



November 2003

Faculty News

Dr. **Heather McAuslane** reports that we have 29 applicants for the Insect Toxicology position. The search committee hopes to report by late December on who will be invited for interviews.

Post-Doc News

Dr. **Anand B. Persad**, a postdoctoral scientist in Dr. **Marjorie Hoy's** laboratory since August 2001, left for a permanent position with Davey Tree Company in Kent, Ohio. Dr. Persad has been ordering long underwear for his sojourn in the frozen north. After growing up in Trinidad and spending over two years in Florida, he and his wife must now adjust to a temperate climate.

Dr. **Yoshi Hashimoto** joined Dr. **Pauline Lawrence's** lab to work on characterization and expression of genes from the *Diachasmimorpha longicaudata* entomopoxvirus (DIEPV). Currently, he is developing a restriction map of the DIEPV genome.

New Teaching Lab

Work began on the new teaching lab in late October. As of early November, the internal walls that separate the three rooms (3117-3118-3119) were coming down.

Room Version of Musical Chairs

Dr. **Virendra Gupta**, now retired, is moving out of his labs and office (3209), but has temporary use of 3006 for his office. At the same time, Dr. **Faith Oi** will move from 3206 to Gupta's old office in 3209. Dr. **Tom Sanford** (retired) used to be in 3006, but he now uses 3207 when he is not starring in a local drama production. The new insect physiology position, which is currently being advertised, is assigned 3206 as office space.

Ph.D. student **Rebecca Baldwin**, who teaches ENY 3005 Principles of Entomology, is moving from 3215 to 3212 and will share that office with Ph.D. student **Pete Coon**, who teaches ENY 3007C Life Science.

The non-tenured toxicologist position, for which the committee is now reviewing applications, is currently assigned office space in 3213. And when insect taxonomist Dr. **Mark Branham** reports for duty next month, his office will be in 2005. This requires Dr. **Norm Leppa** to move from 2005 to 3005.

Speaking of moving... Plans are for much or all of Dr. **Gupta's** insect collection to be given to the Division of Plant Industry Florida State Collection of Arthropods (FSCA) in Gainesville, as space in that collection becomes available when FSCA

assets are moved to the new Lepidoptera building under construction.

Publications

Dixon WN. (August 2003). Nantucket pine tip moth, *Rhyacionia frustrana* (Comstock). *UF/IFAS Featured Creatures*. EENY-304. http://creatures.ifas.ufl.edu/trees/moths/nantucket_pine_tip_moth.htm

Halbert SE. (October 2003). Giant sweetpotato bug, *Spartocera batatas* (Fabricius). *UF/IFAS Featured Creatures*. EENY-305. http://creatures.ifas.ufl.edu/veg/leaf/spartocera_batatas.htm

Halbert SE, Gill RJ, Nisson JN. (October 2003). Eucalyptus psyllid, *Blastopsylla occidentalis* Taylor, and red gum lerp psyllid, *Glycaspis brimblecombei* Moore. *UF/IFAS Featured Creatures*. EENY-306. http://creatures.ifas.ufl.edu/trees/eucalyptus_psyllids.htm

Howard FW, Pemberton R, Hamon AB, Hodges GS, Mannion CM, McLean D, Wofford J. (September 2003). La escama lobata de laca, *Paratachardina lobata* (Chamberlin). *UF/IFAS Featured Creatures*. EENY-309. http://creatures.ifas.ufl.edu/orn/scales/lobate_lac_sp.htm

Hoy MA, Nguyen R. (October 2003). Citrus leafminer parasitoid, *Cirrospilus ingenuus* Gahan *UF/IFAS Featured Creatures*. EENY-312. http://creatures.ifas.ufl.edu/beneficial/cirrospilus_ingenuus.htm

Nickerson JC, Bloomcamp CL, Fasulo TR. (October 2003). Ghost ant, *Tapinoma melanocephalum* (Fabricius). *UF/IFAS Featured Creatures*. EENY-310. http://creatures.ifas.ufl.edu/urban/ants/ghost_ant.htm

Awards

Dr. **Don Hall** reports that **Emily Heffernan** (M.S.) and **Barry Alto** (Ph.D.) were selected by the Departmental Graduate Committee to receive the Mulrennan Outstanding Graduate Student Awards for the 2003-04 academic year. Each of these awards carries a \$500 cash prize. Emily is working under Dr. **Thomas Emmel** on a lycaenid butterfly-ant mutualism. Barry is working under Dr. **Phil Lounibos** on the effect of *Aedes* mosquito larval competition on vector competence.

