip/carrot succotash à la Berenbaum and Zangerl with edamame, freshly shaved sweet corn, celery and scallion, mixed a sweet thyme vinaigrette

Berenbaum M, AR Zangerl and JK Nitao 1984. Furanocoumarins in seeds of wild and cultivated parsnip (*Pastinaca sativa*). Phytochem 23: 1809-1810; Hamilton JG, O Dermody, M Aldea, AR Zangerl, A Rogers, MR Berenbaum, and EH DeLucia. 2005. Anthropogenic changes in tropospheric composition increase susceptibility of soybean to insect herbivory. *Env Ent* 34: 479-485.

Gil Waldbauer's snap beans, grape tomatoes, sweet corn and wild rice with creole mustard vinaigrette (served with flaked roasted salmon on the side)

Naeem, M. G. P. Waldauer and S. F. Friedman, 1992. Selective feeding within snap bean pods by larvae of *Helicoverpa zea* (Lepidoptera: Noctuidae). Ann. Ent. Soc. Amer. 85: 784-791, Waldbauer, GP and AP Marciano, 1979. Mass rearing of the rice leaffolder, *Cnaphalocrocis edinalis* Guenee (Lepidoptera: Pyralidae). J Ent Res. 3: 1-8.

Ed Armbrust's alfalfa sprout-garnished chilled asparagus finished with capers and dill

Sell DK, E.J Armbrust and GS Whitt, 1978. Genetic differences between eastern and western populations of the alfalfa weevil. J. Hered. 69: 37-50.

Cathy Eastman's sweet and spicy slaw, featuring napa, bok choy, snow peas, scallions and cashews, with chili-lime vinaigrette slices of hone-chili roasted chicken on the side)

Eastman C, S Mahr, J Wyman, C Hoy & H Oloumi-Sadeghi. 1995. Cabbage, broccoli, and cauliflower. In: Vegetable insect management with emphasis on the Midwest. (eds R Foster & B Flood). Meister Pub Co., Willoughby, OH, 99-110.

Berlocher blueberry apple bars (no maggots) with shortbread crust

Berlocher, S.H.1995. Population structure of the blueberry maggot, *Rhagoletis mendax*. Heredity 74: 542-555: Berlocher, S. H. and B. A. McPheron. 1996. Population structure of the apple maggot fly, *Rhagoletis pomonella*. Heredity 77, 83-99.

White peach cheesecake bites à la Larry Hanks

Hanks LM and RF Denno, 1993. The white peach scale, *Pseudaulacaspis pentagona* (Targioni-Tozzetti) (Homoptera: Diaspididae): life history in Maryland, host plants, and natural enemies Proc Ent Soc Wash 95: 79-98.

Gene Robinson's baklava with local apples and honey

Giray, T and GE Robinson 1996. Common endocrine and genetic mechanisms of behavioral development in male and worker honey bees and the evolution of division of labor. Proc Natl. Acad Sci. USA 93: 11718-1722.

Vern Milum's 1933 honey chocolate fudge cake

Milum VG 1947. Grooming dance and associated activities of the honeybee colony. Trans. Ill Acad Sci 40:194-196.

Hägen Dazs Vanilla Honey Bee

Generously provided by Hägen Dazs in celebration of recent advances in honey bee research at UIUC

Coffee and tea

AWARDS AND RECOGNITION

Faculty:

Gene Robinson, NIH Pioneer Award 9/24/09 | Phil Ciciora, News Editor | 217-333-2177; pciciora@illinois.edu
CHAMPAIGN, Ill. – Gene Robinson, a professor of entomology and neuroscience at the University of Illinois, has been named a recipient of the 2009 National Institutes of Health Pioneer Award.
Robinson's award is $2.5 million in direct costs over five years. The award enables promising young researchers to pursue high-impact, transformative research in the fields of biomedical and behavioral science.
According to the NIH, Robinson will use his Pioneer Award to investigate in molecular terms how to transform the brain's reward system from a selfish to an altruistic orientation, with the goal of achieving a new understanding of drug addiction and other diseases.
The director of the Bee Research Facility and the Neuroscience Program at Illinois, Robinson is the author or co-author of more than 200 publications, including pioneering research in the application of genomics to the study of social behavior. He also leads the Honey Bee Genome Sequencing Consortium. Robinson, who holds a Swanlund endowed chair at Illinois, previously was honored as a University Scholar, Fulbright Fellow and Guggenheim Fellow. He recently was elected to the National Academy of Sciences.
The NIH, which granted 18 new Pioneer Awards, comprises 27 institutes and centers and is a component of the U.S. Department of Health and Human Services. The NIH is the primary federal agency for conducting and supporting basic, clinical and translational medical research, and investigates the causes, treatments and cures for both common and rare diseases.

Contact: Molly McElroy mmcelroy@aaas.org 202-326-6434
American Association for the Advancement of Science
Entomologist May R. Berenbaum wins Public Understanding of Science Award
The American Association for the Advancement of Science (AAAS) has named May R. Berenbaum, professor and head of the Department of Entomology at the University of Illinois at Urbana-Champaign as winner of the 2009 AAAS Public Understanding of Science and Technology Award. Berenbaum was honored for "her extraordinary ability to integrate her original research on the world of insects with her inspirational efforts to communicate the wonders and complexity of nature." She received the award during a 20 February ceremony at the 2010 AAAS Annual Meeting in San Diego. …In addition to research that has transformed the field of chemical ecology and has had a major impact on agriculture and the environment, Berenbaum was described in a 1997 New York Times article as "the most relentless creative insect advocate in the world." She is the legendary creator of the "Insect Fear Film Festival," which melds entomology and film into a new, successful form of public engagement with science. Now more than 25 years old, the annual event draws thousands of viewers and international media coverage. Throughout her career, Berenbaum has emerged as an authoritative public source of information on insect problems. The prize selection committee commended her extensive service to the National Research Council (NRC), where she is a National Associate, an honor reserved for National Academy of Sciences members who make extraordinary contributions to the NRC. Her work as a National Associate has included chairing the committee on Colony Collapse Disorder (CCD), which issued its report on the status of pollinators in October 2006 – months before the massive disappearances of honey bees across the country. She emerged as the CCD spokesperson for the scientific community, and she has written op-ed articles and testified before Congress on the issue.

Andy Suarez named University Scholar
9/15/10 | Jeff Unger, News Bureau | 217-333-1085; news@illinois.edu
CHAMPAIGN, Ill. — Six Urbana campus faculty members will be recognized as University Scholars. The program recognizes excellence while helping to identify and retain the university's most talented teachers, scholars and researchers. The faculty members were honored at a Sept. 15) at the I Hotel and Conference Center, Champaign. Begun in 1985, the program provides $10,000 to each scholar for each of three years to use to enhance his or her academic career…
Andrew Suarez, a professor of entomology, is a leading figure in two of the most rapidly growing and central disciplines within integrative biology: conservation biology and invasion biology. He is among the leading authorities on the globally invasive Argentine ant, *Linepithema humile,* arguably the world's most noxious "tramp ant" (so-called because they accompany humans, uninvited, as they travel around the world). He was the first person to examine this cosmopolitan species scientifically in its native area and in doing so was among the very first to demonstrate the extraordinary utility of a biogeographic approach to understanding invasion success, pioneering an approach that today is the gold standard in the field.

Student:

Linnean Games Champions 2009!

The University of Illinois Linnaean Games team won the national championship at the 2009 annual meeting of the Entomological Society of America for the first time in the history of UIUC participation. Team members Rob Mitchell, Scott Shreve, Nils Cordes, Fred Larabee, and Stephanie Dold defeated teams from several tough competing schools. At the same meeting, Cindy McDonnell and Emilie Bess won awards for their presentations in the student paper competition. (Pictured: Scott Shreve, Fred Larabee, Rob Mitchell)

Charles Lindbergh Fellowship
Maminirina Randrianandrasana was awarded a grant of $10,580 (the cost of the Spirit of St. Louis) by the Charles Lindbergh Foundation, which supports innovative technology that preserves the human/nature balance.

Campus awards
Undergraduate Entomology Research Award – Timothy O'Connor (2009 Robinson Lab), Timothy Daughtry (2009 Cameron Lab), Alison Dehnel (2009 Suarez Lab).
Robert Emerson Memorial Grant – Josephine Rodriguez (2009)
Isabel Norton Award – Emilie Bess (2009)
Francis M. and Harlie M. Clark Summer Award – Maminirina Randrianandrasana (2009)
Francis M. and Harlie M. Clark Research Support Award – Emilie Bess (2009), Nils Cordes (2009), Michelle Duennes (2009, 2010), Elizabeth Graham (2009), Jo-Anne Holley (2010), Sindhu Krishnankutty (2009), Fredrick Larabee (2010), Robert Mitchell (2009, 2010), Jaqueline O'Connor (2010), Scott Shreve (2010)
Herbert Holdsworth Ross Memorial Fund Award – Diana Arias-Pena (2010), Emilie Bess (2009), Michelle Duennes (2009), Jo-Anne Holley (2009), Sindhu Krishnankutty (2010), Doris Lagos (2010)
Philip W. Smith Memorial Fund Award – Fredrick Larabee (2010), Maminirina Randrianandrasana (2009)
PEEB: Most Outstanding Talk by a MS/Early Ph.D. Candidate – Nicholas Naeger (2010)

Teaching honors
List of Outstanding Teachers at UIUC

Fall 2009	Spring 2010
Chabot, Ember	May Berenbaum
Hanks, Larry	Juraj Cech
Holley, Jo-anne	Michelle Duennes
Mitchell, Robert	Patrick Halbig
Naeger, Nicholas	Jo-Anne Holley
Steele, Laura	Gwyn Puckett
Whitfield, James	Laura Steele

Ellis MacLeod/DuPont Award for Outstanding Teaching – Mathys Meyer (2010), Scott Shreve (2009)

John G. & Evelyn Hartman Heiligenstein outstanding Teaching Assistant – Patrick Halbig (2009)

Dot (Houchens) Gordon – Retired!!!

I was working at the Department of Chemical Engineering in the summer of 1983 and looking for a change. A staff position opened in Entomology and I eagerly applied. Dr. Jim Sternburg conducted the interview (Dr. Friedman was on sabbatical) and after listening to my background information and knowing that I was Donna Mohr's sister, he offered me the job. I was delighted! The department was extraordinarily flush with famous entomologists when I arrived. I had the pleasure of working with Gottfried Fraenkel and William Horsfall, as emeritus professors. The senior faculty at the time also included Stanley Friedman, Jim Sternburg, Gil Waldbauer, Robert Metcalf, Judy Willis, Ellis MacLeod and Fred Delcomyn. Junior faculty were Barry Miller, Stewart Berlocher, and May Berenbaum. During my time in the Department, Hugh Robertson, Gene Robinson, Susan Fahrbach, and Larry Hanks were hired. I can't tell you how many wonderful stories I have about each of the faculty that I will cherish for my lifetime.

I can't name all the Entomology graduate students who passed through Morrill Hall from 1983 through 1999 and beyond, but they each touched my life in some way and I hope that I helped them through a challenging time. My goal was to make each graduate student feel that they had a place to go with questions or problems. The individuality of the grads is what kept the job interesting and enjoyable.

The round table in 320 Morrill Hall was a place for casual conversations, serious scientific debate, problem-solving discussions, and silly banter. I learned so much about academia, human behavior, faculty dynamics, and life in general during my 16+ years in Entomology. I literally grew up there. I watched faculty move through the ranks to become world-renowned scientists, garnering every possible award that can be bestowed on Entomologists. I know the table is gone and maybe the office is more efficient, but I believe the concept was important for the time. The Beckman Center was designed for exactly the same purpose as the round table - to garner interdisciplinary discussions that lead to new and creative ideas. I witnessed good collaborations being formed and ideas expressed around that table in the 1980s and 90s that might not have happened otherwise.

I left the Department of Entomology in 1999 to take a position in the Department of Agricultural and Consumer Economics. I felt it was time to spread my wings and step out of my comfort zone. It was a promotion from Administrative Secretary to Administrative Aide but the work was less demanding and far less interesting. I missed the stimulating conversations that were held daily at the "round white table" in the Entomology office. I had a hard time adjusting to a non-science model in ACE and was soon looking for another opportunity where I would feel more comfortable. In Fall 2001, I was hired as the Assistant to the Head in the Department of Chemistry. Greg Girolami, Chemistry Head at the time, hired me in large part due to his great respect for May Berenbaum, whom I had asked for a reference. Again, my career was indebted to Entomology!

As you may know, Chemistry is definitely a science, and I was back in the world of lab coats, goggles and gloves which felt comfortable. When I began in Noyes Lab, Chemistry had 18 secretarial staff, 40 faculty and approximately 320 graduate students. It is a very large, complicated department with multi-layered administrative functions and budgets. I was definitely not bored in Chemistry!

I decided to do my part to help the U of I out of their budget woes by taking early retirement at the end of July 2010 with 30+ years of service. I am far too young to sit in the rocking chair right now, so I am looking forward to my next adventure. If you have any work for me, feel free to call!

During my years away from Entomology, I have had many life experiences that I would like to share: married my perfect mate- Bob (searched for him while I was in Entomology); my sons graduated from the U of I (Matt became a lawyer; Nathan became a doctor - hopefully together they will have resources to take care of me in my old age!); together with my husband, we have 7 grandchildren (ages 17 to 3) who are delightful. I spent so many years in Entomology avoiding the Newsletter (sorry May!) and now am very grateful to have an opportunity to thank all those in the department who contributed to my "education". Cheers!

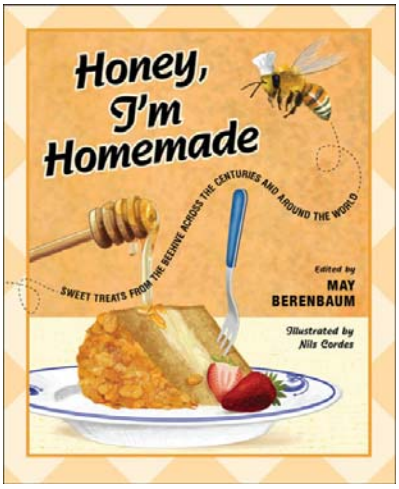
Pollinatarium news

Every second grade class in the Champaign school district visited in fall 2009

National Pollinator Appreciation Week 2009 included an art show, photography classes, and musical performances

Celebrity bee biologist visitors have included Nathan Schiff (USDA Forest Service), Walter "Steve" Sheppard (Washington State University), Hachiro Shimanuki (USDA retired), and Peter Kevan (University of Guelph)

Honey, I'm Homemade



The Pollinatarium, which officially opened to the public in June 2009, has succeeded well beyond our wildest expectations as a means of interacting with the public and raising pollinator awareness. Keeping it going, however, is a challenge given that it has no funding from the university other than a three-year commitment for a half-time research assistantship. It has become abundantly clear that we will need full-time staffing to meet demand, which is particularly difficult to secure in an era of furloughs, layoffs, and voluntary retirement incentive programs. It's enough to keep one up at night. In fact, one sleepless night in August 2009, preoccupied with trying to figure out a way to sustain this outreach effort, I started looking for honey recipes, figuring that maybe we could make a few dollars with a thematic bake sale. The first place I looked was among the thousands of pages of handwritten recipes that Hermilda Listeman, my husband's 94-year-old cousin from Collinsville, Illinois, had given to my teen-aged daughter, after hearing that Hannah had an interest in baking. Herm had already donated over 600 volumes from her extensive community cookbook collection to the University of Illinois library, but she wanted her personal recipes, with their extensive annotations, to go to Hannah. In no time at all, I had amassed a small stack of recipes, at which point I thought that maybe a honey cookbook might be a more sustainable fundraising effort than a bake sale on the Quad.

So, much as honey bees glean nectar from flowers, I started gleaning—I found recipes in our department archives from Vern Milum, the UI's first apiculture professor, and in the Illinois State Beekeepers annual reports, which I had printed out for the Pollinatarium library. And, because the honey bee is the world's premier managed pollinator, honey can be found almost everywhere in the world and in honey recipes almost everywhere in the world; our alumni are almost everywhere in the world and I put out a call for regional/ethnic family recipes from them. Because I had been thinking about honey, I started writing about honey, to accompany the recipes and to advance our mission of raising pollinator awareness.

I had assumed that I could put together the recipe collection through one of those "publish your own fundraising cookbook" places, to come out with a spiral-bound book of the sort Hermilda collected. Graduate student Nils Cordes, a gifted artist with an interest in bees (albeit of the bumble, not honey, variety), contributed some perfect illustrations—whimsical, but sufficiently anatomically accurate to satisfy any entomologist. That it is now a real book, published by a real publishing company, is the result of an offhand remark I made to Bill Regier, President of UI Press. I actually had gone to see him about another manuscript altogether and casually mentioned the cookbook project. He asked to see the manuscript and a day later indicated that the UI Press wanted to publish it. So, after a bit more than a year, with a lot of invaluable help from editors at the UI Press (apparently, I had inadvertently violated every standard practice in cookbook publishing), we have a very professional honey cookbook.

The honey bee epitomizes altruism—unselfish behavior for the good of the colony. There's no reason, though, that altruism can't taste good. Every bit of profit from the sales of the cookbook go toward the Pollinatarium; maybe, if we sell enough, we can help boost honey sales and help out America's beekeepers, too. So—order your copies today! They make great gifts for Christmas (see the lebkuchen recipe on p. 58), Chanukah (see the loukoumades/bimuelos recipe on p.101), Rosh Hashanah (see the honey cake recipe on p. 127), Korean Pepero Day (see the pepero recipe on p. 102), NoRuz (Iranian New Year's Day—see the baagh-lava recipe on p. 49), Easter (see the Greek ricotta and honey pie recipe on p. 117), Thanksgiving (see the pumpkin pudding recipe on p. 108), Purim (see the hamentashen recipe on p. 62), Mardi Gras (see the cicerchiata recipe on p. 67), and for any other occasion! Order here--

http://www.press.uillinois.edu/books/catalog/46dgm4nk9780252077449.html UI Press

http://www.amazon.com/Honey-Im-Homemade-Beehive-Centuries/dp/025207744X/ref=sr_1_1?ie=UTF8&s=books&qid=1289069773&sr=1-1 Amazon

National Pollinator Week 2009-2010



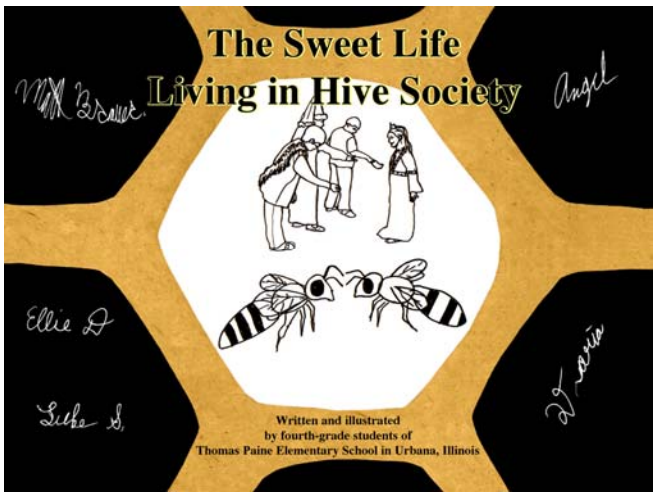






First row l-r Lesley Deem, Alex Wild, Andy Dallas; Second row Box of Insects, Diana Arias-Penna and David Lagos, David Monk; Third row, baker, no-bake bumble bee, Hannah Leskosky

Other Pollinator News



Gene Robinson received an autographed copy of "The Sweet Life Living in Hive Society" written and illustrated by fourth-grade students of Thomas Paine Elementary School in Urbana, IL:
"This book is dedicated to Professor Gene Robinson from University of Illinois, who knows just about everything about bees, and to Peter Fox who helped to create the great Pollinatarium in our town so we could learn about bees."

Vive les Bourdons!*

As we learn more about the status of North American bumble bees, more questions arise that require solutions. From our 3-year interdisciplinary study of changing distributions, genetic diversity and pathogen infection in bumble bee populations across the United States (see Newsletter essay 2007-2008), we have found that the relative abundances of four species (a fifth we couldn't actually study because it is at or near extinction status) have declined by up to 96% and their surveyed geographic ranges have contracted by 23-87%, some within the last 20 years. We have also found that declining populations have significantly higher infection levels of the microsporidium *Nosema bombi* and lower genetic diversity compared to co-occurring populations of non-declining species. A couple of interesting aspects of the pathogen findings: first, four of the five declining North American species belong to the same species group, indicating a strong genealogical component in the species decline. Secondly, there seems to be a rather convincing temporal correlation between the population declines and the development of commercial bumble bee rearing in the U.S. One compelling hypothesis suggests that an invasive *Nosema bombi* strain escaped into wild populations from commercial bumble bee facilities in the western U.S. during the mid- to late 1990s and spread easterly to infect related species. But we have no idea to date whether this is true. All we know is that declining species in the U.S. have higher *N. bombi* infections than species with stable populations. So our team is on the hunt to find out first, whether there are genetic differences between North American and European *N. bombi*, second, whether *N. bombi* existed in North American bumble bee populations before commercial producers came in, and third, how the population genetic structure of bumble bees could contribute to the spread of a pathogen.

