

# UGA ENTOMOLOGY

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THE NEWSLETTER OF THE UNIVERSITY OF GEORGIA DEPARTMENT OF ENTOMOLOGY

SUMMER 2003

## From the Department Head

Programs in the Department of Entomology at UGA continue to be impacted by the lagging economy, primarily through our inability to replace key faculty members because of budget cuts. We are not unique in this regard as Entomology Departments around the country seem to be dealing with similar budgetary difficulties. Even so, our future is bright and we will continue to build our programs in priority areas that will be key to our success. Faculty morale and productivity is excellent and our technical personnel and administrative staff members continue to garner more than their share of awards and recognition. Overall, we have had an excellent year. It began with an unusually large number of new graduate students arriving in the fall, and we also had a large number of students graduating over the course of the year. Extramural funding levels and expenditures in our research programs were up and extension programs have remained strong even though we have fewer faculty members working in this area than in previous years.



“Sunrise at Sapelo”

Productivity of teaching programs and low enrollment undergraduate majors are being scrutinized more closely than in recent years as the University Administration and the Board of Regents look at funding priorities in light of reduced budgets. We have excelled in terms of student credit hours generated, however our undergraduate enrollment and graduation rates do not meet suggested minimums. Consequently, this is a high priority area for us because we must increase undergraduate enrollment from our current level (8 to 10 students) to a level that meets Regent’s enrollment and graduation requirements. One new development in undergraduate education is that our undergraduate degree will now be a B.S.E.S (Bachelor of Science in Environmental Science) rather than a B.S.A. (Bachelor of Science in Agriculture). This provides an excellent opportunity to develop a flexible major that will hopefully appeal to undergraduates interested in agriculture and the life sciences. Marianne Stephens has provided exceptional leadership for us in student recruitment and overall academic program management. I will be working with her in student recruitment to ensure that we address the enrollment issue. Equally important perhaps is the fact that in our area, there is a strong demand for B. S. graduates, and as a Department of Entomology in a Land Grant

University we want to meet this need.

The College has implemented a budget management system that provides opportunities for redirection, particularly in research. We are working aggressively to position our Department to benefit from redirection efforts and to ensure that we will be able to contribute even further to the overall quality of College and University programs.

Strategic planning is now underway in the College and we will be updating our Strategic Plan and reassessing program priorities in the coming year. We welcome your input as we develop priorities and plans that will enable UGA to continue to be a leading Entomology Department. We look forward to seeing many of you at the upcoming ESA Meeting and if you have an opportunity, please come to see us in Athens.

Ray Noblet

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## ARRIVALS

### Alton N. “Stormy” Sparks, Jr. (Tifton)



Stormy joined the Rural Development Center Summer of 2002. He moved to UGA from Texas A&M where he

Applied research and educational programs focus on vegetable insect management designed specifically for conditions in Georgia. The primary purpose is to provide educational programs and materials to County Extension Agents and producers to improve vegetable production systems to maximize economic returns while maintaining environmental integrity, production sustainability, produce quality and worker safety.

In vegetable insect pest management, we emphasize cultural practices to reduce the potential for pest problems in conjunction with insecticides as needed. Applied research is conducted with research counterparts to evaluate new technology and management programs under local production conditions and to provide the most up-to-date insect pest management options. Although our primary focus is the local producer, cooperative efforts with Georgia Department of Agriculture and other agencies help sustain quality vegetable production in Georgia and surrounding states.

THE ENTOMOLOGY  
DEPARTMENT WELCOMES  
STORMY!

## Post Doctoral Associates

Markus Beck (Germany), David Donnell (Arizona) and David Giron (France) recently began post docs with Michael Strand.



## DEPARTURES

### Retirements



John Joyce retired at the beginning of the year. John has assisted Craig Sheppard as a research assistant in livestock pest management while working with the Coastal Plain Experiment Station in Tifton. John is an outstanding worker and his expertise in the area of insect vector analysis of ectoparasites on cattle is essential. The many contributions that he has made to the department during his years of service have proven his excellence as an employee as well as his expertise in the field of livestock pest management.