In October, **Pest Control Technology** (PCT), a national magazine for the urban pest management industry, had “40 Under Forty” as its cover article. The cover also stated, “They’re young. They’re ambitious. They’re the future leaders of the pest management industry.” Two of those featured are departmental alumni: **Dan Suiter** (Ph.D.) and **Jerry Gahlhoff** (M.S.). Suiter is an assistant professor in Urban Pest Management at the University of Georgia. Gahlhoff is national technical director for Texas-based HomeTeam Pest Defense, “...one of the largest and fastest-growing pest management companies in the country,” according to PCT.

2003-2004 Undergraduate Scholarships

Each October, the departmental undergraduate committee accepts

applications from our undergraduate majors for one of nine scholarships. Our department is fortunate to have been provided sufficient endowed funds to permit us to supplement the support of deserving undergraduate majors.

The undergraduate committee consists of Drs. **Carl Barfield** (Chair and Undergraduate Coordinator), **Heather McAuslane**, **Phil Koehler**, **Bob McSorley**, student member **Rebecca Baldwin**, and *ex officio* member **Debbie Hall**. The committee met 31 October 2003 and allocated 11 of our majors scholarships. We are proud to announce the following recipients. Please visit our departmental Web site to view their photos and awards.

Mulrennan Scholarship: - Rhiannon Lewis

Creighton Scholarships: Tracy Conklin and Christine Lynch

Dixon Scholarship: - David Melius

Murphey Memorial Scholarship: Ryan Wagoner

Urban Entomology Scholarship: John Whelan

Richardson Scholarships: Jason Stanley and Mary VanDerBerg

Hetrick Scholarship: Ryan Welch and Erik Shuping

Davis Memorial Scholarship: Barbara Bayer-Lopez

Part of the responsibility of receiving these scholarships is for the recipient to write to the designated donor to inform the donor of

who they are and how they are progressing academically. Scholarship opportunities will be announced next in August 2004 with an October 2004 deadline. Please join the undergraduate committee in congratulating these worthy recipients. - **Carl S. Barfield**

Meetings and Presentations

During October, Dr. **Anand B. Persad** and Dr. **Lucia Zappala**, postdoctoral scientists in Dr. **Hoy's** laboratory, attended the national Entomological Society of America (ESA) meeting in Cincinnati. Dr. Persad presented a poster on "High-fidelity PCR assay discriminates between immature *Lipolexis oregmae* and *Lysiphlebus testaceipes* within their aphid host" (coauthors were Drs. **A. Jeyaprakash** and **M. Hoy**). Dr. Zappala presented a talk on "Oviposition behavior and host discrimination by *Ageniaspis citricola*, a parasitoid of the citrus leafminer, *Phyllocnistis citrella*" (coauthor is Dr. **Hoy**).

If you missed the ESA meeting then you missed the delicious Japanese lunch co-hosted by Dr. **Gene Gerberg**, Sumitomo Chemical and MGK which was attended by a number of our faculty and students.

Dr. **Pauline O. Lawrence** presented a poster "DLEPV homologs of the putative Vaccinia G5R and poxvirus NPH1 and rifampicin resistance proteins" at the ESA annual meeting.

Oscar Hernandez (Lawrence Lab) attended a training course (26-29 October 2003) on HPLC technique sponsored by Perkin Elmer Corporation in Atlanta, GA.

Kyle Hubbard (Tuskegee University), **Gerard Henry** (Santa Fe Community College) and **Kathy Rocha** (BS, University

of Florida) are three Research Experience for Undergraduates (REU) students working with Dr. **Pauline Lawrence**. They conducted research on two projects (1) viral proteins from the symbiotic entomopoxvirus (DIEPV) of the parasitic wasp *Diachamimorpha longicaudata* and PSP24, a virally induced protein in their host, the Caribbean fruit fly and (2) Developmental stages of *Fopius arisanus*, an egg-pupal parasitoid of the Oriental fruit fly, *Bactrocera dorsalis*.

Mr. **Kyle Hubbard** prepared a thesis entitled "PSP24 and viral (DIEPV) proteins in tissues of parasitized *Anastrepha suspensa*" and was invited to present this research in a student competition at Tuskegee University, Fall 2003.

Ms. **Kathy Rocha** (Lawrance Lab) presented a poster "Immature development of *Fopius arisanus* in the oriental fruit fly, *Bactrocera dorsalis*" at the ESA annual meeting.