These questions took some of our team to France this summer. We were only three from the U.S, Robbin Thorp from UC Davis, my postdoc, Jeff Lozier, and me. Our host was Pierre Rasmont, an intrepid bee biologist from Belgium and his wife Ann. Although it was hard to compete with the likes of Sturgis bike week and the Badlands of SD from prior summers spent chasing bees around the U.S., we managed to pull off some pretty interesting collecting experiences in France. We began in the hills of Provence at Pierre's beautiful summer "camp", draped in orange trumpet vine situated in the hills near the village of Gonfaron. This region, in the Department of Var just north of the Mediterranean Sea, is reminiscent of California oak woodlands, but two native species stood out. The cork oak (*Quercus suber*) with its thick, craggy bark was once an important link in the area's wine-growing economy– the wines are the wonderful Côte de Provence. And the Chestnut tree (*Castanea*), which occurs in dense groves throughout the hills of Provence, is magnificent; its nuts are turned into the candied chestnuts (marrons glacé) renowned across the region. And then there was Lavender. You've all seen those idyllic scenes of French Lavender fields in the hilly regions of Provence– red earth, sunny skies, mountains in the distance– well, that's exactly what it looks like. As it turned out, Lavender was the most important plant in our search for *Bombus terrestris* (and it's internal pathogen, *Nosema bombi*). Not only were the vast fields of the purple stuff a haven for hungry bees, but also just about every one of the ten million roundabouts in southern France sprouts Lavender as a landscaping feature. So when no bees could be found in the wild, all we had to do was head for a village roundabout and, voilà, there were the bees en masse. This was a bit taxing during rush hour with Citroens whizzing by, but in typical French fashion, we were mostly ignored. Ann's meals were our reward at the end of the day, and morning tea and coffee were accompanied by fresh croissants and café au lait.

After 10 days of collecting across these ancient hills, in temperatures soaring into the mid-90s F, we left for the Pyrenees and the little Catalan village of Eyne, perched about 2,000 m in the Pyrénées Orientales, population 127. This idyllic cluster of old dwellings, a site inhabited since the Neolithic (3000-4000 BC), with stunning views of the mountains surrounding the Cerdagne basin, was our base for travel to collecting sites near the coastal city of Perpignan. If we thought the hills of Provence were hot, we were in for a real treat coming down from the cool, temperate mountain climate to the ovens of coastal Catalan. At some sites known for their abundant *B. terrestris* populations we found nary a bee-- not a fit day out for man nor bees. But the turquoise waters of the Mediterranean provided refreshing respite. And when all else failed, there were always the roundabouts with Lavender. By early evening we were back in heavenly Eyne. After-dinner walks along mountain paths behind Eyne, past the ancient dolmen (Neolithic burial tomb), still standing in the open meadow after 4,000 years, sun setting behind an infinite horizon alight with complementary colors, closed the day. Side trips to some of the best-preserved 15th century fortresses in Europe, including Mont Louis just down the road from Eyne, and Villefranche set high in the Catalan hills, sampling the Catalan cuisine and strolling through flower-filled meadows were special experiences to remember. We left Eyne to return to Paris on the eve of Bastille Day, and arrived in Limoges at dusk to see a spectacular fireworks display in the Le Champ de Juillet. Just outside of Paris we stopped one last time, to visit the medieval town of Chartres with its soaring cathedral spires and magnificent stained glass windows. We had our last lunch in France just off the cathedral square and drove the 80 km into Paris on Bastille Day, a fitting end to our Tour de France in search of les Bourdons.

*French for bumble bee

FACULTY

Brian Allan. Greetings from the Allan lab! I'm excited to be joining the department and contributing to my first (of hopefully many) entomology newsletters. First off, I think some apologies are in order – due to my last name starting with the letter "A", I believe I have already wreaked considerable havoc in the placement of the mailboxes in the department office and displaced our illustrious department chair from the top of the faculty list on the department website. No doubt even this newsletter will be affected. Apologies all around!

It was a productive summer for me in St. Louis as I finished out my postdoc at Washington University's biological field station, the Tyson Research Center. I had quite the team working with me – two technicians, three undergraduates and three high school students – and we certainly covered a lot of ground! It was a summer of finishing up ongoing projects, such as my primary project for the last three years exploring the effects of landscape change in the St. Louis region on tick-borne disease risk. But I also used the opportunity to break new ground, including a project examining the consequences of the white nose syndrome outbreak in North American bat populations for the control of mosquitoes that vector diseases such as West Nile virus. At the beginning of the summer I did not expect to be driving all over Missouri, sampling mosquitoes at caves containing the last populations of endangered (and sadly very likely soon to be extinct) bat colonies, but opportunity knocked. I will also be starting several new projects in upper Michigan this fall, including one investigating the outbreak of winter ticks (*Dermacentor albipictus*) on Isle Royale (the island national park in Lake Superior), which have significantly altered the famous wolf-moose predator-prey interactions on the island, one of the longest ongoing studies in the field of ecology. Backpacking around Isle Royale for ten days during the fall sampling ticks and counting moose scat may not be everybody's idea of heaven, but for me it comes pretty darn close.

It's an exciting time for me and my family, making the transition from St. Louis to CU. We're still in the process of house-hunting, although hopefully by the time this newsletter comes out we will be settled. My fiancée, Rachel, is an organic farmer and science writer, so she is excited to be moving to a town that so values the virtue of locally-grown, sustainable food. I have no doubt she will become a significant contributor to the Urbana farmer's market in the near future. Our hound dog, Sage, is still unaware of the impending move, but so long as she has a large yard with rabbits to chase I doubt she will complain.

I suspect the upcoming year will involve a lot of getting settled in for me, both personally and professionally. I am excited to set up my new lab and to begin taking on students. I have several grant proposals outlined for this fall and winter, and I have no shortage of data to analyze or papers to write. In fact, my to-do list seems to grow faster than I can cross things off of it! But I wouldn't be happy if it were any different. Thanks to all of you who have gone so out of your way to make me and my family feel welcome here – we look forward to getting to know all of you better in the coming years.

May Berenbaum. For an Illinois entomologist, Abraham Lincoln's 200th birthday, Charles Darwin's 200th birthday, the 150th anniversary of *Origin of Species*, and the 100th anniversary of the founding of the UIUC Department of Entomology have all been 2009 highlights. In terms of research, publishing the results of 2 years of microarray analysis with Reed Johnson and Gene Robinson ultimately linking ribosome degradation with colony collapse disorder received a lot of attention until a report came out a few days later on an Indian wire service linking CCD to cell phone towers. Beyond bees and the usual assortment of butterflies, moths, bees, Japanese beetles and corn rootworms, the ever-expanding list of organisms under study incorporated a few new orders (Phthiraptera, with Barry Pittendrigh's body louse genome project, and Hemiptera/Homptera, with Bridget O'Neill's soybean aphids), classes (Arachnida, with Reed Johnson's work on varroa mites), and kingdoms (with Gudong Niu's work on *Aspergillus* fungal toxins).

Geographically, we're branching out as well; indispensable colleague and dear friend Art Zangerl added New Zealand to our purview in pursuit of parsnip webworms, and Mami Randrianandrasana traverses Madagascar in search of silkworms. To add a more distant field site, we're going to have to look for lunar Lepidoptera.

2009 also marks the publication of my fifth book—*The Earwig's Tail. A Modern Bestiary of Multi-legged Legends*, published by Harvard University Press. At one point this fall, *The Earwig's Tail* ranked 33rd on Amazon.com's list of top-selling books on invertebrates, 3 positions below *Atlas of Marine Invertebrate Larvae* by C.M. Young et al. and 12 positions above F. Harvey Pough's *Vertebrate Life*, which, given its title, did surprisingly well on the invertebrate best-seller list. And, unexpectedly, in 2010 the University of Illinois Press decided to publish a honey dessert cookbook I put together (despite any obvious culinary talent) as a fundraiser for our Pollinatarium— "Honey I'm Home-Made—sweet treats from the beehive from around the world." I can say honestly and with pride that, for a cookbook, it has a lot of entomology in it.

On the personal front, entomology meetings took us to an interesting place for a change. In summer 2009, we went to Ancona, Italy, on the Adriatic coast, for the Italian Congress of Entomology, where, except for my talk and Nick Strausfeld's plenary the next day, all of the talks were in Italian, so, rather than stay through 5 days of Italian entomology, after 2 days we headed for Perugia, to spend a night in the Etruscan Chocotel chocolate-themed hotel and tour Perugia and the world-famous Perugia chocolate factory the next morning. We did manage to set aside one-and-a-half days in Rome, including, along with the obligatory historic sites, a stop at a gelateria boasting 125 flavors of gelato. In September 2009 we went to San Francisco courtesy of the North American Pollinator Protection Campaign 's "Don't Dessert Pollinators" recipe contest. By taking my Aunt Ruth's mandelbrot recipe and switching out non-pollinator ingredients and give it a pollinate-y name ("Apiscotti—bee-enabled biscotti") I won first prize, a year's supply of Haagen Dazs ice cream and one night in the Haagen Dazs Sweet Suite in the Hotel Triton in San Francisco. We ended up staying three nights and while we were in the neighborhood we detoured to Oakland to visit Dreyer's, corporate headquarters of Haagen Dazs, to thank them for their support of honey bees. And in September 2010, thanks to an invitation to give a lecture at University of Amsterdam, the whole family traveled to the Netherlands. Amsterdam is indeed a city of contrasts—in one 24-hour period we visited both the Torture Museum and the Museum of Handbags and Purses (but ran out of time before we could visit the Tulip Museum or the Marijuana Museum).

Probably the biggest family news is that Hannah graduated from Uni High in 2009 (serving as salutatorian at commencement, with a speech that imagined Uni as the focus of a network high school television series). That summer, Hannah landed her first paying job—all-purpose employee at the Art Theatre, among other things dressing up in period costume for "Public Enemy" and "Taking Woodstock" (fortunately, she didn't have to dress up as an ear of corn for "Food, Inc."). She started University of Chicago in Fall 2009 as a film major but by Fall 2010 had switched to being a theater major. In summer 2010, she worked as a prop master/all-purpose employee on the film crew for Robin Christian's feature film "My Dog the Space Alien" here in town and among her many challenges were finding a collar to fit the titular Nova Scotia duck-tolling retriever, finding a rusty tow truck, and engraving alien symbols into a rock. At the beginning of her sophomore year, she was selected to join the UC improv troupe, Off-Off, which puts on regular shows, giving us a great excuse to visit on occasions other than Parent's Day. (Photo, by the way, is courtesy Darrell Hoemann, News-Gazette).

Stewart Berlocher. The Berlochers continue to move forward in time, if not in space. Austin is 18, a senior at Urbana High School, and will be going to college next year, destination unknown at this juncture. Paul is 12, an honor student at Urbana Middle School and a soccer star of the first magnitude. Jeanine continues to master yoga (the strictest Freudian kind), and has been doing a lot of art recently. Stewart did not retire, but has developed an interest in local history, although the mysteries of sympatric speciation still beguile and taunt him.

Sydney Cameron. It can't be 2010 already! Seems we just left 2008 . . . and I'm still trying to keep up with new students and postdocs. Since last report, I've lost Heather Hines and Claus Rasmussen, Heather to NC State and Claus to Greenland. Michelle Duennes finished her Masters last spring and is starting her PhD in my lab under a new alias, Polly Nator– her semester goal: survive the Paign (one of three teams of the Twin City Derby Girls) with no broken bones, at least until winter break. My newest student, Jurko Cech joined the lab last fall, cruising in on a skateboard (or was it a longboard?) from Virginia. Jeff Lozier has accepted a faculty position at the Univ. of Alabama (the Crimson Tide?!), but his infatuation with bumble bees is keeping him here until next Aug. My new postdoc, Haw Chuan Lim (HC), just arrived from Louisiana State, abandoning birds for bees. Haw Chuan will be working with Jeff to test the hypothesis that the *Nosema bombi* isolates we're finding in U.S. bumble bees are invasive from Europe and are playing some role in their decline. Our work on bumble bee decline over the last couple of years will culminate in an international workshop this Nov., in collaboration with the St. Louis Zoo, Xerces Society and IUCN, to work up a conservation strategy for the bumble bee species we consider most endangered. One of the fun things we've done recently is figure out how to mine genetic data from old bumble bees on pins in museum collections to find out interesting things about their past. One application was to compare the population genetic structure and diversity of some species that Gil Waldbauer and Jim Sternburg collected around Illinois in the 1960s with the structure and diversity of the same populations today. Jeff and I published a paper in *Molecular Ecology*, emphasizing the value of natural history collections. The neat thing about it is that we don't have to destroy the specimens to get the DNA, so the museums are on board with our *Nosema* study– we just soak pinned bumble bees in DNA extraction reagents, pull out the *Nosema* DNA, fluff up the bees and return them to the collections. In many cases, they look better after the soaking.

Jim and I continue to spend our summers in Maine. A recent twist to our yearly two weeks in Blue Hill is the cottage we've come to rent along 160 York Road. If anyone has read "Fairweather Duck" or "Ecology of a Summer House" you may remember the description of events in and around the summer bungalow at 156 York Rd. This belonged to Vincent Dethier and family (author of those delightful books, and others), and we just happen to rent the cottage next door, which belonged to his aunt, Christine. It's too good! In the last year Jim's taken up the mandolin (in addition to his guitar and banjo) and I'm doing voice lessons, ostensibly so I can sing along to some of his mandolin tunes. The first song I worked up? Wiegenlied (Cradle Song) by Schubert! Go figure. Our garden is finally looking wilder and, while we keep adding new bee plants, this year we had a record number of butterflies landing on the *Buddleia* flowers-- counted 6 swallowtail species!

Fred Delcomyn, Emeritus. Retirement has not meant the end of my association with the University. Long before my retirement, it was obvious that the web site of the School of Integrative Biology needed a complete overhaul. We began working on it about four years ago but had not finished by the time I retired. Since I had initiated the project, it seemed only fair that I continue to work on it even after I retired. I think Evan DeLucia, the new Director of SIB, heaved a sigh of relief at my offer to continue to work on this! The new website has garnered good reviews from students and faculty alike for its ease of use, which makes the year we spent planning before we began putting it together all worthwhile. Check it out yourself at http://sib.illinois.edu.

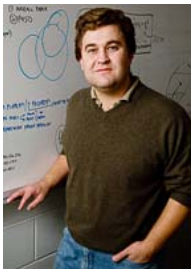
One of our goals for the website was to have a different heading picture at the top of each web page. That required a lot of photos, so I began to take some that we could use. Doing so and going on family vacations to scenic places like Hawaii and Alaska revitalized my long-time interest in

photography. This in turn has led to awards in photo competitions, both local and statewide. These awards, and photos published in the *Illinois Steward* magazine, in *A Prairie Rendezvous* (the newsletter of the local conservation group Grand Prairie Friends), and in the newsletter of the International Society for Neuroethology, provide sufficient reward to keep me at it. I'm only 71, so there's plenty of time for a new career!

Bettina Francis. My laboratory is currently between projects. Lesley Deem deposited her dissertation last December, and the first paper from Sandi Yi's dissertation is in press. I spent this summer dosing mice with cylindrospermopsin, a rather nasty and widespread algal toxin, as the first step toward identifying which genes are expressed in the period before symptoms appear. This project is part of an ongoing collaboration with Neil Chernoff of US EPA. Another project in that collaboration was the examination of data from the National Toxicology Program to identify the effects of maternal toxicity, separately from the effects of the test chemical) on fetal development. This project won an EPA Science and Technology Achievement Award. With a new student moving in, new work will soon begin.

My older grandson started school this fall; his younger brother, now 2, has a large passive vocabulary - but often limits his active vocabulary to the word "no". On the other hand, he is quite willing to repeat it forever.... Their parents now have tenure at Purdue, so we will compete in giving the boys T-shirts in the appropriate colors. My younger son and his wife now live in DC – together! A major improvement in their lives, even though it has been accompanied by more job changes. Theo is now working for an online firm that mines company reports to find information for their stockholders – the sort of material the companies would perhaps prefer to keep buried in the footnotes. Jenny is still working for CNN Online, so they are both "new media" journalists.

Larry Hanks. The latest news from my lab: Rob Mitchell received his Master's degree, and Annie Ray, Pete Reagel, Matthew Richardson, and Liz Graham all graduated with PhDs. Three new students have joined the lab: Joe Wong, Becca Striman, and Ken Robinson. Of course, Rob is still around, working on his PhD. My wife Jean no longer works in the office of the Chancellor and has gone full time in the office of IACUC (Institutional Animal Care and Use Committee). She is relieved to be in a workplace that is not in the crosshairs of the popular media. Our kids are doing fine, Rebecca (11 years) is thriving at the Campus Middle School (along with piano and soccer), and Mason (8 years) has just started at Next Generation School and thrives on Wii.



Barry Pittendrigh. All continues to go well in the Pittendrigh laboratory. We have had many new people join the laboratory over the past year (Dr. Kent Walters, Agunbiade Tolulope Adebimpe, Laura Steele, Scott Allen, Marty Calabrese, and Alice Vossbrinck). Darrin King graduated with his M.S. degree this past summer (in the biology program) and he is now off to dental school in Chicago. Susan Balfe and Dr. Weilin Sun continue to keep the laboratory running at full pace. Dr. Hongmei Li is now a post-doc in Gene Robinson's laboratory. Brett Olds continues to push forward our collaborative efforts with Ken Paige. The body louse genome project finally came to a conclusion with the main paper being published in PNAS this past spring. Our research and extension efforts in West Africa have also continued to move forward. Many of our new activities and events can be found on our laboratory website and Facebook page.

Hugh Robertson. The last two years have seen a remarkable revolution in DNA sequencing techonology, and my lab is starting to take advantage of it. After being dependent on the large public genome sequencing centers for performing insect genome sequencing, and enjoying being able to work on the odorant and gustatory receptors these genomes encode, we can now generate moderately-sized insect genomes ourselves at Illinois. We are not unique in this regard, and the next few years promises a

huge expansion in arthropod genomes being sequenced. As a transition to this new approach, we've been involved in two ant genomes for the past year. The red harvester ant *Pogonomyrmex barbatus* was sequenced by a group funded by a standard NSF grant, and revealed the expected large numbers of odorant receptors, the highest known for an insect to date, about 400 genes of which about 330 are functional. Then an informal community group led by Neil Tsutsui at Berkeley and including Andy Suarez and me at Illinois sequenced the invasive Argentine ant *Linepithema humile* genome. These projects demonstrate the ability to do insect genomes with relatively little funding, and together with Gene Robinson we are attempting to push the costs down to $25k and below per genome. Initially we are focusing on hymenopteran genomes, both for Gene's interest in the repeated evolution of sociality amongst them, and for their relative ease in terms of moderate size and the ability to perform most sequencing from a single haploid male, thus avoiding polymorphism problems. Our sights are now being raised to larger genomes of diploid species, including several that have been the research foci of colleagues in the department for many years. Helping to obtain their genome sequences in the next few years would be a wonderful cap to my stay at Illinois.

On the personal front, we are currently on a second six-month sabbatical in Cape Town, South Africa. This allows much visiting with my mother and sister because we have a flat in the same building as their flats in Milnerton, just north of the city, overlooking Table Bay, Table Mountain, and Cape Town city. In addition to the ant chemoreceptors and new insect genomes, I'm doing some work on the tsetse fly genome, while enjoying the local excellent kiteboarding and mountain climbing. Christina is enjoying the spring flowers, a local choir, and learning Xhosa, while Erica is in the same school she attended four years ago with old friends. Next week we will go to Namibia for a school break, and return to frigid Illinois in January.

Gene Robinson. It's very nice to be able to greet our many alums again via this Newsletter. Research in my lab continues to go well, now along three fronts. We continue to study the mechanisms underlying the honey bee's remarkable system of division of labor, with a special focus on the role of nutrition. We showed that bees "go on a diet" prior to switching from working in the hive when they're young to becoming a forager when they reach the ripe old age of about two to three weeks. What's more, they don't gain it back, despite their honey-laden diet. This was followed by our finding that the insulin pathway is playing an important role in mediating this behavioral maturation, another clue that nutrition is important. This led to our landing a grant from the NIH National Institute of Diabetes and Digestive and Kidney Diseases to study the molecular mechanisms underlying "stable weight loss." We do not anticipate an FDA-approved diet pill in the near future, but if one should arise, we can probably work out an alumni discount…

We also are studying the molecular basis of the honey bee's famous dance language, by which they communicate about new food sources or nest sites. One early success was to show that cocaine makes bees dance more! It's not what you think—or maybe it is? Cocaine boosts a natural endogenous neurochemical system in the honey bee that is involved in the reward system. It appears that cocaine either makes the bee value a food source more highly or increases the "pleasure" bees derive from dancing, we're not sure yet. But we received an NIH Pioneer grant that will allow us to find out. We are studying the effects of cocaine and other types of artificial and natural rewards on the gene networks in the bee brain. We also will compare the reward-related gene networks in different species of bees --from solitary to intermediate to highly social—to see whether the reward system has been changed somehow during social evolution to help support the "me to we" transition that defines honey bees and other social insects.