Simeon McKeown has assisted Jim Todd at the Coastal Plain Experiment Station in Tifton as a research assistant in peanut insect pest management. Mr. McKeown is an incredible and valued worker and his knowledge of peanut IPM is essential.

We extend our appreciation to Mr. McKeown and feel that our Department is fortunate to have employees with his dedication and commitment to excellence in the area of peanut IPM.

William Slaughter, research coordinator with David Buntin in Griffin, was recently called to active duty with the Army National Guard based out of Fort Hood. He is currently at Fort Stewart and his unit will likely be called to the Middle East.

## Post Doctoral Associates

Michael Riehle, working in Mark Brown’s laboratory completed his Ph.D. Spring 2002 and, after a short postdoc, went to do a postdoctoral research project on mosquito-pathogen interactions with Marcelo Jacobs-Lorena, who is soon to move from Case Western Reserve University in Cleveland, OH to Johns Hopkins University in Baltimore, MD.

Publication of the paper on mosquito peptide hormones in the issue of Science premiering the completion of the *Anopheles gambiae* genome database.

Sabine Grube has worked with Brian Forschler researching subterranean termites for the last few years. Sabine will be returning to Germany and has submitted a proposal to work with the Ernst-Moritz-Arndt University of Greifswald studying intermicrobial substances produced by termites.

Kim Lohmeyer graduated with a Ph.D. Spring 2002, under the direction of John All. She joined his laboratory as a post doc and recently accepted a job with the USDA in Kerrville, Texas working in the Livestock Insects Research Lab.

## Student Section

Entomology welcomed **19** new students into the graduate program this Academic year 2002-2003.

### Masters Students

Melissa Churchel  
Damon Ely  
Shira Gordan  
Sara Hague  
Chris Hartley  
Jennifer Henke  
Nabor Mendizabal  
Punya Nachappa  
Steven Pruitt  
Rich Schultheis  
Christian Torres  
Michael Ulyshen  
Caleb Warrington  
Jeff Whitman  
James Young  
Shu Zhang

### Major Professor

Darold Batzer  
Bruce Wallace  
Michael Strand  
Dan Horton  
Joe McHugh  
Darold Batzer  
Keith Delaplane  
Paul Guillebeau  
Bruce Wallace  
Darold Batzer  
Robert Matthews  
Jim Hanula  
John All  
Brian Forschler  
Wayne Berisford  
Michael Strand

### Ph.D Students

Lohitash Karumbaiah  
Floyd Shockley  
Honglada Thoetkiattikul

### Major Professor

Michael Adang  
Joe McHugh  
Michael Strand

## Academic Degrees Awarded

**Ben Brewer**, BSA, Spring 2003

**Tim Daly**, MS, Spring 2003, Field evaluations of Yieldguard (Bt) corn on non-target pests and beneficial insects.

**Juanita Forrester**, MS, Spring 2003, Taxonomy of the Aspidiphorus uenoi species group (Coleoptera: Sphindidae).

**Juan Luis Jurat Fuentes**, Ph.D, Summer 2002, Mode of action analyses of cry1 toxins from

*Bacillus thuringiensis* in susceptible and resistant *Heliothis virescens*.

**Amanda Hodges**, Ph.D, Summer 2002, The life history of *Polistes metricus* Say: A study of behavior and parasitic natural enemies.

**David Jenkins**, Ph.D, Fall 2002, Impact of the Red Imported Fire Ant (*Solenopsis invicta* Buren) (Hymenoptera: Formicidae) on Xylophilous Hymenoptera in Georgia and South Carolina.

**Brent Johnson**, Ph.D, Fall 2002, Effects of resource manipulation on selected primary and secondary consumers in two detritus-based southern Appalachian streams.

**Tatiana Kiselyova**, Ph.D, Spring 2003, A phylogenetic study of Dermestidae (Coleoptera) based on larval morphological characters.