The third area of emphasis also involves the comparative approach. We are studying multiple species of bees to try to find out more broadly what genetic changes have occurred during bee social evolution. This project began with an award from Roche Applied Science Inc. that allowed us to partially

sequence the genomes of 12 species and was leveraged for an NSF grant. We have some tantalizing results that we are right now validating –sorry I can't be more forthcoming…But I can say that working closely with Hugh Robertson's lab, we are now starting to sequence entire bee genomes, and we anticipate having 15 species within a year! This will be a treasure trove for solving the puzzle of how bee societies evolve. You might also be pleased to know that these sociogenomic studies are only possible because of the superb facilities and staff at our campus genomic center, the W.M. Keck Center for Functional and Comparative Genomics, and great bioinformatics colleagues at the Institute for Genomic Biology.

On the home front, Julia continues to enjoy working at the Spurlock World Heritage Museum on campus—a gem of a place that you should definitely visit the next time you're back. Our son Aaron, 24, works in the public policy office at Google, which sounds like its almost as much fun to work in as our department—and that's saying a lot. Son Daniel, 20, is a junior at Washington University in St. Louis majoring in political science. He really enjoyed summer school at the London School of Economics, and we had a great time visiting him. We were especially impressed by how well he knew the restaurants of London after only a few weeks—but as a hard-core foodie we expected nothing else. Son Sol, 17, is a senior at University High School, and is thinking about his future, in between playing World of Warcraft and/or Magic the Gathering Cards. Sol's Magic card collection was recently upgraded by a generous donation of oldies by an Entomology faculty member, just another sign of the collegiality and broad interests of our faculty.

Andy Suarez. It has been a great year once again for the Suarez lab. We graduated Joseph Laird (who completed a joint Master's with Hugh Robertson) and added a new postdoc, Eli Sarnat, who will be developing a lucid key for ants intercepted in quarantine. In addition we had a good showing at the International Congress of Entomology in Copenhagen and managed to make it back from Borneo with new research subjects and relatively few leech scars...

Jim Whitfield. The Whitfield lab has had a relatively complete turnover in personnel in the last year, so it's time for an update on the goings-on! Josephine Rodriguez finished her Ph. D. last year and is currently an NSF Postdoctoral Fellow at the National Center for Ecological Analysis and Synthesis at UCSB, working on parasitoid food webs. Diana Arias-Penna joined the lab last fall after a stint of university teaching in Colombia. She worked previously at the Humboldt Institute associated with Mike Sharkey's and Brian Brown's Colombian survey project, and for her M. S. completed a revision of Colombian *Urosigalphus* (Braconidae) along with some other projects on Chalcididae. She recently finished a taxonomic paper on New World *Venanus* (with Jim and with Claus Rasmussen, soon to appear in the *Annals of the ESA)*, and is beginning studies on neotropical *Glyptapanteles*, integrating material from the ACG, Colombian and Ecuador projects.

I continue to conduct descriptive taxonomic studies of braconid wasps, especially Neotropical Microgastrinae. Collaborations with the large caterpillar rearing inventories of the Guanacaste Conservation Area (ACG) in Costa Rica, at Yanayacu Biological Station in Napo, Ecuador, and in Papua New Guinea supply vast quantities of new material for both descriptive and phylogenetic work. Other ongoing projects concern comparative aspects of sex determination and mating systems in *Cotesia* wasps, comparative genomics of polydnaviruses in microgastrine wasps (with Mike Strand at the University of Georgia), and large-scale molecular phylogenetics of microgastrine genera (no, we haven't finished that project yet!). After finishing some collaborative work on the *Nasonia* genomes last year, we are on to beginning sequencing of the *Microplitis demolitor* genome (with Hugh Robertson in the department and Mike Strand).

Much of my day-to-day work this year is wrapped up in trying to finish revising, with Sandy Purcell, the (formerly Daly, Doyen and Purcell) *Introduction to Insect Biology and Diversity* for its 3rd

edition. Textbooks are an amazing amount of work! To relax, the occasional evening is spent playing music with the Stewart Berlocher Experience, or at the Irish sessions at Bentley's!

Charlie Whitfield. It was a good summer for me. The department, school, college, Board of Trustees, and perhaps higher authorities decided to promote me to tenured professor! I hope I can continue to live up to everyone's high expectations. Our laboratory is moving on two fronts. First, we are in the middle of a two-year NSF grant that takes a "systems" approach to describe and model the interaction between DNA sequence variation, gene expression in the brain, and behavior, using the honey bee as a model system. This is a project that we started several years ago (without funding) with a genetic cross in the laboratory of our collaborator Yves LeConte in Avignon, France. My former postdoc Amro Zayed (now assistant professor at York University, Canada) collected several thousand bees from this cross, and we are using these to conduct the study. In retrospect, I think I must have been crazy to conceive this project because it requires microarray analyses of about 400 individual bee brains. Thanks to heroic efforts by Jason Ebaugh (and my own return to the bench after a five-year absence), we are about two-thirds of the way through this part of the project. After data collection is completed next year, our lab will move into data analyses and modeling in conjunction with Amro Zayed's new laboratory. We expect this project to reveal both novel (as well as previously described) pathways by which particular genetic variations affect circulating hormone level, gene expression in the brain, and resulting behavioral phenotype.

Our second area of focus has been to develop an approach for a comprehensive (i.e., whole genome) analysis of DNA sequence variation in the honey bee. Variation at the DNA sequence level is, of course, the basis for all genetic traits including resistance to various pathogens and defensive behavior in Africanized bees. The accelerating advances in next generation sequencing means that, today, we can sequence an individual bee's genome for maybe $3000 (compare that to the many millions of dollars a few years ago) and that price is likely to continue to decrease. Studies that examine both within- and between population variation require large sample sizes. Financially at least, this kind of population study of the whole genome is now feasible (and are in progress in studies of human DNA variation). In practice, the technical aspects of dealing with large amounts of sequence data from many individuals are daunting. However, we have made significant progress in this over the last year, focusing on pilot sequence data from four individual honey bee drones. This effort has been conducted largely by my graduate student Chen Fu. Having at least a little preliminary data now, I will be submitting a grant application early next year that will allow us to look at genome variation in 100 or more individual honey bees.

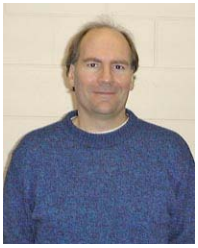
James Sternburg. Jim turned 90 in February 2009!

Jim Sternburg, May Berenbaum, Stewart Berlocher

AFFILIATES AND OTHER ACADEMICS

Marianne Alleyne. Fifteen years! That is how long I have been privileged enough to be associated with this great Entomology Department, first as a grad student now as a research scientist.
I still teach the graduate course in Insect Physiology and it is probably my favorite thing about the job. I also started teaching modules on biomimicry (using nature, specifically insects, as models for design). Recently I became a member of the School of Integrative Biology Online Teaching Team. Together with 4 other SIB members I work with SIB faculty to convert content from their courses to an online format. Sounds easy enough, but to do it right turns out to be a big job. Luckily I enjoy this aspect of the job too.
The main area of my research still involves the study of physiological factors that influence host suitability for parasitoid development. My project using MRI technology, with Rob Mitchell, to view in vivo parasitoid development is also starting to show some interesting results. Together with Lee Solter I also guide graduate student Gwyn Puckett's proteomics project.
This year my service as officer of the Integrative Physiology and Molecular Insect Systems Section of the Entomological Society will come to an end. It has been a long haul since I have been on the executive committee from before the re-organization of ESA. My legacy will probably be that I will make sure that our section will get a more suitable acronym…not sure how I feel about that.
My family is doing very well. Andrew/Omar is a true inspiration to me. He runs an amazing lab while having many administrative duties. The University is lucky to have him. Our son Harmen is in third grade and our youngest son Willem is now in first. They give us great joy.

Susan Balfe. I am in my 3rd year with the Department of Entomology here at the University of Illinois Urbana-Champaign as a research specialist / lab manager for Dr. Barry Pittendrigh. I began my career in entomology in the summer of 1985 as a field technician at Purdue University and from that point forward have been caught by the bug. My career at Purdue continued for another 23 years and has since progressed to UIUC. My experience includes performing scientific entomological research and laboratory management, specifically dealing with research associated with genomics and proteomics as it relates to insect resistance to pesticides and plant defensive compounds.
Aside from insects, some of my other interests include spending time at home working on my wetland and prairie restoration project, woodworking, biological illustration, gardening, volunteer teaching at the local kennel club, and most of all hiking with my dog.



Sam Beshers. I am continuing my lab and theoretical work on division of labor and colony organization in ants, with the help of lab colonies of *Atta texana* and computer simulations.
My wife Lynn Wiley has become Head of Acquisitions in the University library, our son Max has graduated (c'est impossible!) at Oberlin College, and daughter Caroline is enjoying her sophomore year at Uni High. Somehow this spring we acquired a young "Pacman" frog whose contribution to entomology is to eat lots of insects.

Axel Brockmann. I am always late for the blurbs for the Entomology Newsletter. July and August are always the busiest month in the bee season. The end of the season is in sight and you realize which data you still don't have. In the last three weeks Matt McNeill and I have dissected more than 700 honey bee brains, and we are not finished yet. The study is aimed to identify brain regions involved in reward processing in the bee brain.

Career-wise, I have started to apply for faculty position in the last two years. As I am interested in focusing my research on the molecular and neural mechanisms underlying the evolution of honey bee behavior, I recently visited a research institute in India for an interview. Things are looking promising.

Lesley Deem. I came back to the Department of Entomology in January of 2009 to finish my PhD and run the Pollinatarium. I love the chance to share with the students and public that come to visit. It has also been great to spend time with all the volunteers that have helped with the woodland and prairie areas and those that help host the classes that come. This is truly a community education and outreach project. It is only successful because of all those that pitch in. Thank you. And for those of you that haven't seen it yet come on out and visit.

Chris Dietrich. Research in the Dietrich lab continues to focus on the systematics of leafhoppers, with increasing emphasis on the use of Internet-integrated tools for increasing the rate of taxonomic discovery and synthesis. Dietrich and postdoctoral fellow Dmitry Dmitriev completed their revision of New World Erythroneurini, a group comprising >700 described species with the publication of the fourth and largest in a series of monographs including keys, descriptions and illustrations of every known species (Illinois Natural History Survey Bulletin #39(3)). They are now revising a larger and more taxonomically difficult group of microleafhoppers, the genus *Empoasca,* which includes >800 described species worldwide. Former PhD student, Jamie Zahniser, received a 3 year NSF grant to continue as a postdoctoral fellow in the leafhopper lab working on a phylogenetic analysis and revision of the genera of Deltocephalinae, the largest and most economically important subfamily of leafhoppers. PhD student Sindhu Krishnankutty is nearing completion of her study on the biogeography of leafhoppers in Madagascar; her results indicate some unusual patterns of relationship between the Malagasy fauna and those of other continents, with three lineages of endemic leafhoppers having their closest relatives in southern Asia and South America rather than Africa. New PhD student, Therese Catanach, a graduate of Texas A&M, joined the lab this year and is working on the biogeography of grassland Auchenorrhyncha.

Kevin Johnson. This past year has been exciting for new research opportunities integrating genomics and systematics. I've been teaming up with Hugh Robertson to develop new methods of extracting phylogenomic data from single lanes of Illumina sequencing. These Target Restricted Assembly Methods (TRAM for short) have the potential to recover hundreds of genes from Ilumina data without having to perform the steps of genome assembly and annotation first. Needless to see, this is all new ground for me, so I'm learning lots of new techniques, but I'm very excited about the potential of these data in systematics. I've also had the chance to travel to conferences in interesting places, the International Ornithological Congress in Brazil and the International Congress on Phthiraptera in Turkey.

Richard Lampman. Pictures of me and Robert Metcalf, my advisor as a PhD student, conducting attractant research in the field with corn rootworms and spraying attract-and-kill formulations (last experiment).

Hongmei Li. I started working as a Post-Doctoral Associate with Dr. Gene Robinson in April 2010. Currently I am working on two projects: 1) decoding DNA methylation mechanisms in honey bee genome using RNA interference approach, and 2) studying the relationship of aggression behavior and brain metabolism of *Apis mellifera* in *Drosophila* model system. I enjoy the life in Chambana area, and try to keep up with my toddler as well. I will be a new beekeeper next spring, and I am so excited about it!

Haw Chaun Lim. This summer has certainly been a time of transitioning. I wrapped up my PhD studies at the Museum of Natural Science, Louisiana State University, and joined Sydney's lab as a postdoc. Having spent six years in a gulf state, and growing up in a tropical country – Malaysia – I was warned by many that I have to get used to the cooler climate here. I also transitioned from seeking to answer evolutionary questions using avian systems to one based on insects. The work that lies ahead includes discerning whether the collapse of some bumble bee populations in North America is caused by an invasive microsporidial parasite – *Nosema bombi* – that presumably came from Europe, and may expand into other aspects of their biology, including ecological genomics. After the initial settling period, things will get exciting, and I look forward to fruitful interactions with people in this incredible department and campus.

Jeff Lozier. I am a post-doc in Sydney Cameron's lab studying the population genetics and molecular ecology of several bumble bee species and their disease organisms in North America. We recently documented the geographic extent and severity of declines in several bumble bee species, and found that these declines were associated with both high pathogen levels and low genetic diversity. I am currently working to understand the potential pathways of invasion of the pathogen *Nosema bombi* using a combination of museum specimens, field collections, and molecular markers. This summer I will be moving to the University of Alabama (roll tide!) for a faculty position in population genetics, where I plan to continue my research in bumble bee conservation and genetics.

Matthew McNeill. I am a post doctoral researcher with Gene Robinson. He is currently working to identify the neural circuits in the honeybee brain mediating rewarding behavior.

Saber Miresmailli. I am a postdoc in May Berenbaum's and Evan DeLucia's lab. My project is part of the EBI where I study VOC emission in energy crops. In addition to my main project, I conduct several side-projects on different insect-plant systems. In collaboration with Barry Pittendrigh, I also work on novel educational tools using animation and new technologies (including iPhone and iPad - Yeah! I am a Machead). I completed my PhD at the University of British Columbia, Vancouver, Canada and joined this department in January 2010. As part of my PhD project, I designed and built a robot for pest monitoring in greenhouses based on herbivore-induced plant volatiles (www.miresmailli.com). I have a very diverse scientific interest from chemical ecology to toxicology and pest monitoring. I generally consider myself an applied biologist.
While I truly enjoy being in the academia, I also have an active life in the business world. I am a member of scientific advisory panel of EcoSMART Technologies Inc. (The world leader in safe pesticide solutions) where I develop new application technologies for pest management. I am also the president and chief scientist officer of my own company, ECOation Innovative Solutions Inc., in Vancouver, BC which is a consulting and contract R&D company specializing in sustainability, renewable energy and safe agrochemicals.

I love living in CU and I am so happy to be here in this department surrounded by intelligent, bright, kind and caring faculty, staff and students. I just wish those who warned me about the cold and windy winters in Illinois, would have mentioned something about the hot and humid summers as well!

Jim Nardi. The insect midgut is a particularly rich source of stem cells. After examining these cells in *Tenebrio* and *Manduca*, I am now attempting to generate an antibody that recognizes stem cells in all insects, perhaps all arthropods. Striking stem cell pouches ornament the midgut surfaces of most beetle midguts. We are still puzzling over the observation that while all adult beetles have stem cells, only members of certain families display these conspicuous stem cell pouches that suddenly appear at metamorphosis. With a colleague at Oxford University, Jeya Kathirithamby, I am examining cuticular features of Strepsiptera that are associated with the failure of these endoparasites of insects to evoke a host immune response.

I shall be teaching a course on "The World beneath our Feet, An Appreciation for Life in the Soil" at the Osher Lifelong Learning Institute this fall. With a recent expansion of my backyard garden and the addition of new vegetables to the garden, I have had ample opportunities to collaborate with these creatures that dwell beneath our feet . Also this autumn, with help from Mark Bee who works at the Beckman Institute's Imaging Technology Group, I'll be finishing a children's science/natural history book that is set in the backyard of a White-footed Mouse, inhabited by many other creatures, including numerous insects like the tiger beetle shown above.

Charley Nye. I took over as the job of beekeeper at the Bee Research Facility in March of 2010. It was a wonderful summer for honey production, but a sad year as we saw the entrance of Small Hive Beetle to the University bee hives. Another burden placed on our hardworking little experiment subjects, but a burden we will try to help them handle in the coming years. As for me, when I'm not beekeeping, I enjoy playing rugby, being outside, and playing music with my lovely girlfriend.

Leellen (Lee) Solter. The past two years have sped by with work on bumble bee decline in collaboration with the Cameron lab, and on honey bee diseases (with welcome assistance from the Robinson lab). Nils Cordes completed his MS thesis on bumble bee pathogens, having examined specimens from sites across the U.S. Our honey bee research focuses on the interactions of viruses with two microsporidian pathogens that cause “Nosema disease”, as well as comparison of the development of the two microsporidian species in the honey bee host. Post-doctoral researcher Wei-Fone Huang is leading this research.

Work on biological control of the gypsy moth continues in collaboration with colleagues in Bulgaria, Austria and Germany. This summer (2010), I was able to make a return visit to the Bulgarian sites where our initial work on host specificity of several gypsy moth pathogens began in 1997. Ph.D. student Gwyn Puckett is currently tackling questions on immune response of gypsy moth larvae to naturally occurring pathogens. I’m also continuing work with the USDA Forest Service on microsporidian pathogens of several species of predatory beetles that were imported from Asia for control of the hemlock woolly adelgid.

On a personal note, Phil and I have (at last) finished the major structural aspects of our old-house remodel, just in time to acquire a neglected cabin and some land at the Salt Fork River in Vermillion County. We’ve been replacing walls and ceilings in the cabin and building a ‘canoe shed’ that we hope will also function as a gathering place for friends and family, so please come on out to the countryside! Our son, Ravi, is (quite happily) serving his second year in the Peace Corps in Benin, West Africa.

Weilin Sun. I am grateful that Barry hired me from Purdue. I worked for Barry at Purdue for four years before I joined him again at Illinois. I have worked with Barry on projects with cowpea bruchid, *Drosophila* and lice. I got my PhD from Purdue also. My main expertise is in molecular biology bench

work. I am originally from China, married with a daughter and a son. Since my wife works in Decatur, we selected our new home in Monticello, IL.

Kent Walters. I have a long-standing interest in physiological and biochemical responses to environmental stresses, including extreme temperature, dehydration and exposure to chemical agents . During my doctoral research, I studied the physiological adaptations that insect possess to survive subzero temperature and in the process discovered a new class of antifreeze molecule that function similar to antifreeze proteins. As a postdoctoral research associate in Dr. Barry Pittendrigh's lab, I have been studying the effects of methamphetamine on metabolism and behavior in *Drosophila melanogaster*.

Alex Wild is just finishing his second year in the lab as a postdoc working with Jim and (especially) **Paul Marsh** on NSF-funded revisionary, molecular phylogenetic studies and LucID interactive keys for neotropical *Heterospilus*, a huge genus. In his "spare time" he continues to work with ants, finish off molecular phylogenetic papers with the beetle AToL project (his previous gig) and photograph and blog about insects.

Art Zangerl. It has been a crazy year for me. Initially, things went very well. Our work on wild parsnips and parsnip webworms in New Zealand received a major boost when Tania Jogesh joined the lab as a doctoral candidate. She has been phenomenal! Her involvement has become crucial as I've been handed a rather formidable handicap this summer. While collecting webworms this Spring near Kankakee, I became disoriented. It turns out that I have brain cancer of the worst flavor (glioblastoma multiformae). Much of my time since has been spent recovering from brain surgeries (2) and coping with chemo and radiation. It won't be clear how extensive my impairments will be after treatment, but I'm hopeful that I will still be able to contribute some to the project. The only bright side to this is that I've found the perfect excuse to relieve myself from doing reviews!

Art's 58th birthday party, September 19, 2010 (with Robert Orpet, Henry Pollock, Judy Parrish)

For updates about Art and to show your support see http://www.caringbridge.org/visit/arthurzangerl

STAFF

Todd Fulton. Greetings! All continues to go well in the Insectary. Who would have thought when I took the part time job as a student in college 20 plus years ago, that I'd still be maintaining the Insectary. I continue to work full time as a R.N. at the Developmental Service Center, a challenging and rewarding position. My children that grew up drawing pictures in the Insectary rooms while I worked now have children that want to come with "grandpa" to draw pictures and look at the "bugs". I am thankful for the opportunity to work here at the Department of Entomology.

Audra Weinstein. I hit my 20 year mark at the U last December (2009) and will celebrate my 4 year anniversary in Entomology in January! During the past few years we've said goodbye to many graduates who are starting on new adventures. I wish them all the best.
We celebrated the Entomology Centennial last year, which was a blast to work on and see those "before my time". Dot and Jackie were able to make an appearance too.

Karen Trame, pictured at right, mans the registration desk at EntCent 2009.

ESA Mixer 2008/2009







From upper left: May Berenbaum and chocolate fountain; Hannah Leskosky and Buzz the Giant Talking Bumble Bee; Joel Coats' Alejandro Valerio; Dennis Fielding; Larry Hanks (center) with John Tucker, Emerson Lace. Matt Ginzel, Liz Graham, Matthew Richardson, Rob Mitchell; Carol Anelli and Jay McPherson

Fred Larabee, Chad Tillburg, Chris Smith, Elissa Suhr,
Andy Suarez, Jo-anne Holley at the 2009 Indianapolis ESA Mixer.

ILLINOIS ENTOMOLOGISTS IN THE NEWS

6/21/2010: The genome of the human body louse is published by a consortium of scientists including U of I professors Barry Pittendrigh, May Berenbaum, and Hugh Robertson, postdoc Weilin Sun, and recent department alum Reed Johnson (PNAS).

6/6/2010: If you haven't already read May Berenbaum's recent book, The Earwig's Tail, have a look at the preview published in Google Books!

4/27/2010: The Robinson lab contributes to a study that indicates a conserved genetic basis for division of labor in social Hymenoptera (Proc. R. Soc. B).

1/15/2010: Drs. Hugh Robertson, James Whitfield, and May Berenbaum contribute to the publication of three genomes of the parasitic wasp genus *Nasonia* (Science).

1/1/2010: Members of the Hanks lab review the causes and consequences of cannibalism in non-carnivorous insects (Annu. Rev. Entomol).

12/20/2009: Department head May Berenbaum discusses the increasing use of fly decals to improve hygiene in men's restrooms (NPR).

10/6/2009: Emeritus professor Dr. Gilbert Waldbauer publishes "Fireflies, Honey, and Silk," a book documenting the beneficial impact of insects on human society. The text is illustrated by fellow department member Dr. James Nardi. .

8/25/2009: Drs. Reed Johnson, May Berenbaum, and Gene Robinson identify a new marker for colony collapse disorder and a potential cause (PNAS, Time).

8/17/2009: The Robinson lab links inherited aggression in Africanized bees to genes and behaviors that are induced by environmental factors in European honey bees (PNAS).

8/14/2009: Department head May Berenbaum discusses the agricultural - and the cultural - impacts of honey bees in a two-part podcast (Scientific American: Part 1; Part 2). Also, click here to read an online forum where Dr. Berenbaum discusses the use of DDT to combat malaria (Public Radio International).

8/3/2009: The Electronic BeeSpace Project is featured on ESA's Buzz of the Week.

7/22/2009: Congratulations to Professor Gene Robinson, who has been elected as a Fellow of the Entomological Society of America.

7/7/2009: Postdoctoral researcher Dr. Jeff Lozier humorously illustrates the pitfalls of ecological niche modeling (J. Biogeogr.).

6/23/2009: Congratulations to department head May Berenbaum for taking first place in the National Pollinator Week recipe contest with her original dessert recipe, "Apiscotti."

5/2009: The Department of Entomology's newest outreach effort, the Pollinatarium, has opened its doors. This small museum is located south of the university's Arboretum and is dedicated to educating the public about the natural history of pollinators such as bees, bats, and butterflies. The Pollinatarium will be open beginning May 30th, every Saturday and Sunday from 1-4 PM. Click here to watch a photoessay by the News-Gazette, or visit the Pollinatarium website for more information!

4/28/2009: The photography of postdoctoral researcher Dr. Alex Wild is featured in a New York Times slide show presentation on ants (NYT).

4/2/2009: The Cameron lab pioneers a new technique to non-destructively sample genetic data from museum specimens, and demonstrates that populations of bumble bees have fragmented and lost genetic diversity as numbers have declined (Mol. Ecol.).

2/12/2009: Professor Jim Whitfield discusses how parasitic wasps use a virus to subdue their hosts' immune system. (Nature News).

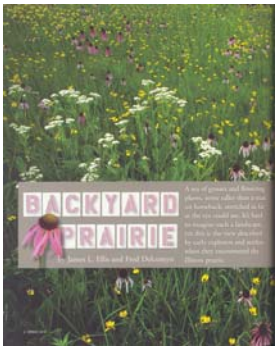
2/10/2009: Research of the Robinson lab is humorously featured on a segment of the Colbert Report. (Comedy Central).

2/2009: The University of Illinois Library, in conjunction with the Chicago Field Museum, is digitizing 175 volumes on the taxonomy and life history of the Hymenoptera! As entomologists know well, the Hymenoptera -- the ants, bees, and wasps -- contain a staggering amount of diversity and the addition of these books to our digital collections is exciting news.

1/2009: To celebrate its centennial, the Department of Entomology published its first calendar, titled 'Orange & Blue Insects.' This 2009 calendar marks important entomological dates and features images of insects with natural patterns of orange and blue colors.

Marianne Alleyne. Participant Parent and creator of "Monarchs in Space" blog for Leal School's Monarchs in Space program. On November 16, 2009 three monarch caterpillars from Monarch Watch lifted off with the space shuttle Atlantis (STS-129), destined for the International Space Station. Thousands of "Monarchs in Space" participants raised monarchs in the classroom or at home and watched as the monarchs on the ISS completed their development and emerged as adult butterflies - the first monarchs in space! M was interviewed by WCIA. http://lealmonarchsinspace.yolasite.com/; http://illinoishomepage.net/search-fulltext?nxd_id=118161

Fred Delcomyn. First place winner in the Champaign County Soil and Water Conservation District 1st annual Photo Contest in the Close Up Conservation division was Fred's "Autumn on the Prairie". 2009



Fred also had an article published, with James Ellis from INHS, in *Illinois Steward* – Spring 2010, Vol. 19 no. 1, pp. 6-10, "Backyard Prairie". The article describes the planting and growth of his prairie and features a dozen and a half of Fred's photos.

Media news!

(1) Stoltz, D. B. and J. B. Whitfield. 2009. Making nice with viruses. *Science* 323: 884-885.
This Perspectives paper in Science reviewed the recent evidence that polydnaviruses in parasitic wasp arose from nudiviruses, and proposed that the definition of what a virus is and is not needs re-examination.
Stoltz and Whitfield (2009) *Science* was reviewed in the following articles (among many others):

ScienceNow, 13 February 2009, R. Zelkowitz: "Ancient Virus Gave Wasps their Sting"
NewScientist, 13 February 2009, E. Calloway: "Ancient virus gave wasps power over caterpillar DNA"
e! ScienceNews, 13 February 2009, D. Yates: "What is a virus? Research suggests a broader definition may be needed"

(2) *Nasonia* Genome Working Group. 2010. Functional and evolutionary insights from the genomes of three parasitoid *Nasonia* species. *Science* **327**: 343-348.
(This paper on three new genomes from the parasitoid wasp genus *Nasonia* contains contributions from Jim Whitfiel;d, Hugh Robertson and May Berenbaum.
Nasonia Genome Working Group (2010) *Science* was reviewed in the following articles:
Science, 15 January 2010, Elizabeth Pennisi, "The Little Wasp That Could"
Nature online news, 14 January 2010, Brendan Borrell, "Parasitic wasps' DNA laid bare"
ABC News, 15 January 2010, Dani Cooper, Nature's "smart bomb" genome revealed
The Independent, 15 January 2010, Steve Connor, "Voodoo wasps that could save the world"
San Francisco Chronicle, 14 January 2010, David Perlman, "Tiny wasp with potential for big impact"
ScienceDaily, 14 January 2010, "Parasitic wasps' genomes provide new insights into pest control, genetics"
Welt Online, 14 January 2010, "Wespen gegen Schädlinge: Nasonia-genome entziffert"
Discovery News, 14 January 2010, Robert Lamb, "Parasitic wasps' genome may yield new drugs"
Die Presse.com, 14 January 2010, "Eingeschleus: das Gen des Parasiten"
CBC News, 14 January 2010, "Scientists decode genome of helpful wasps"
Sydney Morning Herald, 15 January 2010, Samuel Cardwell, "Tiny wasps' genes hold big promise"
Top News (NZ), 15 January 2010, Ketan Mukherjee, "DNA of wasps mapped by scientists"

(Selected!) news Items on the Body Louse genome project


UN INSECTE à la page
Le Pou du corps
grande histoire, petit génome

Discover Magazine : Page 14[1]November 2010 issue
IndiaReport : Lice genes 'decoded' June 29, 2010
Science Codex : Of Lice and Men: the book on the human body louse genome June 28, 2010
ZeeNews : Lice genes 'decoded' June 28, 2010
Bio-Medicine : Of lice and man: Researchers sequence human body louse genome June 28, 2010
e! Science News : Of lice and man: Researchers sequence human body louse genome June 21, 2010
USA Today: Battle against lice may be aided by new genome study June 21, 2010
Discover : Will Unlocking the Genome of Body Lice Help Us Destroy Them? June 21, 2010
Nature News : Sequencing Napoleon's nemesisJune 21, 2010
Science Alert : Scientist decode lice genes June 28, 2010
MedlinePlus : Genome for Human Body Lice Unlocked June 21, 2010
Business Week : Genome for Human Body Lice Unlocked June 21, 2010
Money Times : Sequencing of body lice genome successful[17]June 22, 2010
Washington Post : Researchers ID louse genome June 21, 2010
Scientific American : Full genome sequence shows body lice have lousy sense of smell June 21, 2010
MSNBC News : Watch out lice, researchers are gunning for you June 21, 2010
Wales Online : Research discovers the Achilles' heel of head lice[21]June 22, 2010
CTV News : Geneticists work to map body lice genome[22]Dec 9, 2005
Sync : Genome of human body lice sequenced in step that could lead to better control, repellant[23]June 21, 2010
The Globe and Mail : One step closer to eliminating lice[24]June 21, 2010
Swiss Institute of Bioinformatics : Sequencing of the human body louse genome[25]June 21, 2010
EurekAlert! : Sequencing of the human body louse genome[26]June 22, 2010
ScienceDaily : Sequencing of the Human Body Louse Genome: Important Step Toward Control of Disease-Vector Insect June 22, 2010
ScientistLIVE : Sequencing of the human body louse genome[30]June 21, 2010
R&D Mag : Sequencing of the human body louse genome[31]June 22, 2010
Tribune De Genéve : Le génome du pou séquencé: l'Université de Genève impliquée[32]June 21, 2010
Le Soir Echos : Génétique Le génome du pou séquencé[33]June 24, 2010
TV5 Monde : Séquençage du génome du pou, un fidèle compagnon de l'homme[34]June 21, 2010
Vince Smith : First draft of the human body louse genome released![35]Feb 7, 2007

LA Times: Hot genome news: The body louse genome is sequenced, and Ozzy Osbourne's is about to be June 22, 2010
Science : ScienceShot: Body Louse Genome Reveals a Vulnerable Parasite June 21, 2010
El Pais.com : El piojo, insecto de pocos genes June 22, 2010
NPR : Mapping Louse DNA Could Help Fight The Parasite[39] June 23, 2010
BBC : Research hope over lice treatment with antibiotics[40] June 21, 2010

PUBLIEKE INTERESSE IN DE WETENSCHAP IS BELANGRIJK VOOR MAY BERENBAUM EN HAAR ONDERZOEK

Insecten zijn benaderbaar, grijpbaar'

Entomologe May Berenbaum zet zich in voor publiek begrip van de wetenschap. Haar onderzoek naar de bijenverdwijnziekte leverde veel betrokkenheid op, maar ook een wijze les voor de werking van media.

'Als hij een dode rat in een bijenkast had gelegd, had hij ook resultaat gevonden'

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PNAS：弄清蜜蜂崩溃的线索
中国生物技术信息网 - 1 hour ago
May Berenbaum及其同事分析了蜜蜂肠道的基因表达。蜜蜂的肠道是杀虫剂解毒和免疫防御的主要地点。这组科学家比较了美国东海岸和西海岸CCD蜂群的蜜蜂和来自健康蜂巢的 ...

蜂群消失谜团新突破 核酶体遭病毒破坏
大紀元 - Aug 25, 2009
这项研究的主持人，伊利诺大学的昆虫学家伯亨鲍女士（May Berenbaum）利用微阵列分析（Microarray）比对健康蜜蜂与在蜂箱采集到的CCD死亡蜜蜂的所有基因序列，结果 ...

Arı ölümlerinin sebebi bulundu
Superonline - Aug 25, 2009
Illinois Üniversitesi'nden May Berenbaum ve Reed Johnson, araştırmaları sonucunda arıların protein sentezindeki bozulma yüzünden öldüklerini belirledi. ...
Superonline

Bijensterfte mogelijk veroorzaakt door overwerkte ribosomen
C2W LabNews - Aug 25, 2009
"We hebben het hier over een rokend vuurwapen, en we hebben het kogelgat", aldus onderzoeksleider May Berenbaum van de University of Illinois. ...

EEUU: Hallan nueva pista sobre desaparición de abejas
Houston Chronicle - Aug 24, 2009
Uno necesita de proteínas para sobrevivir", señaló la directora de entomología de la Universidad de Illinois, May R. Berenbaum, en un comunicado. ...
EEUU: Hallan nueva pista sobre desaparición de abejas Al Día (Texas)
all 6 news articles » Email this story

Hvorfor dør biene?
TV 2 - Aug 25, 2009
... er nødvending for enhver organismes overlevelse. Du trenger protein for å leve, sier May R. Berenbaum, som leder entomologi-avdelingen ved universitetet.

Ученые нашли причину массового вымирания пчел на пасеках США и Европы
РИА Новости - Aug 25, 2009
... и отбросить из рассмотрения ненужные гены в ходе анализа", - сказала ведущий автор публикации Мэй Беренбаум (May Berenbaum), слова которой приводит ВВС. ...
РИА Новости

Descubrimiento sobre las abejas de miel que tienen el desorden del ...
USDA (Servicio público) - Aug 24, 2009
Evans fue un miembro de un grupo de investigadores que incluyó entomólogos May R. Berenbaum, Reed M. Johnson y Gene R. Robinson de la Universidad de ...

LIFE ZONE BY ROBERT R. DUNN

The Next Wave

What makes an invasive species stick?

16 | NATURAL HISTORY October 2010

LIKE MANY BIOLOGISTS, Andrew V. Suarez, of the University of Illinois at Urbana–Champaign, struggled for years with the question of which colonizing organisms fail and which succeed. He studied it the hard way—with fieldwork and lab experiments—until 1999, when he found some brown jars. He found them the way a child hopes to find treasure, accidentally. He had gone to the Smithsonian Institution National Museum of Natural History's National Insect Collection to look for early samples of Argentine ants collected in the United States or at its borders. He hoped to find out how vintage specimens of Argentine ants were related to the existing populations: would they be kin to the first successful queens—or, perhaps, evidence of other, less successful attempts?

Ted R. Schultz, a myrmecologist who works in the museum, pointed Suarez to samples that had been collected throughout the twentieth century. There, among many thousands of jars of insects labeled with taxonomic notes, locations, and dates, Suarez ultimately found relatively few samples of Argentine ants. But what he found besides them was, to his mind, far more interesting: some of the ethanol-filled jars were jammed with vials of ants collected at ports of entry in the eastern U.S. from 1927 to 1985. They were ants that border agents, tired, overworked, and overwhelmed, had picked from plants being shipped into the U.S. Could those ants be identified as members of species that had failed or succeeded as colonists, and if so, could the specimens be used to compare the two groups? As curious as Pandora before him, Suarez opened the jars.

In the jars and vials were 394 separate samples of ants. Suarez solicited the help of two friends, ant ecologist David A. Holway of the University of California, San Diego, and Philip S. Ward, guru of ant gurus, at the University of California, Davis. Altogether they identified 232 distinct species, many of them completely new to science. Twenty-eight of those species had survived and established themselves somewhere in the U.S. (from separate introductions that occurred either before or after the arrival of the interdicted ants). The rest, as far as was known, had never made it through.

Suarez considered the traits possessed by each of the ant species in an attempt to see what might have predisposed some of them to survival. He measured whether they were big or small. He examined whether each lived in the canopy or on the ground, and whether they were from one subfamily or another. He also looked at a simpler possibility: that "survivor species" tended to be those introduced more than once. The evidence in the jars showed, for example, that Argentine ants had arrived at least twice. Were successes just a consequence of the number of tries? Might history, at least of ants, be a consequence of persistence—try and, as your mother might have said, try again?

The theory that surviving species tend to be those that were introduced more than once held up, on average. There were also other patterns. Ants that live exclusively in tree canopies, for example, were very unlikely to succeed unless they were versatile in their choice of host trees. But one conclusion seemed inescapable: the more species

Colloquium Speakers

Spring 2009

Jessica Hellman, University of Notre Dame, *Constraints on geographic range change and the need for a new conservation paradigm*
Claudio Gratton, University of Wisconsin – Madison, *Midge Madness! Quantifying linkages between lake and land*
Heidi Appel, University of Missouri, *Molecular signatures of plant-insect interactions*
Scott Powell, University of Missouri, St. Louis, *The evolution of specialization in insect societies: Insights from the ant genus Cephalotes*
Barry Alto, UIUC, *Ecological interactions alter mosquito dynamics and susceptibility to virus infection*
Aaron Gassmann, Iowa State University, *Fitness costs of insect resistance to Bacillus thuringiensis*
Fred Nijhout, Duke University, *The control of polyphenic development in insects*
Ann Ray, UIUC, *The sweet smell of Cerambycidae: pores, pits, pheromones, and phylogenies*
Lee Dyer, University of Nevada, Reno, *Biotic and abiotic gradients in plant-caterpillar-parasitoid interactions*
Marianne Alleyne, UIUC, *Biomimetics: Insects did it first*
Jeff Lozier, UIUC, *Population genetics, pathogen levels, and current distributions of North American bumble bees*
Patricia Wittkopp, University of Michigan, *Connecting intraspecific polymorphism to interspecific divergence: genetics of pigmentation evolution in Drosophila*
Josephine Rodriguez, UIUC, *Exploring the biodiversity of parasitoid wasps in Costa Rica: integrating ecological, morphological and molecular data for microgastrine braconids*
Joel Levine, University of Toronto at Mississauga, *Genetic basis of social behavior in Drosophila melanogaster: Could it bee?*
Stephen Dobson, University of Kentucky, *Endosymbiotic Wolbachia bacteria in mosquitoes: population-level effects of natural and artificial symbioses*

Fall 2009
Cindy McDonnell, UIUC, *Sensing a change—the evolution of cytochrome P450 genes in Drosophila that respond to xenobiotics*
Aaron Birk, Philadelphia City Paper, *"The Pollinator's Corridor", a graphic novel*
David Wagner, University of Connecticut, *Threats posed to rare or endangered insects by invasions of non-native species*
Corrie Moreau, The Field Museum/Chicago, *Unraveling speciation and diversification patterns across the ants*
Lee Solter, Illinois Natural History Survey, *"Gipsy Moth Circles the World" ©: An international research program on gypsy moth microsporidia*
John Clark, University of Massachusetts, *Mechanisms and monitoring of permethrin resistance in human head lice*
Keyan Zhu-Salzman, Texas A&M University, *Gaining molecular insight into insect adaptation to dietary toxins*
Coby Schal, North Carolina State University, *Microbial flatulence and bug farts as insect semiochemicals: Lessons from cockroaches and mosquitoes*
Juan Luis Jurat-Fuentes, University of Tennessee, *Prospecting insects for enzymes to improve lignocellulosic biofuel production*
Jeremy Allison, Louisiana State University, Baton Rouge, *Evolutionary ecology of moth pheromone communication: Acceptance of a paradigm without empirical support?*
Dan Potter, University of Kentucky, *Japanese beetle-plant interactions*
John Marlin, *Entomology goes to Springfield: Illinois' scientific and political response to the Asian tiger mosquito (Aedes albopictus)*

Colloquium Speakers

Spring 2010

Christian Krupke, Purdue University, *Biology: an unexpected challenge for resistance management in transgenic crops*
Anand Ray, UC Riverside, *Manipulating insect behavior with odors*
Stephen T. Trumbo, University of Connecticut, *Parental care, age and juvenile hormone in a biparental burying beetle*
Elizabeth Graham, UIUC, *Chemical communication in longhorned beetles: Aggregation and eavesdropping*
Armin Mozcek, Indiana University, *On the origins of novelty and diversity in development and evolution: a case study on beetle horns*
Allard Cossé, Peoria, IL, *Overview of the insect pheromone and semiochemical research at NCAUR*
Paula Mitchell, Winthrop University, *Feeding behavior of leaffooted bugs and stink bugs (Hemiptera: Heteroptera)*
Sam Heads, UIUC, *Fun with fossils: insect evolutionary history and the importance of stem groups*
Carol Von Dohlen, Utah State University, *Phylogenetic study of host alternation in aphids: origins, losses, and diversity*
Sara Via, University of Maryland, *Genetic mechanisms of ecological speciation in herbivorous insects*

Fall 2010

Douglas Tallamy, University of Delaware, *The impact of non-native plants on the species richness and community structure of insect herbivores*
Michelle Arbeitman, University of Southern California, *Genetic and genomic studies of Drosophila reproductive behaviors*
Dan Hahn, University of Florida, *Speciation and life history physiology in the apple maggot: metabolic mechanisms mediate the miserable months*
Robert Marquis, University of Missouri, *Building an arthropod fauna on oak trees: leaf quality, plant architecture, and the role of leaf-tying caterpillars*
James Traniello, Boston University, *Caste, ecology, and social brain evolution in the hyperdiverse ant genus Pheidole*
Tom Seeley, Cornell University, *Swarm intelligence: how honey bees choosing a home achieve a high collective IQ*
Lynn Riddiford, Howard Hughes Medical Institute, *Juvenile hormone and the timing of Drosophila metamorphosis*
David Hoekman, University of Wisconsin, *How midges connect lakes and the surrounding landscape*
Adam Wallner, Ph.D. Candidate Exit seminar
Brian Johnson, University of California, *Integrative approaches to organization of work in the honey bee*
Dhruba Naug, Colorado State University, *The interaction between behavior and disease dynamics*
Eileen Hebets, University of Nebraska, *The evolution of complex courtship signaling in wolf spiders*

GRADUATE STUDENTS

Tolulope Agunbiade. I am from Nigeria. I received my Bachelor's degree from the University of Ibadan, Nigeria and my Master's degree from the University of Ghana, Legon, Ghana. I worked at the Noguchi Memorial Institute for Medical Research, Ghana and later at the Africa Rice Center (at the International Institute of Tropical Agriculture) Ibadan, Nigeria before coming to UIUC last Fall for my PhD. Having a supportive husband and family has made settling in very easy for me. Since joining the Pittendrigh lab, I have been involved in very interesting projects including editing and doing voice over for extension videos in English and in my native language, Yoruba. I am interested in studying the population genetics of cowpea pests. I look forward to a rewarding and fulfilling study here at UIUC.