**Erika Bilger Kratzer**, MS, Fall 2002, Temporal and Spatial Variation of macroinvertebrates of the Okefenokee Swamp.

**Jay Overmyer**, Ph.D, Fall 2002, Utilization of black fly larvae (Diptera: Simuliidae) in biomonitoring and aquatic toxicity testing: Assessing the effects of lawn care chemicals in suburban streams.

**Joy Rumisell**, BSA, Fall 2002

**Daye Stewart**, BSA, Fall 2002

**Erich Tilgner**, Ph.D, Summer 2002, Systematics of phasmid

## Departmental Events and Activities

### H.O. Lund Week Activities

The Entomology Department is excited to announce a week of activities honoring our Founding Department Head, H.O. Lund. **Lund Week** was March 24 – March 31. Activities included:

- 3/24 Poster and Photo Display
- 3/25 Pizza and a Movie (Joe's Apartment)
- 3/26 Oral Competition
- 3/27 Poster Competition
- 3/27 Photo Competition
- 3/28 Lunch and a Movie (Microcosmo)
- 3/31 H.O. Lund Seminar w/ Deane Bowers
- 3/31 Reception at GA Center (Awards Presentation)

## Student Awards

### H.O. Lund Awards

Outstanding Ph.D - **Jorge Torres**  
Outstanding Ph.D Outreach & Service - **Gretchen Pettis**  
Outstanding M.S. - **Christian Torres**  
Outstanding M.S Outreach & Service - **Juanita Forrester**

Oral Presentation Competition  
First Place – **Selim Dedij**  
Second Place – **Gretchen Pettis**

Poster Competition  
First Place – **Jay Overmyer**  
Second Place – **Juang-Horng Chong**

Photo Competition  
First and Second Place – **Jim Young**

**Juang-Horng Chong** (Ph.D Student) - Runner-Up in the Section F Student Display competition Entomological Society of America national meeting in Fort Lauderdale, Florida.

**Juan Luis Jurat Fuentes** (Post Doctoral Associate) - 1st place in the Section C Student Display competition Entomological Society of America national meeting in Fort Lauderdale, Florida.

**Floyd Shockley** (Ph.D Student) Twice awarded Center for Systematic Entomology grant to travel and study in the Florida State Collection of Arthropods.

**Chris Hartley** (M.S. Student) Awarded a Two-year University Wide Fellowship beginning Fall 2002 through Spring 2004.

**2003 Linnaean Team** – 2<sup>nd</sup> Place SEB-ESA  
**Junaita Forrester, Jennifer Henke, Floyd Shockley, Jim Young.** The UGA Linnaean Team will be competing at the national meeting in October in Cincinnati, Ohio.

### Georgia Entomological Society Meeting

**Gretchen V. Pettis** - Outstanding Ph.D. Student  
**Michael Ulyshen** - Outstanding M.S. Student

Award for best paper by a Ph.D. student  
1st **Gretchen Pettis**  
2nd **Josh Campbell**  
3rd. **Juang-Horng Chong**





## H.O. Lund Outreach Activities

### 2002-2003 Officers

President – Juang-Horng Chong  
 Vice President of Insect Curation – Jim Young  
 Vice President of Outreach – Juanita Forrester  
 Treasurer - Melissa Churchel  
 Secretary - Jen Henke  
 Ag Hill Reps – Chris Hartley and Caleb Warrington  
 Social Chairs – Shira Gordan and Floyd Shockley  
 Grad Student Association Rep – Floyd Shockley

### Ratified Constitution

The H.O. Lund Club recently drafted and ratified a new constitution. The previous constitution was in need of extensive revision, and a committee was formed to update it and make it more formal, meeting guidelines mandated by the University of Georgia Department of Student Activities.