Diana Arias-Penna. I am from Colombia and my main interest is the diversity of Neotropical parasitoid wasps Microgastrinae (Braconidae: Hymenoptera). These wasps have been used in successful biological pest control programs, making it one of the most important groups. At the moment I am starting my 2nd-year PhD studies under the tutelage of Dr. James Whitfield. My thesis research is focused on *Glyptapanteles*, one of the largest and most common genera of the Neotropical Microgastrinae fauna, but its phylogeny remains uncertain. I will assess the correspondence between morphological and barcoding data in order to attain a more accurate definition of boundaries among species and the first robust phylogeny of *Glyptapanteles*. I attended the HYM course 2010 at Rocky Mountain Biological Laboratory RMBL, Gothic CO, which (apart from enjoying the beautiful landscape) gave me the opportunity to exchange information with students who share the same interest in insects.

Emilie Bess. I began the PhD program in the Department of Entomology in 2005 and I'm happy to say that I am now wrapping up my dissertation. My research focusses on the biogeography and evolution of a genus of endemic Hawaiian bark lice. I was able to document some very interesting and unexpected patterns of diversification in the group, in addition to discovering some new species. I recently started working full time for the USDA in the Plant Protection and Quarantine office in Seattle. I identify the arthropod and snail pests that are intercepted at the ports in Washington and five other states. It's a lot of fun and allows me to continue working on bark lice as my area of specialization.

Juraj Cech. The summer of '09 was truly a wild ride. In the effort to collect bumble bees for the *Bombus* decline project, I was lucky enough to travel back and forth across the eastern half of the U.S. Our collection trips took us from New Hampshire to Texas and from Nebraska to North Carolina. One thing that really struck me, that I remember specifically, is traveling at the speed limit of 65 mph on country roads in Kansas. To travel northwest, we had to go north, then west, over and over again because the only roads were between perfectly rectangular North-South crop fields. Then, I began working on my Master's project and transitioned to being a graduate student. First, it was a difficult transition for undergraduate studies but, now, going into my second year, it's all coming together. We've found that the color patterns of bumble bees are composed of elements that occur on the dorsal surface of the bee. These elements have boundaries that occur in the same areas from bee to bee both inter- and intra-specifically. These boundaries also occur overwhelmingly on morphological divisions, for example, between tergites on the abdomen. The study goes on!

Michelle Duennes. In May of 2010, I finished my Masters in Sydney Cameron's lab on Mesoamerican bumble bee systematics and color pattern evolution. For my PhD, I am continuing to work in Dr. Cameron's lab focusing on the population genetics of one of the species I worked with for my Masters, *Bombus ephippiatus*. While finishing up my thesis in the spring, I also became a skater for the Twin City Derby Girls, a roller derby league in Champaign-Urbana. My league-mates know me as Polly Nator.

Patrick Halbig. I am currently finishing my dissertation that primarily focuses on the biology of anopheline malaria vectors in an agricultural region in Kenya. I have also conducted field experiments throughout Illinois on the epidemiology of West Nile virus transmission. I have also recently presented research focusing on the history of evolutionary theory within various educational contexts.

Terry Harrison. Terry Harrison is interested in biosystematics of Nearctic microlepidoptera. His present research, on microlepidoptera of Illinois hill prairies, also incorporates a conservation component, in testing hypotheses of optimal reserve design. He is also the scientific coordinator for BeeSpotter, a citizen-scientist-based initiative for monitoring bees in Illinois. In addition, he is collaborating with Donald Davis and Charles Mitter on LepTree, which is part of the Assembling the Tree of Life project.

Jo-anne Holley. Since arriving here two years ago, I've settled on a project investigating the evolution of life history traits in the ant genus *Linepithema*. This group of ants includes the notorious Argentine ant, a global pest species. I'll be modeling the evolution of traits associated with colony growth and social organization in a phylogenetic context. The goal is to elucidate which traits allowed the Argentine ant to be a successful invader.

Benjamin Hottel. This will be my second year as a Master's student working with Dr. Sue Ratcliffe on dark-eyed fruit flies. I am looking into visual and volatile cues to monitor and control this pest.

Sarah Hughson. I am a first year Master's student studying the western corn rootworm beetle with Dr. Joseph Spencer in UIUC's Illinois Natural History Survey. I am studying the behavior and ecology of the western corn rootworm beetle in experimental corn and soybean fields as well as grower fields. As an undergrad I developed a strong interest in invertebrates and their behavior. I received my Bachelor's of Science from Saginaw Valley State University in Saginaw, Michigan.

Tania Jogesh. I am a second year PhD student in the Berenbaum lab. I moved from Ottawa, Ontario where I completed my Masters working on invasive plant biology. I am especially interested in the evolution of invasive weeds under novel selection pressures. Art Zangerl and May Berenbaum had a fantastic project underway, tracking the evolution of wild parsnips in New Zealand after the recent introduction of its coevolved herbivore, parsnip webworms, and they were looking for a graduate student! This fantastic opportunity along with the chance to travel to NZ was enough to move me from Ottawa to Urbana-Champaign.
I moved to CU in June 2009 and began fieldwork the next day! I have completely enjoyed working with Art and May on wild parsnips (minus the burns), parsnip webworms and pollinators, learning about American idiosyncrasies and enjoying the cultural diversity of my lab. Even though, weeds tend to grow in largely unattractive places, I think I might have lucked out in finding a weed that invaded NZ! I look forward to another field season soon.

Jungkoo Kang. I am studying mathematical modeling under the guidance of Dr. David Onstad. I believe that I can help to eradicate starvation in the world by improving crop production systems. For this reason, I study the dynamics of insecticide resistance in pests attacking field crops by using mathematical

models. Professors in the UIUC Entomology Department give their 100% during their lectures, and that inspires me. Entomology undergraduate students, especially members of the Club Insecta, have great understanding in Entomology because they are deeply involved in research. They always provide fresh ideas for my research. Needless to say, research in the Entomology Department opens new possibilities in biological science.

Aron Katz. As an undergraduate, I worked on a project with my entomology professor, Dr. Donald Chandler, which looked into measuring water quality by monitoring the distribution of aquatic insects. Upon graduating from the University of New Hampshire in 2007 with a degree in Biology, I spent a few months as an Intern for the United States Geological Survey in Hawaii.
I studied springtails as indicators of soil quality, and distributions of invasive yellowjackets. After completing my internship, I returned home and worked as an antibody purification technician for a biopharmaceutical company. Although this was a valuable experience, I quickly realized that my true passion was for working in the field of entomology. In the summer of 2009, I helped Dr. Richard Weinzierl of UIUC, with his project concerning the management of Corn Earworm. This was a great experience, and only reinforced my ambitions to return to school for Entomology.

It is now 2010, and I have just started my first year as an Entomology Masters student at UIUC. I am currently working with my advisor, Dr. Felipe Soto-Adames, on projects regarding Collembolan Systematics. I am also interested in conservation ecology, and using insects as key indicators of environmental stress. The flatness of Illinois may take some time to get used to (I'm from PA), but otherwise I'm definitely looking forward to spending the next few years here at Chambana!

Sindhu Krishnankutty. I am a PhD candidate in the lab of Dr. Chris Dietrich. This is my sixth year in the Department. I received Masters degree from the same lab in 2006. My PhD research is to understand the origin of leafhoppers in Madagascar using integrated approach of phylogenetic inference, biogeographic and dating analyses. Last year, I finished prelims and now preparing toward completion of dissertation.

Doris Lagos. I am a doctoral candidate under Dr. David Voegtlin. My research is about aphids. I study the taxonomy and systematics of *Aphis*. The classification of the genus *Aphis* needs to be revised because its solely taxonomic studies are often ambiguous due to the complexities of convergent morphologies and cryptic species. Species within this genus are difficult to discriminate using only morphology and most dichotomous keys rely on host plant association to identify species. However, molecular studies together with morphological, biological, and ecological information can aid accurate identification and reveal the identity of undescribed species. Therefore, the main objective of my research is to contribute to the improvement of aphid classification system and to the knowledge of biodiversity of aphids. Outside of research, I love to spend time with my son, David Alejandro and husband, Tony Kutz. Also, I enjoy giving presentations about insects especially for elementary school kids, cooking and dancing.

Fred Larabee. Shouldn't filming ants at 80,000 frames per second make time slow down? It's hard to believe that I am starting my third year in the department. For the last two years, I've been working in Andy Suarez's lab, researching the mechanical and physiological adaptations of trap-jaw ant mandibles. I will finish this project up this fall and will transition to a broader comparative study of trap-jaw ant mandible snap kinematics and behavior for my PhD. I've been fortunate to spend time collecting at the Archbold Biological Research Station and, just last month, completing the Ant Course in Borneo.

Over the last year, I've served as EGSA's outreach coordinator, helping to spread the love of insects to children during at least a dozen elementary school and community events from Champaign to Mattoon. I'm looking forward to continuing to serve in the coming year. I was also on the National Champion Linnaean Games Team in 2009, and captained the 2010 team (though we didn't make it past regionals).

When not in the lab, I continue to explore Champaign County by bicycle, brew beer, host dinner and board game parties. Melissa and I have just been introduced to the miracle of grilling and hope everyone can make it over sometime before the cold, unforgiving grip of winter forces us to stay inside.

Ling-Hsiu Liao. In Dr. Berenbaum's lab, I have become fascinated by the metabolic capacity of honey bees to detoxify xenobiotics such as pesticides and phytochemicals. I have chosen to focus on esterase activities in honey bees. Esterases form one group of detoxifying enzymes that could break down lipids into alcohols and acids. I hope my study will further develop ways to improve the health of honey bee colonies and understand the impacts of pesticide usage.

Tara McGill. "The voyage of discovery lies not in finding new landscapes, but in having new eyes." -- Marcel Proust This has been my mantra for these first couple months of my graduate career as I learn to develop my eyes as a scientist. I love being able to bounce ideas off the plethora of talented researchers here. I got married in May of this year and my husband and I just bought a house in Champaign. My advisor is Dr. Gene Robinson, and I am interested in studying how pheromones might be involved in the reward system of honey bees

Mathys Meyer. I am in the process of completing the final chapters of my dissertation that focuses primarily on the alpha level taxonomy and phylogenetics of lice in the genus *Goniodes*, as well as the coevolution between these ischnocerans and their galliform hosts. I am originally from Pretoria, South Africa, and moved to the U.S. in 1993. I received my Bachelor's degree in biological sciences from Knox College in 1999 and my Master's degree from Illinois State University in 2004, and have been in the department since then. As for the future, I hope to secure a teaching position at a nice little college in the next few months. On a more personal note, my partner Karyla, my son Bix, daughter Rainier, and I still live in that cooperative in Savoy.

Rob Mitchell. I am a third-year PhD student co-advised by Larry Hanks and Hugh Robertson. However, I spent some time here working on my MS, so realistically this begins my sixth year in the department. During my idealistic early years I studied agricultural systems and I tried to save the nation's squash from pests and disease. Then I remembered that squash is my least favorite food, so for my PhD I have begun studying chemoreception in the longhorned beetles (Cerambycidae). Specifically, I screen cerambycids for novel pheromones and I study how pheromones are detected by the beetles at the molecular level. Interest-wise, I am enamored with insects and nature, and I spend far more money on camera equipment than is justified by my meager skill. I also enjoy biking, tinkering with electronics, and spending time with my wonderful and surprisingly insect-tolerant wife.

Nicholas Naeger. In the past year I completed my masters degree here at UIUC with a thesis on molecular signatures associated with spatiotemporal memories in honey bee brains. I am continuing on, now as a doctoral student, working with Professor Gene Robinson. My current research includes various molecular analyses related to the reward system of honey bees, including how reproductive state influences the neural reward systems and subsequent behavior. Other areas of inquiry include molecular aspects related to honey bee health and the modulation of hard-wired behaviors.

Katherine Noble. I am a PhD student in Dr. Berenbaum's lab where I have begun working with detoxification systems in the navel orangeworm, an agricultural pest in California. Before coming to UIUC, I was researching paper wasp thermoregulation at Tufts University--and I do still have a passion for social insects that I will come back to some day. I received my BA from Smith College in Biology and Latin American Studies, which has proved to be a very interesting intersection of subjects. As a New Mexico native, and am happy to be a bit closer to my home state, and I look forward to my next years at UIUC!

Jaqueline O'Connor. I moved to Champaign from England just over a year ago now, and was thrown head-first into the world of Entomology. Since then I have worked on the life history of Microgastrinae parasitoid wasps. They are teeny tiny, very cool and do lots of crazy things to their unfortunate caterpillar hosts. In my time here I have been lucky enough to attend meetings in Utah and Oregon and travelled to Colorado for the Hymenoptera field course. My research interests mostly include lots of Hymenoptera type things (such as the life history traits of teeny tiny Braconid wasps). During my undergraduate at Newcastle University I developed a massive love for the enigmatic Honeybee and hope that in the future I'll get to work with them again!

Massimo Pessino. I am Massimo, PhD candidate in my second year of studies. My advisors are R. Edward DeWalt and Rosanna Giordano. My research is focused on aquatic insects and I am currently working on projects examining the biogeography and population genetics of several taxa of stonefly in Midwestern North America.

Gwyn Puckett. I am a second year PhD student working with Leellen Solter and Marianne Alleyne. I earned a B.S. in microbiology and a M.S. in invertebrate zoology before deciding that insects are much more interesting than crustaceans (at least to me) and moved to the Midwest. While I am interested in insect diseases and the host-pathogen relationship, I have decided to focus my research on studying the innate immune response of gypsy moths. While much is known regarding pathogen activity and affect on the host larvae, little is known in regards to the host response. By selecting pathogens with different modes of action and different target tissues, it is very possible that differential up-regulation of immune genes will occur. By examining the proteins expressed by the host when infected with an invasive microorganisms or viruses, I hope to increase our knowledge of Lepidoptera innate immunity response as well as potentially improve the bio-control of invasive species.

Maminirina Randrianandrasana. I am a doctoral student under the direction of Dr. May Berenbaum. For my Master's, I studied the feeding habits of a stonefly living in the streams of Illinois under the direction of Dr Steve Taylor. I am always interested in ecology whether the organism is aquatic or terrestrial. So, I am excited to be working on ecological aspects of a wild silkworm of Madagascar called *Antherina suraka* (Saturniidae) for my PhD because fieldwork mainly takes place in my tropical home country, which is a nice change from collecting insects in a frozen stream (that was an interesting experience, though). I am trying to determine whether the extraordinarily broad diet of the species influences biological aspects such as its cocoon quality. Knowing the optimal food plants suitable to the wild silkworm will not only provide information about the natural history of the species but it also will help local people save money by rearing it, reducing overexploitation of natural resources available in the remaining forests of Madagascar. Support from Ideawild and the Lindbergh Foundation, as well as my own advisor's laboratory, allowed me to travel throughout Madagascar for fieldwork last spring 2010.

In my spare time, I enjoy watching movies, swimming as well as eating good food with friends and family in Champaign and in my hometown.

Scott Shreve. I am a second-year PhD candidate working with Kevin Johnson at the Natural History Survey. I am using population genetics and cytogenetics to study several species of psocopterans which are all mostly asexual, but have a few, highly isolated sexual populations. This is an expansion of the Master's project I completed here at Illinois about a year ago, which looked on only one species. I hope being able to compare finding between species will shed new light on the problem. I'm also looking forward to learning and incorporating several new techniques into my project. My non-entomological interests include reading, hiking, and board games.

Laura Steele. I completed my Bachelor's degree in Molecular Biology and Spanish at Coe College (Cedar Rapids, IA) in December 2008. Before moving to Illinois, I spent five months living in Costa Rica where I took classes and did research at the Universidad de Costa Rica. I am currently working towards my Master's degree as a student in Dr. Barry Pittendrigh's lab. I am involved with a few ongoing projects in the lab, including research on the pests/parasitoids of Cowpea (*Vigna unguiculata*) in West Africa and on body/head lice. At the moment, my individual research is using *Drosophila melanogaster* as a model organism to look at the effects of oxidative stress and at DDT resistance in populations
During the fall of 2009 I rescued a 6-month-old Boxer-Lab mix puppy from the Champaign County Humane Society, who I named Luna. Besides spending time with Luna, I enjoy scrapbooking, reading, running, and anything to do with insects!

Becca Striman. I arrived in the lovely city of Urbana in July of 2009 and started working in the Hanks lab soon after. I am interested in the activity periods and aggregation pheromones of cerambycid beetles. During the field season, which typically runs from May through September, I spend a lot of time traipsing through mosquito-infested forests, setting up traps, and collecting beetles to bring back to the lab for identification.
When I'm not doing field work, writing my thesis, or studying for classes, you can find me in roller skates and stripes, refereeing roller derby scrimmages for our local league, the Twin City Derby Girls. In my spare time, I work on the Women's Resources Center website, play video games, and attend as many Murder by Death concerts as possible.

Alice Vossbrinck. I am a first-year master's student in Dr. Pittendrigh's lab working with the cowpea weevil. I got my B.A. In 2007 from St. Mary's College of Maryland. I moved here from Connecticut and am really enjoying the program and hanging out with all the other awesome grad students. In the future I hope to do extension work with pest management.

Adam Wallner. I am a fifth-year PhD student at the University of Illinois at Urbana-Champaign in the Department of Entomology. My research focuses on the use of leafhoppers, treehoppers, planthoppers, spittlebugs, and cicadas in measuring the health of Illinois hill prairies. Data from this study may be important in making novel conservation and management decisions, and may increase our understanding of the dynamics of hyper-diverse groups of organisms in highly fragmented landscapes.

Marsha Wheeler. I had a wonderful time with the bees this summer and now that the season is coming to an end, I am getting ready to transition from field work to bench work. *Almost* all of my samples are in the freezer and soon I will trade my beekeeping hat for my lab coat. My research entails studying how

nutrition mediates honey bee division of labor. For the past year, I've been studying a specific brain region that is closely associated with nutrient-sensing. So far, I have compared the gene expression profiles of this brain region for hive bees and foragers. The results show that thousands of genes are differentially expressed between these two groups, including some key neuropeptides (!). This summer, I have stowed away samples to study how this brain region responds to diet manipulations and hormonal treatments.

Joseph Wong. I am a second-year graduate student in the Hanks lab studying the chemical ecology of cerambycid beetles. I am interested in the evolution of the Clytines in Hawaii, and also in plant volatiles and the role they play in the chemical communication of cerambycid beetles. It has been more than a year since I have moved here, and the flatness of the land still amazes me. It has actually made walking less enjoyable, but it does take less time to get places, which has its ups and downs. I enjoy taking frequent naps, board games and participating in sports in my free time (in that order).

Johnny Yu. I began my second year in graduate school in the Fall 2010 semester. Professor Matthew Hudson in the department of Crop Sciences and Professor Gene Robinson advise my research in bee pathology. I work with several tropical and local bee species and the pathogens that they carry. New molecular DNA sequencing technologies have recently surfaced that allow for a deep analysis of the DNA and RNA present in an organism. I perform metagenomic analyses to identify and quantify the deleterious viruses, bacteria, and fungi present in various species of bees. I plan to study how different bee species in overlapping ranges can transmit pathogens to each other. I try to focus my work on studying viruses but I am generally interested in all the pathologies these hymenopterans can have. My future research may include researching the evolution of viruses in bees and possible harmful effects of biocontrols on bees.
My hometown is San Leandro, California. I spent most of my life in the Bay area located in northern California. I completed my Bachelor's in Integrative Biology in the University of California at Berkeley. While at UC Berkeley, I worked in Cheryl Briggs' lab where I performed research on chytridiomycosis, a fungal disease in amphibians that has been implicated in frog and salamander decline. After I graduated, I began working with Roche Molecular Systems on PCR diagnostics for sexually transmitted infections. Most of my academic and professional career has involved and continues to involve use of molecular techniques to diagnose diseases.

RECENT GRADUATE STUDENTS

Ph.D. 2009

Lesley Deem, Behavioral Responses of Diabroticite Beetles to Selected Olfactory and Visual Clues (Coleoptera: Chrysomelidae), Francis Lab
Annie Ray, Evolution and Taxonomic Distribution of Volatile Pheromones in Cerambycine Longhorned Beetles, Hanks Lab
Peter Reagel, Effects of Natural Enemies and Host Condition on Populations of Insect Pests of Trees, Hanks Lab
Josephine Rodriguez, Integrating Molecular, Ecological and Morphological Data to Explore the Biodiversity of Microgastrine Parasitoid Wasps, J. Whitfield Lab

M.S. 2009

Lynn Fennema, Population Genetics and Systematics of the *Rhagoletis pomonella* Species Group (Diptera: Tephritidae): Insights from the Period Gene, Berlocher Lab
Scott Shreve, Phylogeographic and Population Genetic Analysis of *Echmepteryx hageni* (Psocoptera: Lepidopsocidae), Johnson Lab
John Zukowski, Insight into the Neural Basis of Locomotion in the cockroach, *Periplaneta americana*, Delcomyn Lab

Ph.D. 2010

Elizabeth Graham, Host Plant Relationships and Chemical Communication in the Cerambycidae, Hanks Lab
Cynthia McDonnell, Regulation of Cytochrome P450 Genes in *Drosophila melanogaster* by the Chemical Environment, Berenbaum Lab and Schuler Lab
Guodong Niu, Toxicity of Mycotoxins to Insects and their Underlying Molecular and Biochemical Mechanisms, Berenbaum Lab and Schuler Lab
Adam Wallner, Evaluating North American Tallgrass Prairie Quality Using the Auchenorrhyncha Quality Index, Molano-Flores Lab

M.S. 2010

Ember Chabot, Range-wide Distribution and Genetic Structure of *Acroneuria frisoni* Stark and Brown 1991 (Plecoptera: Perlidae): Tools for Reintroduction to Central Illinois, DeWalt Lab
Nils Cordes, The Role of Pathogens in the Decline of North American Bumble Bees with a Focus on the Microsporidium *Nosema bombi*, Solter Lab
Stephanie Dold, Impact of Mustards (Brassicaceae) Grown as Cover Crops on Non-Target Arthropod Communities, Weinzierl Lab
Michelle Duennes, Phylogeny and Color Pattern Evolution in a New World Bumble Bee (Hymenoptera: Apidae: *Bombus: Pyrobombus*) Species Complex, Cameron Lab
Nicholas Naeger, Spatiotemporal Memories in Honey Bees: Microarray Analysis of Time-Trained Foragers, Robinson Lab

2009-2010 ENTOMOLOGY GRADUATE STUDENT ASSOCIATION

President: Rob Mitchell
Secretary: Nils Cordes
Treasurer: Michelle Duennes
Outreach Coordinator: Fred Larabee
Social Co-Chairs: Juraj Cech, Ember Chabot
Faculty Liaison: Jo-anne Holley
GSAC Representative: Sindhu Krishnankutty

The 2009-10 year saw a variety of activities for the EGSA. As always, we planned and manned the Insect Fear Film Festival, our 27th, in late February. The festival featured prehistoric insects and our petting zoo handlers introduced the public to a menagerie of arthropod fossils, both mineralized and living. The festival's t-shirt, designed by Nils Cordes, was a huge hit and sold out within hours of the festival opening, requiring an unprecedented second printing.

Our workshops this year featured an introduction to web design by grad student Rob Mitchell and, separately, a tutorial on using Adobe Illustrator for scientific illustrations by visiting professor Dr. Ralph Holzenthal from the University of Minnesota. The EGSA also sponsored the usual array of social events and campouts, though our efforts met considerable resistance from rainy weather.

Outreach continues to be EGSA's strongest focus, and we took our entomological enthusiasm to several local classrooms and events, including Carl Sandburg Elementary in Charleston; Booker T Elementary in Champaign; Mahomet-Seymour Elementary Science Day; Robeson Elementary in Champaign; Homer Community Library; and the Muscular Dystrophy Association Summer Camp. Additionally, EGSA members routinely participate as volunteers and docents at the UI's new pollination museum, the Pollinatarium.

2010-2011 ENTOMOLOGY GRADUATE STUDENT ASSOCIATION

President: Scott Shreve
Secretary: Laura Steele
Treasurer: Michelle Duennes
Outreach Coordinator: Fred Larabee
Social Chair: Jaqui O'Connor
GSAC Representative: Rob Mitchell
Faculty Liaison: Jo-anne Holley

The Entomology Graduate Student Association is looking forward to a great 2010-2011 year. We have a great group of new entomology students this year who have already been very active, and we're excited about how they will shape the EGSA in the future. The social calendar has already begun with a camping trip, and a venture through the corn maze. Veteran outreach coordinator Fred Larabee returned to build on our success last year in introducing the younger generation to insects. The highlight of the year, as always, promises to be the Insect Fear Film Festival in February. The theme has not yet been decided upon, but the traditional art show, petting zoo, and Bug Scope activities will be there. We want to thank the efforts of all the out-going officers, especially Rob Mitchell, president for 2 years. Our success this year will rest in large part on their work the past few years.

CLUB INSECTA

Club Insecta goes collecting at the Vermilion River Observatory…

Claire Johnson, Alan Yanahan, Allen Lawrance, Rachel Kirchoefer and Robert Orpet visit ISU…

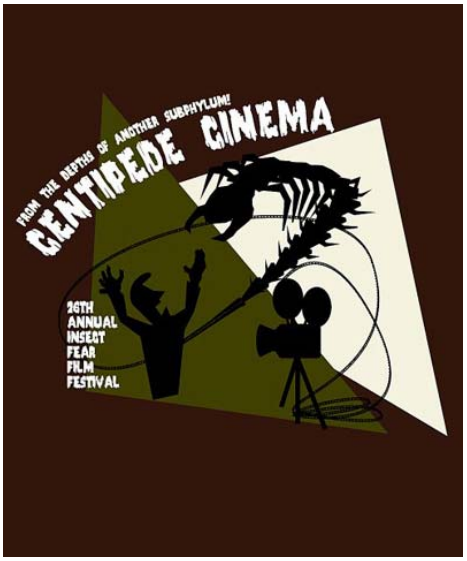
From Allen Lawrance, President:

For many years at this university there existed no entomology club accessible to undergraduate students, which was a real shame. Fortunately, that void was filled through the founding of Club Insecta by Allen Lawrance and Alan Yanahan last spring. It not only provides a way for undergraduate majors to get more involved in activities directly related to their studies, but also allows for students with a more casual interest to explore the world of insects. Members come from many disciplines, including undergraduates majoring in entomology, physics, and bioengineering, as well as graduate students majoring in human resource education and statistics.

Club Insecta has its very own insect collection. The pollinators from the collection are on display at the Pollinatarium. Club members have the opportunity to serve as docents for the Pollinatarium during its weekend open hours. Other club activities include camping and collecting trips around the state, movie nights, curating sessions, departmental visits, museum visits, and even dining at restaurants that serve insects.

26TH ANNUAL INSECT FEAR FILM FESTIVAL

Saturday, February 24, 2009 Foellinger Auditorium Centipede Cinema



This year, it became official—in 2009, the IFFF acquired its own Wikipedia entry! And it's under the category "Film Festivals in the United States," no less. IFFF also appears at Acronyms, the Free Dictionary site: http://acronyms.thefreedictionary.com/Insect+Fear+Film+Festival, along with the International Family Film Festival (Santa Clarita) and the International Flag Football Federation. The 2009 theme was Centipede Cinema. Education is our goal, which is why it was a little embarrassing that the News Gazette Environmental Almanac story about the festival ran with a photo of a millipede.

Why metaphorically centipedes take precedence over millipedes for conveying legginess, despite on average having far fewer legs, is a puzzle. Maleated polyalkylene polymers are called centipede polymers, and of course the iconic 1980 Atari video game was Centipede, featuring a centipede moving down the screen through a mushroom field. In 1993, Centipede became available for PCs, in 1998 for PlayStation, in 2004 for XBOX, and in 2008 as an app for the iPhone. "Millipede" appeared in 1982 but just never had quite the same cachet. It just didn't have legs, I guess…

There are to my knowledge no millipede fear films about millipedes—they're actually not very scary (how fast can you move with all of those legs?). There is, though, one species of millipede, *Diopsiulus regressus.* capable of jumping the full length of its body, about an inch when disturbed: Still not too scary, nor is their habit of consuming decaying vegetation and, for one semiaquatic species in caves in Italy, dirt. Because they can't outrun their enemies, they do emit poisonous secretions, including hydrogen cyanide. Centipedes, on the other hand, are apparently the stuff of which nightmares are made. Other than legs, the 2800 species of centipedes are best known for being poisonous. The venom is used for catching prey and in fact centipedes can take down not just fellow arthropods but also vertebrates, including frogs, toads, lizards, snakes, small birds, and bats. The venom can be used defensively but it's not terribly toxic to humans. Centipede envenomation involves severe pain, local redness, swelling and fluid accumulation, headache, nausea, vomiting, anxiety, and local itchiness. Even so, it's not so bad. In fact, centipedes are even deliberately consumed by people in some parts of the world. One website http://www.thailandunique.com/store/giant-centipede-whiskey-12-litre-p-71.html advertises "Giant Centipede Whiskey 1/2 Litre £14.99 "Triple distilled Thai white whiskey infused with a highly venomous tropical giant centipede"

Our first feature is Centipede! (2004). Like the award winning Slumdog Millionaire, this movie was a collaboration with India, filmed on location, and used local talent. Other than that, it has nothing in common with Slumdog, or, for that matter, any other film that has ever won any kind of award for excellence. Basically, preppy rich kid David Stone, instead of a bachelor party, takes his ex-girlfriend and other caving buddies to the Shankali, Hyderabad, India to visit a cave three miles below the surface. A local tour guide, Kafi takes them belowground where they party until things turn ugly. Of course, one of the guys has a morbid fear of "insects." There are some actual biological realities depicted in the film. Centipedes can indeed be found in caves in Malaysia, Azores, Mexico, Greece, Serbia, Australia, South Africa, and in the U.S. It's not even implausible that big centipedes are found in caves; in the Cueva del Guano in Venezuela, *Scolopendra gigantea*, the world's largest centipede (about 12 inches in length), has been recorded capturing bats in mid-air (although the 10-ft-long centipede in this cave must live on air because there are no other organisms in this cave). And, as the medical student in the group declaims, "insect venom" does contain 5 hydroxytryptamine and cytolysins. The Tertiary period did begin 65

million years ago. Centipedes do swim. But unless you're playing the videogame Centipede, if you cut them in half they die. And, despite the presence of SPOILER ALERT a "whole hive of them," centipedes are not only not social, they're cannibalistic, so it's unlikely any large group of them would survive for long. The film is clearly on the lowbudget size--puppets were used unadorned by expensive CGI effects. And check out the "transponder box," a sophisticated piece of equipment that supposedly tracks the cavers but appears to be just a flashing light in a box.

As usual, the festival starts with family friendly fare. Longtime friends of the festival will remember the n-2 rule for animated arthropods—animators drop one pair of legs to simplify drawing so that insects usually have four legs and spiders six instead of 8. Our first cartoons demonstrate that centipedes violate the n-2 rule. The 1937 Disney short "Woodland Café" depicts an arthropod jazz band with a centipede maitre d'. Count and you'll see only five pairs (with the tails of a tuxedo on the last segment). The second cartoon, Mickey's Garden (1936), is a little more accurate, with 9 pairs (one per segment). And kids, if you think today's educational television is boring, here's a chance for you to have some sympathy for your parents, who had to Watch Mr. Wizard in their childhood, an educational TV show on NBC that ran from 1951 to 1965. With respect to leisurely pace, the centipede in "How Animals Move" doesn't appear until 17 minutes into the program.

As for the second feature, what is there to say about the Hong Kong film *Centipede Horror* (1984)? More properly, about *Wu Gong Zhou*? This film was not easy to find. Exhibition rights are owned by an outfit called Apprehensive Films. Jonathan Morken, the distributor of Centipede (2004) actually asked me to draw up the license agreement for exhibition rights, and is advertising its appearance at IFFF on his website. Other films you can rent from Apprehensive-- HEART FULL OF NAPALM, NAKED MASSACRE, HOUSE BY THE CEMETERY, THE CRIPPLED MASTERS and RATMAN. On the promotional material there's a quote from goremaster Sam Raimi of *Evil Dead* fame—"the most disgusting film I've ever seen."

The plot kind of defies a simple summary. It's apparently representative of early 1980s Cantonese sorceror/horror genre and is helmed by Keith Li. Suffice it to say that it involves the king of Centipedes, fairies, a fortune teller, Southeast Asia, a magic necklace, an ill-fated vacation, vengeful sorcerer, grass jelly, ghost chickens, a lot of upchucking… It's apparently a point of pride that only real centipedes were used in the shooting of this film (but note there is no American Humane Association disclaimer at the end—centipedes were definitely harmed during the making of this film.

Left--kids admiring centipedes; Right—Nathan Schiff with Jim Whitfield, Sydney Cameron; Below—Nils Cordes paints a face

27TH ANNUAL INSECT FEAR FILM FESTIVAL

Saturday, February 27, 2010 Foellinger Auditorium Prehistoric Insects

After all these years, we still can make headlines. Our theme of Prehistoric "Insects" proved to be a powerful draw. Among our special guests was Kim McGuire, science writer from the St Louis Post-Dispatch, here because, in her words—"who doesn't like trilobites?" The Chicago Tribune ran a story (a nice break from their usual coverage of University of Illinois). R&D Magazine ran a story--although I can't tell whether giant prehistoric scorpions are supposed to represent research or development. More typical stories have titles like October's "The Great Fume Hood Debate" and "First woven fabric heater made from carbon nanotubes"). WCIA and WICD locally covered the festival. Our arthropod (art-hropod) art contest, initiated at our tenth festival, had over 360 entries this year—an all-time record.

Which brings us to our theme...

Because humans tend to see themselves as the apex of evolutionary advancement, there's the general feeling that the more different from humans an organism may be, the more primitive it must be. So insects, with their external skeletons, jointed appendages and wings, are sufficiently different from humans that it follows logically in some minds that they must be ancient vestiges of the earth's prehistory. In reality, today's insects aren't all that old, relatively speaking. That said, most people don't have a firm grasp on Earth's timetable. Fish are Ordovician—505 million years ago. And mammals are 200 million years old, whereas butterflies are probably 60 million years old. Amphibians are about 250 million years ago, as are cockroaches. If you want to talk old, you can talk scorpions. Fossil scorpions have been found in marine deposits dating back to the Silurian, about 430 million years ago. In fact, fossil evidence suggests that there were more scorpions around during the Paleozoic 500 to 250 million years ago than any time since. Truly impressive were the eurypterids, or sea scorpions, marine predators that may well have reached lengths of 8 feet, with an abdomen tipped by what was likely a venomous spine, capable of pursuing their prey in water and on land (like 8 legged crocodiles equipped with a stinger).

Scorpions, though, aren't insects today and weren't back then, either. Neither were trilobites, a group of extinct marine arthropods that dominated oceans for 300 million years-- from about 540 million years (Cambrian) through the Devonian (when most lineages disappeared) until the end of the Permian 250 million years ago, when they disappeared forever.. There were at least 20,000 species of Paleozoic trilobites in ten orders and more than 150 families, and they ruled the sea bed—although most were filter-feeders, scavengers, and planktivores, some were voracious predators with fangs on their gnathobase (*Naraoia compacta)* and streamlined body shape. Admittedly, they were voracious predators of tubedwelling marine worms but they did seem to be capable of ripping them apart segment by segment. I can't figure out why they haven't captured the imagination of dinosaur lovers. Today's insects have a mere three pairs of legs on their thorax—trilobites had a dozen or so thoracic legs as well as 4 pairs of legs on their head and 9 or more pairs of legs on their abdomen and a whole assortment of spines, ridges, tubercles and nodes. Maybe it's because they ranged in size from about 1/25th of an inch to about 2 feet in length. The biggest known trilobite, found in 1998 in rocks dating back to the Ordovician from Hudson Bay, was called *Isotelus rex*—like *Tyrannosaurus rex*. As one website points out, that's about the size of an umbrella (http://www.trilobites.info/lgtrilos.htm).

So it's surprising that extinct arthropods have a film presence at all. We pick up the prehistoric arthropod film tradition in 1957 with *Black Scorpion*. Scorpions are not insects, they are arachnids, with two and not three major body regions, four pairs of walking legs, and fangs instead of jaws. The most distinctive characteristic of the scorpions is the recurved abdomen tipped with a sting. People know the sting because it is used defensively; if you step on a scorpion, it will whip its tail around, embed the sting in your flesh, and inject a variety of nerve-scrambling substances. Otherwise, the sting is used to immobilize mostly insect prey. Scorpions will not, however, sting busses, trains, cars, or low-flying aircraft. The Black Scorpion was made in the wake of the tremendous success of Warner Brothers blockbuster hit "Them." The producers overlooked the fact that that movie was a success because it was good. As Bill Warren points out, "there's no point in keeping the identity of your menace a secret in the film when the title gives everything away." Nobody in the audience knew who "Them" were until they made an appearance in

the film; in a movie called "The Black Scorpion," you know what you're in for from the minute the title sequence rolls. The filmmakers tried to disguise the fact that they borrowed heavily from "Them." Instead of a girl, there's a baby in a ruined house. Instead of Los Angeles, it's Mexico City. Instead of ants, it's scorpions. Instead of underground sewers, it's an underground volcanic cavern. Instead of good, it's inept..

Basically, the story is that a volcano erupts in Mexico, unleashing a cattle-killing scourge on the countryside panicking the local citizenry. Enter two geologists, American Hank Scott (played by Richard Denning of "Creature from the Black Lagoon" and "Creature with the Atom Brain" fame--this was a breakout role for him in that it was a film without "creature" in its title) and Arturo Ramos (played by Carlos Rivas, of "Beast of Hollow Mountain"), to explore the volcano. They end up investigating the mysterious killings instead, in the process picking up the requisite beautiful girl (played by Mara Corday, of "Tarantula" fame). In rescuing the girl after she's thrown from her horse, the geologists stumble across a piece of obsidian (hardened lava) containing a live scorpion (herded into a collecting jar with a brandy snifter, invaluable collecting tool). It's a "creature thought to be extinct in the TriAsian era!" A visit with distinguished scientist Dr. Belasco confirms that, indeed, the erupting volcano has loosed a throng of giant scorpions. After several unsuccessful attempts (involving gas and dynamite), humans prevail, by dispatching the one remaining giant scorpion with 600,000 volts of electricity administered to its Achilles heel--or in this case, Achilles unsclerotized area described as the "white (weak?) spot on its throat."

The one thing that's good about the movie are the special effects--the puppet animation was done by the legendary Willis O'Brien and Pete Petersen. O'Brien is widely regarded as a genius of stop-motion animation (he did King Kong in 1933 and created a prehistoric spider sequence that was cut from the original, which might have been the first celluloid prehistoric arthropod) and really was the inspiration behind the film in the first place. The tiny budget hampered his style, however, and the head model constructed for closeups looks and acts nothing at all either like a real scorpion or like O'Brien and Petersen's lovingly crafted full body models. Biologically, the head is the most disturbing thing in the movie, with glassy lidded eyes that roll in their sockets and not one but two sets of mandibles, a pair that work sideways and a pair that work up and down (scorpions actually don't have mandibles at all, they have chelicerae, or fangs). And scorpions to my knowledge don't produce ropy threads of drool before they eat.

Our second feature was the memorable Ice Crawlers (2003) (aka Deep Freeze), possibly the only movie ever made about killer trilobites. In the thinnest of plots, Geotech Industries has established Geo 1, a state of the art drilling facility in ecologically sensitive Antarctica. Drilling through the shelf sets off some earthquakes and the company sends down a team of naïve graduate students to investigate, in the hope of evading notice by the United Nations Global Awareness Committee. Unbeknownst to the crew at the facility, the drilling unleashes a prehistoric terror—bloodthirsty trilobites about the size of a collie or German shepherd. Attention to detail isn't a strong suit in this film. There are, for example, real arthropod "ice crawlers," but they're rather smallish grylloblattids, aka rockcrawlers, that live in glaciers and ice fields in the western US, Canada, Siberia, and Japan and are best-known for being active, albeit slow-moving, at temperatures below 32^{o}. The lack of attention to detail is most striking when any of the scientists in the film start talking; one identifies a DNA sample as

"Either a premillipede they never got around to classifying as an official species or it's a aphedactic trilobite…It's been extinct for about ten million years. It's like a cross between a worm and a mosquito—a parasite." Post-production attention to detail is lacking as well; the DVD package describes the story as taking place in "in the desolate Arctic wasteland." The special effects aren't so special. The Antarctic research station was actually a sewage treatment facility in El Segundo, CA and the bleak Antarctic landscape was stock footage from John Carpenter's 1982 The Thing.