### SPRING OUTREACHES

- 1/25 Camp Elachee Nature Center
- 2/22 Camp Elachee Nature Center
- 2/22 Rainforest Festival
- 3/8 SuperScience Day at Sandy Creek
- 3/22 Camp Elachee Nature Center
- 4/4 Insect Zoo, Entomology Dept
- 4/16 Elberton Comprehensive HS
- 4/22 Athens Montessori School  
Earth Day
- 4/26 Athens Academy Day Festival
- 5/3 Lanier Museum of Natural History
- 5/17 Zoo Day at Memorial Park
- 5/23 Biodiversity Blitz at Elachee

**THANKS to all of our students and staff who participate in outreach activities. Outreach is a vital service to the Athens area communities and would not be possible otherwise.**

### BUG JOKES

Which mosquito attacked Dorothy and Toto?  
 ...The Wicked Itch of the West.

Where do spiders go to learn new words?  
 ...Web-ster's Dictionary.

What do you get when you cross a praying mantis with a termite?  
 ...A bug that says grace before eating your house.

What's spiral in shape and very crowded?  
 ...A snail with a house guest.



## Publications

### Refereed journal articles and Extension Bulletins published.

- Daniel, A., Sangadala, S., Dean, D.H. and Adang, M.J. 2002. Denaturation of either *Manduca sexta* aminopeptidase N or *Bacillus thuringiensis* Cry1A toxins exposes binding epitopes hidden under non-denaturing conditions. Appl. Environ. Microbiol. 2002. 68: 2106-2112.
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- Sun, J., G. L. DeBarr, S. R. Clarke and C. W. Berisford. 2002. Yellow sticky traps for monitoring males and two parasitoids of *Oracella acuta* (Lobdell) (Homoptera: Pseudococcidae). Journal of Entomological Science.37: 177-181.
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- Krewer, G., **J. D. Dutcher** and C. J. Chang. 2002. Imidacloprid slows the development of Pierce's disease in bunch grapes. *J. Entomol. Sci.* 37: 101-112.
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## Faculty Awards

- Keith Delaplane**  
2002, Exceptional Service Award, Apiary Inspectors of America
- James Dutcher**  
Tifton Chapter Sigma Xi Distinguished Service Award, 2002
- Wayne Gardner**  
Communicator of the Year Award, Georgia Green Industry Association, January 13, 2002.  
Silver Award, Institutional Landscape Design, Georgia Green Industry Association to the Research & Education Garden, January 13, 2002.
- Dan Horton**  
2002 Walter B. Hill Award Recipient (UGA's Award for Distinguished Achievement in Public Service and Outreach, 31 Jan 2002
- William Hudson**  
2002 Award of Excellence for Senior Scientist, Tifton Campus, UGA, CAES
- Robert Matthews**  
Recipient of the McGraw Hill Higher Education Distinguished Teaching Award for sustained excellence in animal behavior instruction presented by the Animal Behavior Society at its annual meeting in Bloomington, IN July 2002
- Ronald Oetting**  
Received the 2001-2002 award of excellence for the Southeast Greenhouse Conference education program presented to the education committee by the Georgia Society of Association Executives.
- David Riley**  
2002 Sigma Xi Creative Research Award, Tifton Chapter of Sigma Xi 2002 Award of Excellence to the Tifton Chapter of Sigma Xi during my tenure as president
- Daniel Suiter**  
Plaque of Appreciation from the Georgia Pest Control association for continued service as Chair of the Association's Career Development Committee, 2002.

## DEVELOPMENT ACTIVITIES

### 1. The Gary Herzog Crop Pest Management Professorship.

This Professorship is being created to honor Dr. Herzog for his contributions and to ensure excellence in crop insect pest management research at the Tifton Campus.

Donations should be made to the University of Georgia Foundation for the Gary A. Herzog Endowment Fund.

### 2. The Irvin/Russell Professorship in Urban Entomology.

This Professorship is being created to further excellence in structural insect pest management and to honor two individuals to have contributed in major ways to advance the Pest Control Industry. These individuals are The Honorable Tommy Irvin, GA Commissioner of Agriculture and Mr. Bob Russell who devoted his entire career to advancing the Pest Control Industry.

Donations should be made to the University of Georgia Foundation for the Irvin/Russell Professorship Fund.

More information will be forthcoming on this Development Initiative. Contributions may be mailed to:

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