ALUMNI NEWS

Intan Ahmad. Greetings from Bandung Indonesia to all, after getting my PhD under the direction of Gil Waldbauer and Stanley Friedman in 1992, I continue to work at ITB (Bandung Institute of Technology). And now I am an Associate Professor (hopefully full Professor by the end of 2010) and Dean of the School of Life Sciences and Technology ITB. My current research interest is mostly in Urban Entomology (insecticide resistance in *Aedes aegypti* and *Blattella germanica*, as well as on management strategies for insect pests of urban environment). My other activities include in the area of Higher Education Management [(among others as World Bank consultant for Higher Education in Sri Lanka, 2004-2006, expert in the International Deans' Course Ethiopia (2008), Germany (2008, 2010)]. My wife Rini, continues to run our small pest control company, and our son, Ivan, he is now 24 years, has BS in Civil Engineering from ITB in 2009 and now works in Singapore, and thinking about graduate school. http://www.sith.itb.ac.id/profile/intan.html

Stephanie "Tess" Bailey. We are doing great - Tom has quit teaching and we are starting a hobby farm just south of White Heath. We will have an orchard, a pumpkin patch, and probably veggies too. I've been wondering if any grad students need to do any bee/other bug work on something like that because we are planning to use minimal if any pesticides... We will probably build out there in the next year or two - it is definitely an adventure, and we have had tons of fun this summer!!!

Carol Anelli. Is the new associate dean of Honors College at Washington State University. She also received the Entomological Society of America Distinguished Teaching Award in December 2009. Award recipients must have "excelled through innovations in developing new courses, programs, and teaching methods."

Ross T. Bell (The Bellfest, June 12-15, 2010)
A Festschrift tribute to the scientific work of Ross and Joyce Bell.
On behalf of the Department of Biology at The University of Vermont, it is my distinct honor to welcome you to 'Bellfest 2010', a festive symposium celebrating the life and works of Professor Emeritus **Ross T. Bell**. The program presentations, organized by Professor John Spence, include among renowned coleopterists many of Professor Bell's former students, associates, and former student's students. Indeed the Bell phylogeny is deep and highly branched! We are pleased that you have chosen to come to beautiful Burlington for what promises to be a memorable event to honour Ross and Joyce Bell, who have been Vermonters for more than sixty years. Professor Bell has distinguished himself throughout his long and illustrious academic career at the University of Vermont. We are proud that our beloved institution has served as the Bells' research quarters since 1955, with no signs of abating. Professor Bell's extraordinary scholarship, careful and dedicated work, and passion for 'the beetle' has influenced and inspired many. Together with Joyce, his tireless lifelong companion, Ross has traveled the world in search of elusive and exotic beetles. He has discovered species worldwide, produced taxonomic revisions and field guides, published numerous scientific papers, contributed significantly to our understanding of the natural history of northern New England and made expert contributions to the Tree of Life web project.

He is rightly considered by many to be a foremost authority in carabidology, a walking encyclopedia of carabid lore and a fountain of knowledge that keeps on giving. He is afforded folk hero status by those, scientists and amateurs alike, who have been influenced by his work and benefited from his generosity, even those who have not had the privilege to meet him. Our understanding of the phylogeny and classification of Caraboidea bears a distinct and widely appreciated imprint of Ross Bell.
Our best wishes to Professor Bell at the time of this Festschrift. We also wish a joyful and productive meeting to all of our distinguished speakers and guests. May this occasion provide an opportunity to rekindle old friendships, relive encounters past, and forge ahead the science of beetles. Professor Bell's inordinate fondness for beetles is only matched by that of the omnipotent Creator. The beauty of their work will be on display here for all to enjoy. Jim O. Vigoreaux, Professor and Chair of Biology, University of Vermont. http://www.ualberta.ca/~jspence/Bellfest/

Robert Benson. I retired from the State of California last August 1, 2009. However, I still work 3 days per week as a retired annuitant at CalPERS (public pension fund). I believe that it is important to

continue working part-time in order stay active mentally and physically, and to earn some money during these continuing tough economic times. Lois and I continue to garden, hike in the mountains, and occasionally take trips (Guatemala and Costa Rica). We will celebrate our 44th anniversary this June. Our two boys (Karl and Phillip) are both married and live in Sacramento (no grandkids as yet). Lois's mother lives with us and is 97-1/4 years old. Must be some longevity factors in the Illinois air, water and dirt where she lived until joining us 2.5 years ago. I am busy with singing barbershop harmony (West Valley Chorus) and am on the Board. I am also enjoying photography -- digital at this point. Our best wishes to everyone in Illinois Entomology!!! Bob and Lois

Guy Bloch. 11/07 – present: Associate Professor; 5/08 – 3/09: Sabbatical leave; 7/08 – 11/08: Visiting Professor, Arizona State University; 3/09 – present: Head, Teaching Program in Evolution, Systematics, and Ecology; 10/09 – present: Chair, Department of Evolution, Systematics, and Ecology. http://bio.huji.ac.il/staff_in.asp?staff_id=27

Robert "Bert" Cleghern. Linda and I have been up to the same old stuff. I have been doing some teaching, now with the local community college, providing an Environmental Studies class to senior citizens. Most enjoyable. An old friend and I have recently completed five years of field work on the development of a new soy-based mosquito larvicide called BIO-LARV, which we are submitting to EPA for registration. It is very effective, cost-competitive, and environmentally benign. Travel wise, Linda and I "did Europe" last fall (2009) visiting 5 countries by plane, train, bus and ferry; and next fall we plan to drive the Sierras from Washington State to southern California, visiting 6-8 national parks which are still on our bucket list. We still maintain and improve our old antebellum

house here in Elkridge, just south of Baltimore. The best time to visit us is in late April, when our 80+ azaleas are in bloom. Best wishes to all.

Randy Cohen. I am currently starting my third year as Chair of the Biology Department here at CSUN. I certainly picked a wonderful time to chair an academic department in California: budget cuts, furloughs and layoffs. Susan continues as a roving Microbiologist in the Valley. Rachel is in her fourth year as a Graduate Student in Zoology at Michigan State studying reproductive neuro-endocrinology of green anoles. Sarah just finished college (CSUN) with a BA in Art History and is undecided about her future. Finally, Josh is starting his junior year at UC Berkeley and is working in a mammalian paleontology lab measuring fossil monkey teeth (photo with alumnus James Nitao).

Ed Cupp. Professional: I retired 4 years ago from Auburn University but remain professionally active as a "volunteer" for two tropical public health groups– the Mectizan Expert Committee (funded by the Merck Company as part of its Mectizan Donation Program) and the Onchocerciasis Elimination Program for the Americas (OEPA - administered by The Carter Center). The primary goal of each group is to promote the treatment/control of river blindness, a vector-borne, blinding disease that occurs in Africa and The Americas. I serve as a science advisor to each and also chair the Program Coordinating Committee for OEPA. This involves attending four meetings a year usually in Europe, Africa and Latin America. As a result of some earlier contributions to understanding the epidemiology and control of river blindness as well as my current efforts, I received the 2009 Merck Mectizan Award. This award is given annually to individuals who have made significant contributions to onchocerciasis control at the international level. I mention this because I am the first entomologist and only the second US scientist to be given the award. Go Fighting Illini!! Mary continues to publish results from our efforts at Auburn University to develop an anti-feeding vaccine directed against the horn fly (Haematobia irritans) by using a recombinant salivary protein. We recently began working with a team of MBA students from the University of Louisville whose goal is to take this technology public and it has been very interesting to be around a group with so much youthful energy and enthusiasm!
Home: In trying to prepare for full retirement, we recently attended fly fishing school (motto: "Trout don't live in ugly places") and have signed up for sailing school at Kentucky Lake later this summer. We continue to hike and enjoy the state parks in this area and hope to trek the length of Hadrian's Wall in Spring, 2011 (previous big efforts – a three day hike through part of the Grand Canyon; a five day hike around the Dingle Peninsula in Ireland). Our greatest joy is being with our grandsons - ages 2 and 4 months – whether in-person or by Skype and having the extra time in the morning to read the daily newspapers and have that second cup of coffee. It's definitely something we can get used to.
Best wishes to all and let's hope that the future for the U. of I. is better than the past.

Eric Day. I continue to manage the Insect Identification Lab at Virginia Tech. Much time is spent on new invaders, the brown marmorated stink bug and the emerald ash borer. In addition I continue my detection program for wood boring beetles at the ports of entry.
On the home front it's nearly an empty nest as the boys have pupated and headed off to college. Nan and I still enjoy our little farm in Craig County. www.idlab.ento.vt.edu

Andy Deans. I'm finishing my third year as assistant professor of Entomology and director of the NCSU Insect Museum. Heather Hines ('08), who's an NIH postdoctoral fellow in Genetics at NCSU, and I are expecting our first child this June. Life has been crazy but very fun! http://deanslab.org

Bill Delaplane. I'm finally retired at 96 years old. In 2008 (July) I sold our Illini Pest Control, started in 1939 (I was associated for 66 of its 69 years) by Bob Metcalf's father, then the head of Entomology Department, Clell Lee et al, including the late C.L. Kearns, to a long-time friends whose 22-state even more professionally-run operation known as Presto is associated with the world's largest pest control operation, Rento-Kil, based in England. I'm finishing what I believe is the last item for closure – the last IRS report- then I'll be officially retired. My mobility requires a walker but my mind is as "bad" as ever. Give me a buzz you old FARTS. I'll buy lunch if you provide the transport and we'll reminisce. Meanwhile, best wishes to all and may entomology continue to enhance its image in the fabric of our civilization! We need more Berenbaums!!

Jodie Ellis. Since 2002, I have worked with Dr. Cliff Sadof at Purdue Entomology on outreach and education regarding invasive forest pests including emerald ash borer, gypsy moth, and Asian longhorn beetle. I also serve as a steering committee member for the Continental Dialogue on Non-Native Forest Insects & Diseases and co-chair two of its initiatives. I am one of the lucky ones as I really enjoy what I do and have certainly had some great adventures along the way. www.extension.entm.purdue.edu/EAB

David Evans. After completing my term as Chair of College Council, I served one more year as part of that body and then retired from active work in Penn College Governance. I had been active in Governance since 1992 so it was time to let newer blood take up the challenges.
However, I took up several other professional opportunities. I developed and have successfully offered a "Science and religion" course at the College both in face-to-face versions and on-line. In conjunction with this, I was selected to attend the Templeton Foundation's Stars science and religion program in Cancun, Mexico.

I also continue to be active in human biology: I am the chair of the HAPS Public Affaris Committee (this really keeps me hopping!) and am currently preparing a new edition of a book on human biology. The other book is in its 5th edition currently.

My wife now works for the main campus of the Pennsylvania State University and our son is an undergraduate there now. Our daughter is enjoying her summer before her last year in high school with three weeks in France.
Enjoy the beach!

Mohammed Farooqui. I continued to be the Chair of the Biology Department at the University of Texas Pan American at Edinburg, Texas. In addition I am the Coordinator of the NIH funded Bridge to Doctorate Program in collaboration witht the University of Texas Medical Branch at Galveston, Texas.

Lynn Fennema. After graduating with my Masters in May 2009, I moved to sunny California! I work with two non-profit organizations, the Youth Science Institute and the Audubon Society. Both teach science to kids. The work is fun, interesting, exhausting, and wonderful! It gives me opportunities that I may never have had otherwise: I am trained to use live birds in our animal programs. Sometimes you'll see me out walking around the park with an owl on my arm! I'll be getting married this July 17th and in the fall I'll start work with the city of Cupertino leading programs for kids. I joined a 'Bug Club' of volunteers that identify stream insects and spend my free time hiking and exploring. http://www.ysi-ca.org/

Rachel Galun. Writes entomological papers in a youth scientific journal on a monthly basis. Published a book on my biography (in Hebrew).

Robert (Bob) Harwood. Just returned (4/29/10) from a three-week tour of northern India and Bhutan. Visited Woodstock high school where I graduated in 1943. I am involved in conservation issues and the school has a fine conservation and outdoor center. My only granddaughter (I have three grandsons) is completing high school and will go to Woodstock, starting in August, for a gap semester before starting college.

James Kardatzke. After 20 years in the military, 9 years as a training manager for Orkin and 8 years as an aquatic ecologist/Branch Manager with the Eastern Region of the Bureau of Indian Affairs, Nashville, TN, I have fully retired to travel and hobbies.

John M. Kingsolver. I have been a research entomologist volunteer with the Florida Department of Agriculture Collection of Insects in Gainesville for the past 18 years. My research interests are with the beetle family Bruchidae of the new world.

Lisa Knolhoff. Grüße aus Deutschland! Greetings from Germany! After finishing my PhD at the end of 2008, I started a postdoc position at the Max Planck Institute for Chemical Ecology in the department of entomology. Right now I am studying the behavioral and genetic mechanisms of a host range expansion in the diamondback moth. In my free time, I've enjoyed getting to travel around Europe. I go to Berlin regularly, but at the time of writing I've also visited other countries such as Ireland, Great Britain, France, the Czech Republic, Hungary, Austria, and Switzerland. There are a few other recent graduates in Europe too, and it has been great to meet up with my Illinois friends.

Gene Kritsky. Jessee and I have been busy with Egypt and bees during the time period since the last Newsletter. I have been working with the Cincinnati Museum Center on the analysis of a Late Period mummy that will go on display in late 2010. We also took a third group of students to Egypt in May of 2010 as part of a course that I teach with an Art History colleague. Also, my book, The Quest for the Perfect Hive, was published by Oxford University Press in early 2010, completing a project that I started in 2001 as part of my previous sabbatical.

We are now gearing up for my 2011 sabbatical to Europe and Africa.
It was enjoyable to see many old friends at the Centennial Celebration last December, and we are looking forward to seeing you at ESA in San Diego in December.
Don Kuhlman. Since retiring in 1991, my wife and I have traveled quite a bit in the U.S. and thruout the world.

Robert E. "Bob" Lewis. Now that I can no longer maintain an erection for four hours, my phone bills have plummeted!

Xianchun Li was promoted to Associate Professor at University of Arizona Tucson.

Richard D. Lipsey. World-wide consulting in toxicology as a forensic expert witness.
www.richardlipsey.com

John C. Marlin. I retired in June but will continue to be active with campus units and will be involved with river and soil issues. I hope to spend some time with the INHS Hymenoptera collection, and do a bit of field work, and perhaps help at the pollenatarium. I also signed up for the mater naturalist program. Diane is also retired and serves on the Urbana city council. Both of the children are out of school and doing well.

John W. Matteson. Anna-Marie and I are still active and healthy. We are enjoying gardening, lake shore living and are involved with lake and ground water quality at the county level.
We have three children, six grandchildren and one great-grandchild all of whom we spoil.

Michael (Mickey) McGuire. In 2009, I have moved from the Assistant Area Director to the Associate Area Director role with the Northern Plains Area office of the USDA-ARS. We provide administrative and programmatic oversight, concentrating on the quality of science, for an 8 state area comprised of 13 locations. On a personal note, two grandchildren arrived in 2010 bringing our total to 4!

Bruce McPheron. I've been dean of the College of Agricultural Sciences for nearly a year. The global financial picture has made it a challenging time to have taken the reins, and we are engaged in planning and implementing a variety of changes to ensure that the College maintains a leadership role. I'm working to finish up obligations with graduate students, especially tidying up a variety of manuscripts. I have continued to teach a course in international agriculture, which allows me to take a cohort of students (including undergraduates from UIUC) to Paris for two weeks each year.
My wife, Marilyn, works in the College's international programs office, but is also finishing her B.F.A. in printmaking. She anticipates finishing her degree program in December, 2010, once she has completed her honors project - a children's book that she wrote, is illustrating with original woodcuts, and will print and bind. One of her recent print exhibitions can be found at http://www.personal.psu.edu/sfw3/mm/ .
Our son, Neale, just celebrated his 3rd wedding anniversary out in San Diego, where he is a Petty Officer in the US Navy. He is trained as a rescue swimmer, and in his helicopter crew role he monitors all the anti-submarine detection equipment. Our daughter, Brenna, is entering her junior year at Penn State, where she is majoring in visual arts and minoring in art history. http://agsci.psu.edu/dean

Bill Medler. I am now retired from teaching for four years. I occupy my time in a number of ways. I volunteer for community activities 3 days a week. I garden extensively and do some landscape design.

My wife and I travel during each summer (Costa Rica last year). We have a pond in back stocked with bass so come try your fishing skills!

Mohammad Naeem. The Agricultural University has 5 Faculties, namely Faculty of Crop Production Sciences, Faculty of Crop Protection Sciences, Faculty of Rural Social Scies, Faculty of Nutrition Sciences and Faculty of Animal Husbandry and Vet. Sciences. Each Faculty is headed by a Dean who is appointed by the Chancellor from amongst the three senior most Professors of the Faculty. Being the second senior most professor, I was appointed as Dean of the Faculty of Crop Protection Sciences by the Chancellor for a period of three years in Dec. 2008. Dean is the academic head of all departments of the Faculty. The Faculty of Crop Protection Sciences has 4 Depts. 1. Entomology 2. Plant Pathology 3. Plant Protection and 4. Weed Science. The chairmen of all the Depts. earned their PhD. Degrees from the Different US universities. The Ex- Dean who has currently been appointed as Vice- Chancellor is a graduate of the UIUC, Dept. of Agronomy.

Zenas B. Noon, Jr. Consult to pharmaceutical development companies. Provide services in marketing and organization development.

Bridget O'Neill. I got my PhD in December 2008 and started as a post-doctoral research fellow in the Botany Department of Trinity College Dublin in February 2009. I am working in the Phenology group under Dr. Alison Donnelly. My project is focusing on moth phenology in Ireland, how it is changing under climate change and how these changes might affect bat populations in Ireland. I am also co-organizing the Phenology 2010 conference here at Trinity. And I am one of the founders of NatureWatch, the Irish Phenological Network's website for members of the public to learn about phenology and to upload their observers on the phenophases of birds, insects, and plants.
Besides these projects I got married back in NH in July 2010 and am searching for a more permanent position after my post-doc is finished in 2011.
http://www.tcd.ie/Botany/phenology/index.php

Lance Peterson. I have continued to enjoy my retirement from Dow AgroSciences, keeping busy with woodcarving, ball room dancing and traveling with my wife, Jan, to visit our 5 children and 9 grand children (none of whom live in Florida). We also have managed to take a few exciting cruises, among them the Baltic Sea Area, Alaska, South America and Australia/New Zealand. We spend our summers on the shore of Lake Superior near the little town of Two Harbors, MN. Life is Good!

Christopher Pierce. As of January 2008, I am now serving as the Pest Survey Specialist in the United States Department of Agriculture, Animal and Plant Health Inspection Service, Plant Protection and Quarantine for Missouri and Iowa. Currently fighting the "good fight" against invasive pests (insects, mollusks, nematodes, pathogens and plants). Kelly and I will be married for 12 years this July. Eliza just turned 6 and will be entering first grade in the fall. Crosby will be turning 4 in November and is just as amazing as her older sister. We miss Champaign-Urbana. Now that it is summer, we would really love to indulge in some Jarlings Custard Cup goodness. Best wishes and continued success. ILL – INI!

Roscoe Randell. I turned 80 this past March. Still volunteer at local hospital. Have a garden and yard to take care of. We travel to Colorado to see children. Enjoyed 100 years of U of I Entomology at the I-Hotel.

Annie Ray. Since I graduated in May 2009, I have been a post-doctoral researcher with Dr. Jocelyn Millar, in the Department of Entomology at the University of California, Riverside. I have continued my work investigating chemical ecology and mating behavior of longhorned beetles. In August 2010, I will begin as assistant professor in the Department of Biology at Xavier University in Cincinnati, OH. It is

rough to leave southern California, but I am pleased to return to my lower midwestern roots and to the Ohio Valley (where I was born). I am looking forward to continuing my research in southern California during the summers, even if I do live in Ohio during the cold parts of the year.

Craig Reid. We've started an Alternative Health & Wellness Service Company and have already had breakthroughs in the treatment of Alzheimer's, Fibromyalgia & ALS. We work with the US Olympic athletes, Kaiser Permanente, Navy SEALS, British Olympic Team & have created new therapies in dealing with PTSD, Bipolar, Dyslexia, Down's Syndrome and emotional & stress related health issues. Craig's first book "Ultimate Guide to the Martial Arts Films of the 1970s" comes out the fall of 2010 (www.vivalachi.com).

Hilary Reno. In the summer of 2009, I finished my training in Infectious Disease and am board certified in Internal Medicine and Infectious Disease. I am an Instructor of Medicine at Washington University in St. Louis with a dual appointment in Hospitalist Medicine and Infectious Disease. My position is largely clinical with some teaching, and I am wrapping up my fellowship research projects on Sexually Transmitted Diseases in women. I also serve as medical director of the St. Louis County STD clinic, a very rewarding part of my job. I continue to work part time, so I have most of the week with our boys. We welcomed Kieran John Reno, born June 15, 2010, and I am enjoying a long summer off to care for Kieran. He looks a lot like his big brother though we are hoping that he sleeps better than Ian. Ian is now four years old and continues with his soccer obsession. He (like Shaun) is a Chelsea fan and is starting to accumulate useless sports facts. He is a well rounded kid who also enjoys board games, reading, and listening to music especially Pete Seeger, show tunes, and opera. You haven't lived until you have heard him belt out "How do you solve a problem like Maria." Shaun continues as an assistant professor of English at St. Louis Community College and will be on sabbatical in 2011 for additional graduate studies. We moved to Kirkwood, a close suburb of St. Louis, and enjoy its trees and walk-ability. We have been able to travel in the U.S. recently, but will stick closer to home for a little while now. I hope everyone is well!

Edward Sakufiwa. I did not work much with bugs since coming from U of I. On arrival from US, I only worked for a few months as stored products entomologist. I then went on secondment to work on an FAO project for 4 years. This project worked on promotion of improved post-harvest technologies in the rural setting. After I was done with the FAO project I came back to government where I was placed in management until I retired two years ago in 2006. During the time I was in management I spent time in the insect collection at my work place rehabilitating the beetles collection. I also carried out some collections of beetles.
I am currently teaching entomology courses (specifically insect morphology/anatomy and Integrated Pest Management) at the University of Zambia. My main interest in entomology is taxonomy with a focus on beetles. So, collecting and identifying beetles is my permanent hobby.
Thank you so much for your email and I wish you well both in life and in your job at U of I.

James W. Sanford. I am "almost" retired, being involved in the Funeral Service business on a part-time basis. I haven't worked as an Entomologist since 1979, although recently I have been pursuing an interest in Forensic Entomology. Kindest personal regards to all Illinois Entomologists, past and present.

Soelaksono Sastrodihardjo. I got my Ph.D. in 1967 and retired as Professor from Institut Teknologi Bandung (ITB) Indonesia in 2003, after 41 years of service. Currently, I am still active in the National Accreditation Board, and at home with my wife, I also like gardening (especially exotic orchids).

Alan Schroeder. Learning Russian has become both a pressing challenge and passion since I began working in Tajikistan earlier this year. In fact, serving farmers in countries from Eastern Europe all the way to the western edge of China has drawn me further abroad in the past couple of years. And, even if people in Albania or Serbia say they don't speak Russian, many of the exact same words and phrases have made it through to their languages. Speaking Spanish, French and now learning Russian has highlighted for me the movement and blending of words and languages, which I find totally fascinating. With my job as a freelance international consultant to our government and the companies that serve it, I still travel a lot to emerging market countries and get to solve international insect outbreak issues as well as issues with the conservation of agriculture, biodiversity, forestry and energy resources. I recommend and help implement IPM and best agriculture practices (Dr. Metcalf's teaching lives on as I often consider his ideas and advice when making IPM decisions). I also analyze pesticide choices for human health and environmental impact issues and then make recommendations to companies that implement agricultural and malaria management projects.

Just last year, in January, there was reported to be an outbreak of African Armyworm in villages of Liberia (http://news.bbc.co.uk/2/hi/africa/7854126.stm). A number of donor countries were asked to assist. As luck would have it, I was chosen for the team to represent the USA (http://www.apanews.net/spip.php?article87653). Visits to affected villages found that it was not armyworm at all, but a local tree-feeding caterpillar in the genus *Achaea*. Crop damage was limited to some feeding on cacao trees and some fruit trees near affected villages, but our team went by tens of villages with no caterpillar sightings or damage, so the "outbreak" was not as wide-spread as was being reported in local media--and ending up being cited by international media. I had the distinct experience of being mis-quoted by a Liberian news outlet. And, by visiting with United Nations FAO staff and some Ministry of Agriculture officials, we found that there was a strong interest in keeping the panic at fever-pitch--to keep resources flowing. Thus, our job evolved from technical to political as we attempted to block any further moves by self-interested parties to game the donor system. My years of dealing with African locust "plagues"--and I do use that word loosely--taught me to take big risks with myriad powerful groups hoping to cash in on the chaos. Most of my jobs, however, don't involve these same levels of risk-taking, or reward.

Keith Solomon. I have recently retired (Jan 1, 2010) but am still active at the University of Guelph with 11 graduate students, teaching courses, editing journals, running workshops, international advisory committees, etc. No more administrivia to worry about so the emails in the morning are less daunting. http://www.uoguelph.ca/ses/users/ksolomon

Bruce Stanley. Three years ago I transferred from DuPont Crop Protection to DuPont Pioneer Ag Biotechnology as a biostatistician and simulation modeler. It has been a very satisfying move for me. It has allowed me to move to a small farm in the Finger Lakes region of Upstate New York halfway between Cornell and the New York Agricultural Experiment Station in Geneva where my wife, Diane, and I met. Diane and I have now been married for 27 wonderful adventure-filled years. We have two children. Our daughter, Evelyn, is living in Germany working on her Master's degree in international relations, and our son, Philip, recently graduated from the University of Delaware with his BA degree. He is an avid musician, and pursuing his music career. Working for Pioneer has allowed me to work more closely with the UIUC's Dr.

David Onstad, which I enjoy very much. David and I were students together at Cornell. I've attached a slightly dated photo of our family. I send my best wishes to all my friends from the UIUC and the students now and in the future.

Daniel Strickman. I have had a job as an administrator since 2006 as National Program Leader for Veterinary, Medical, and Urban Entomology for USDA Agricultural Research Service. The last two years I have also been director of ARS' four Overseas Biological Control Laboratories. I never expected to enjoy administration, but it has been a wonderful opportunity to meet great people and learn entomology more broadly. To brag a bit, the third of our three kids graduates from college this spring and I co-edited a book for CRC Press in 2007 and wrote a book for Oxford University Press in 2009 (Prevention of Bug Bites, Stings, and Disease), both co-authored with Mustapha Debboun and Steve Frances. I often think of Frankl as an elderly gentleman when I was a graduate student proudly showing his book on piano music and suggesting humorously that it would make a good holiday gift!

David Stone. Several years ago I wrote "An Introduction to Bee Biology" (http://www.beespace.uiuc.edu/files/stone-bee-biology.pdf), which was made available online from the BeeSpace website. This educational bee biology packet has been distributed at BeeSpace student workshops and numerous regional and national beekeeping workshops. In some cases presenters requested permission to use it, which was nice in that I was able to see that it was being used by a broad audience. This morning I granted permission to two professors (Department of Zoology & Entomology, University of Pretoria, Pretoria, South Africa) to distribute the document in both English and Afrikaans as part of a nonprofit information service to the African beekeeping community. Gotta love the Internet when it comes to information transfer. You just never know who, or where, your audience will be!

Mike Toliver. Well, the EntCent celebration was great - getting to see all my old friends again! And so many of them were speakers at the celebration...
I'm currently Secretary, the Lepidopterists' Society and one of the Lepidoptera editors for Zootaxa. Still teaching at Eureka College and looking forward to retirement (still a ways off). My daughter is a student at Eureka College, and she's already a junior about to become a senior. Peg (many of you know her; she used to be secretary at the department before I stole her away) wrote a book this last summer which you can see at her web site: http://www.pegtoliver.com/. She continues to teach Yoga and take photographs. We've got a big family trip planned as we meander out west to the Lepidopterists' Society meeting in Leavenworth, WA.
http://ww1.eureka.edu/emp/toliver/index.html

John Tooker. I am trying to stay afloat as a new professor, balancing research and extension responsibilities for Pennsylvania field crops. I have three great graduate students pursuing some promising projects and as well as a few undergraduates that are involved. My first summer with a full lab has had some challenges but we are finding our way. Fortunately, there are a reasonable number of Illinois-associated folks around the Department to help me out when I get lost or confused. At home, two little boys supply energy to keep me distracted from work.

Frank Ray Voorhees. Hi to all in Morrill Hall!

I have been at U.C.M. (formerly C.M.S.U.) since 1975. I was hired to supervise the Medical Technology Program and teach Physiology in the Pre-Med program. 35 years later I am still at this same station, with detours along the way as Dept. Chair, etc. I still try to identify mosquitoes for in terested bystanders, but have not taught an Entomology course since I left Knox College in 1975. I suppose the field has left me far behind!

Phillip Watson. Maureen (MLS-U of I 1977, Married 32 years) and I are the proud grandparents of gorgeous twins. We also have just returned from our 2nd Senior Fulbright Fellowship in 2009 this time to Qatar and after 29 years at Ferris State University (FSU)have decided to retire to new jobs at Qatar University in Doha Qatar in the fall of 2010. I will be working in the biology department on research and accreditation and Maureen will be head of reference in their new library. Our 2009 Fulbright to Qatar was full of local travel and travel to Egypt,Jordan,and a rail trip through Europe and other pleasurable events. We hope to continue that adventure in the next couple of years. We leave FSU with some sadness as it has been our academic home for many years. We will retain our current home in Michigan for now even though all of our sons are living far away. We would love to hear from some of our old friends so drop us an email or poke us on facebook if you are curious.

Art Weis. Hello to all my friends from the department! In 2008 I took the directorship of the University of Toronto's new field station, Koffler Scientific Reserve. This 880-acre property has an array of forest types, wetlands and oldfields. It hosts experimental and survey research by investigators from the UofT, and other institution across Ontario, the US, the UK, France and New Zealand. My own work focuses on the evolution of plant phenology, including natural selection imposed by the lengthening growing seasons that come with climate change. We have built a field-based experimental warming array--a 'time machine' where plant growth genetics can be evaluated under the temperature regime expected for the year 2050. In addition, I am director of the Canadian Institute of Ecology and Evolution, a newly forming 'think tank' that sponsors working groups to synthesize and analyze diverse environmental data sets and to communicate their findings to policy makers.

Donna and I live on the reserve, 35 miles north of Toronto. After 20 years in suburban Orange County, California, we were more than happy to return to a land with four seasons. We enjoy a life out in the woods, but we are still in easy striking distance of a world-class city. My older son, Adam, is in graduate school (architecture) at the University of Oregon. My younger son, Alex, is a senior in biological psychology at UC-Santa Barbara.
The EntCent celebration was terrific. Thanks to May and the whole department for a wonderful time. For all of you who could not attend, you were missed. Let's do it again in 2109!!!
http://labs.eeb.utoronto.ca/weis/

Thomas Wilson. Nov. 09 - study trip to Cuba. See web article.
http://www.judson.edu/news.asp?record_no=18370

Academic Alumni

Peter Price. I and my coauthors have just sent to the publisher our new book "insect Ecology: Behavior, Populations and communities". The publisher is Cambridge University Press, and hardcover and paperback editions will be published simultaneously, hopefully by May 2011. The book is estimated to be 600 pages, with 15 chapters. I originally started the book with Dr. Robert Denno, Department of Entomology, University of Maryland, but his untimely death in 2008 motivated me to collaborate with some of his former doctoral students who would represent his perspectives on insect ecology. Hence coauthors on the book are: Robert Denno, Micky Eubanks, Associate Professor, Texas A&M University; Deborah Finke, Assistant Professor, University of Missouri; and Ian Kaplan, Assistant Professor, Purdue University.

Other activities include: long distance running-my preferred distance is 10K and I have awards for the oldest runner in the race and 2nd place in the over 70 years age category; planning and implementing a restoration/conservation project along the Rio de Flag involving planting of trees and shrub s along about a one mile stretch to contribute t the development of the Flagstaff Green Belt, which runs along the Rio right through town; gardening; and hiking with my wife, Maureen.

Joseph Spagna. I am currently finishing my 2nd year as a faculty member at William Paterson University. Tascha, Elena (6) and Maura (3) are all doing well, and adjusting to life in 'Jersey.' I am still working on trap-jaw ants, but have also picked up some spider research projects (biomechanics and phylogenetics) from my graduate school days.

Kevin Wanner. The time has gone quickly since leaving my post doctoral position at UIUC! During the last two years I have been working to establish my research program in molecular entomology and pest management. My group includes three graduate students and one associate working on a variety of topics. Pheromone receptor evolution in corn borers and yucca moths, molecular biology of the wheat stem sawfly and molecular approaches to identifying and managing wireworms infesting small grains.

Obituaries

Henry E. Gray. Henry E. Gray, 90, a long time Midland resident, passed away on Friday, Dec. 4, 2009, at his home surrounded by family.
A memorial service for Henry will be held at 11 a.m., Friday, Feb. 26, 2010, from First United Methodist Church, with the Rev. Pam Buccholz and the Rev. Dr. Charles Keyworth officiating.
Memorial gifts may be offered to the Michigan Eye-Bank, 4889 Venture Dr., Ann Arbor, MI 48108; to the University of Michigan Ophthalmology Dept. for research, Kellogg Eye Center, 1000 Wall St., Ann Arbor, MI 48105; or the Library of Michigan, Service for the Blind, 402 W. Kalamazoo St., Lansing, MI 48909.
Funeral arrangements are by the Wilson Miller Funeral Home where personal messages of support may be left for the family at www.wilson-miller.com.

George Earl Huff. George Earl Huff, 86, of Cherokee Village, Ark., died Dec. 16, 2008, at White River Medical Center in Batesville, Ark. He was the son of the late George and Vida (Robertson) Huff. Earl retired from the state of Indiana as an entomologist. He served in the U.S. Army during World War II. He was a member of the Masons, the American Legion and the Lions Club. He is survived by: his wife, Marjorie Huff; a son, Richard D. Huff of Australia; a daughter, Paula English of Cherokee Village; and four grandchildren. A memorial service was held April 4 at the Cherokee Village United Methodist Church. Local arrangements were under the direction of Heath Funeral Home of Highland, Ark.

Richard L. Hurley. Richard Lester Hurley, 74, passed away Wednesday, Sept. 3, 2008, at Mountain View Care Center in Bozeman. He was born on June 22, 1934, in Sault Ste. Marie, Ontario, to Thomas Lester and Helen Jane (Waldron) Hurley. After a brief time at the University of Toronto, Rich received a Bachelor of Applied Arts (Honours) from Queen's College in Kingston, Ontario, in 1957. He worked for two summers for Agriculture Canada, collecting insects in the Northwest Territories and southern Manitoba. He then attended the University of Illinois, Champaign-Urban where he earned his master's degree in entomology in 1960 and his Ph.D. in entomology in 1965. Rich was a professor of biology at Humboldt State University in Arcata, Calif., from 1966 to 1996. He was a world expert on the fly family Dolichopodidae. He became a U.S. citizen in the 1970s. Rich traveled widely in North America and the South Pacific, collecting insects and leading educational field trips. He was associate
curator of the Montana entomology collection at Montana State University from 1996 until his death. He donated his extensive collection of insects to the Montana Entomology Collection in 1996. Rich was a well-loved teacher, world-renowned researcher and exemplary mentor and friend. He is survived by his brothers, Thomas (Marylin) Hurley and Leonard (Pat) Hurley of Ontario, Canada; sister, Helen Pottorff (Don) of Florida; and 11 nieces and nephews.

A celebration of Rich's life will be held at 5 p.m. Saturday, Sept. 6, at the Emerson Cultural Center's second floor Weaver Room. Interment will take place in Sault Ste. Marie, Ontario. In lieu of flowers, donations in Rich's name may be made to the Montana State University Foundation, 1501 S. 11th Ave., Bozeman 59717-2750, Entomology Fund. Arrangements are in the care of Dokken-Nelson Funeral Service; www.dokkennelson.com. Published in Bozeman Daily Chronicle from September 5 to September 6, 2008

Costas Kousklekas. 1927-2010 Dr. Costas Kouskolekas, a retired professor of entomology at Auburn University, died in his home Thursday morning February 11th 2010. He was 82. A memorial service will be held at 2 pm Sunday February 14th 2010 at Fredericks Funeral Home in Opelika. Affectionately known among students as Dr. K, he arrived on the Plains in 1967 and spent the subsequent decades teaching graduate level courses, working at agricultural substations, and doing research. Dr. Kouskolekas is survived by his wife of 51 years, Maria, two sons, Alex and Tony, seven grandsons, and one great-granddaughter. Dr. Kouskolekas was born on the island of Santorini in Greece, and came to the US in the early 1950s where he earned his PhD at the University of Illinois. After a brief stint working with the Agricultural Ministry in Greece, he returned to the States for good after accepting a position at Auburn. Fredericks Funeral Home is in charge of arrangements. Published in The Opelika-Auburn News on February 13, 2010

Clifford C. Roan. Mr. Kenneth L. Olds, formerly USACHPPM, reports that his longtime friend and mentor, Dr. Clifford ("Cliff") Creighton Roan, died Friday, 23 May 2008, in Manhattan, Kansas. Dr. Roan was born on 22 December 1920 in Casey, Illinois, and earned B.S., M.S. and Ph.D. degrees from the prestigious University of Illinois. During World War II, he served in the Army Air Corps, with an assignment to India. From 1954 to 1965 he was a professor of entomology at Kansas State University; subsequently, he worked with the USDA in Honolulu, Hawaii, and at the Beltsville Agricultural Research Center in Maryland, and held various other positions, foreign and domestic, including one at the University of Arizona, Tucson, where he conducted research on DDT. In 1972 he began a career with the U.S. Army at Aberdeen Proving Ground, where he established a pesticide monitoring program that entailed collecting and analyzing soils, sediments, water, and fish and bird tissues throughout the United States and Europe. The program was highly successful and caught the attention of several federal agencies, including the CIA and EPA. Ken Olds remembers Roan's project as "one of a kind." In 1983, Roan retired and returned to Kansas. He leaves a legacy of seminal pesticide research papers and reports, including 22 that now grace DPMIAC's online Literature Retrieval System.

James A. Slater. Dr. James Alexander Slater, 88, of Rock-ford, died at 9:10 p.m. Sunday, Nov. 2, 2008. Born Jan. 10, 1920, in Belvidere, the son of Ray Alvin and Gladys Banks Slater. On Feb. 20, 1943, he married Elizabeth Anne Thackston in St. Louis. A Navy veteran of World War II, Dr. Slater served in both the Atlantic and Pacific Theatres of operation. Dr. Slater was professor of entomology at the University of Connecticut-Storrs, from 1953 to 1988. While at the University of Connecticut, Dr. Slater served as head of the zoology and entomology departments, head of the section of systematics and ecology and biological sciences group and head of the section of systematic and evolutionary biology, biological sciences group. Dr. Slater also served as president of the Society of Systematic Zoology, the Connecticut Chapters of Phi Beta Kappa and Sigma Xi, the National Milk Glass Collectors Society and the Connecticut Entomological Society, as well as vice president of Connecticut Academy of Arts and Sciences and the Association for Gravestone Studies. Member of many worldwide entomological societies and served as Connecticut state ornithologist. He was a prolific writer about Hemiptera and was the author of "A Catalogue of the Lygaeidae of the World" (1964), as well as books on milk glass and colonial gravestones. Dr. Slater was an avid researcher and collected insects in Africa, Australia, Central America and the West Indies. Survivors include wife, Elizabeth; children, James A. (Geraldine Gibbon-Slater) Slater II of Lawrence, Kan., Jacquelyn Rae (John Alan) Neil-Boss of Belvidere, Samuel Thackston (Nicki Hall) Slater of West Hartland, Conn., and Lydia Ann Slater-Hintzsche of Poplar Grove; grandchildren, Alexander Wolpe of Rockford and Rae Wolpe of Cape Town, South Africa; great-grandchildren, Luka and Hannah Wolpe, both of Cape Town, South Africa; and cousin, Carol Slater Rowe of Belvidere. Graveside service at 1 p.m. Wednesday, Nov. 5, in Belvidere Cemetery. There will be no visitation. Arrangements are entrusted to Buck-Wheeler-Hyland Funeral Home, 218 W. Hurlbut Ave. Memorials in his name may be made to the Arc of Winnebago, Boone, and Ogle Counties.
http://www.bioone.org/doi/pdf/10.1664/09-SN-007.1

Births

Rebecca Peterson Brown. Zoe Alice Brown, 6 lbs, 12 oz, 19 ¾”, 1/21/10.
Andy Deans and Heather Hines. Vivian Simone Deans, 8 lbs 3 oz, 21 3/4", 6/8/10
Moushumi Sen Sarma. Edward Aditya Russer, 6 lbs, 19”, 12/11/08
Harland Patch and Christina Grozinger. Evelyn Odessa Patch, 7 lbs 6 oz, 22”, 3/23/10

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A heartfelt and emphatic "Thank you!!" to our alumni supporters and friends—we really appreciate your generosity!

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Please attach photos!

https://www-s.life.illinois.edu/entomology/alumni/new

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