Dr. **Julio Medal** gave an invited lecture at the Universidade Estadual do Centro-Oeste, Iratí campus in Paraná state, Brazil, 23 October. Medal gave the two hour lecture (in Português) on "An overview of biological control of invasive plants worldwide with emphasis in the Florida experience" to a group of 15 undergraduate students of the Plant Protection class in the Forestry Department.

On 3 November, Dr. **Julio Medal** gave a 30 minute lecture to the Tampa Middle School 8th grade (approximately 35 students) Science class on "Biological control of weeds in Florida." Medal also is advising Travis Sexton (student) on his Science Fair Project using the first biocontrol agent (a South American leaf beetle) released in Florida to control tropical soda apple. Travis

is studying the effects of different densities of the leaf beetles on defoliation and fruit production of tropical soda apple.

On 28 October, Dr. **Julio Medal** attended the tropical soda apple task force meeting at the Florida Department of Agriculture and Consumer Services- Division of Plant Industry in Gainesville. Medal gave a 20 minutes presentation on "*Gratiana boliviana* (Chrysomelidae), the first biocontrol agent released in Florida to control tropical soda apple."

On 3 November, Dr. **Susan Webb**, UF/IFAS vegetable entomology extension specialist, presented an invited talk to entomologists and plant pathologists at Clemson University. She spoke about her past research on the ecology and management of aphid-vectored viruses in cucurbits and discussed the results of a recent survey of Florida cucurbits for insect-vectored plant viruses.

Posters Posted

As a result of discussion at the last faculty meeting, new posters or other displays placed around Building 970 can be announced in this newsletter. Please send author(s) and title to the newsletter editor. Do not forget to include the location, else readers will have to search the building for your display.

Hay-Roe MM, Shapiro AM, Becnel JJ, Boucias DG. "A newly discovered baculovirus induces reflex bleeding in the butterfly *Heliconius himera* (Nymphalidae: Heliconiinae)." Adjacent to room 3119.

Lawrence PO. "DLEPV homologs of the putative Vaccinia G5R and poxvirus NPH1 and rifampicin resistance proteins". Presented at the recent Entomological

Society of America (ESA) meeting. Adjacent to 2218.

Rocha K, Mangine T, Harris EJ, Lawrence PO. "Immature development of *Fopius arisanus* in the oriental fruit fly, *Bactrocera dorsalis*." Presented at the ESA meeting. Adjacent to 2218

Persad A, Jeyaprakash A, Hoy MA. "High-fidelity PCR assay discriminates between immature *Lipolexis scutellaris* and *Lysiphlebus testaceipes* within their aphid hosts."

Arevalo A, Frank JH. "Sugar composition in the crop contents of *Larva bicolor* (Hymenoptera: Sphecidae) captured in the field." Presented at the ESA meeting. Adjacent to 2312.

Big Bug Books

Are you one of over 350 authors, from 36 countries, of the **Encyclopedia of Entomology**, edited by Dr. **John Capinera**? It is currently in press and should be available late Spring of 2004. The Encyclopedia contains 2400 pages in three volumes and will list for \$495 (US) or 450 Euros. There is a pre-publication price of \$396 (US) or 360 Euros if you order before 30 April 2004. Details at <http://www.wkap.nl/prod/b/0-7923-8670-1> or on a poster adjacent to room 3224.

Grants

The US EPA recently funded another phase of the project "Whole-structure decontamination of *Bacillus* spores by methyl bromide fumigation" bringing total funding of this project to \$288K. In an example of a public/private partnership, the

EPA Small Business Innovative Research grant to Cobra Termite Control, Lauderdale (FL), will be used to fund fumigation research at the UF/IFAS Ft. Lauderdale Research and Education Center and aims to further support a patent granted to entomologist **Rudi Scheffrahn** (FLREC) and Mark Weinberg (Cobra) for use of methyl bromide as a structural decontaminant of anthrax spores. On 29 October, Scheffrahn met with EPA and Homeland Security officials, and US Army scientists at the Army's Aberdeen Proving Grounds in Maryland to develop a protocol for fumigating virulent anthrax spores and candidate surrogate spores with methyl bromide. The Edgewood Chemical and Biological Center (ECBC) at Aberdeen is the US military's center for bioterrorism research. The \$160K ECBC study is to be funded by the Technical Support Working Group of the Office of Homeland Security. Field testing of non-pathogenic surrogate spores is slated to begin at FLREC in July 2004.

Dr. **Pauline Lawrence** received a \$43,408 grant from the National Science Foundation to study the symbiotic viruses in *Diachasmimorpha krausii*, a parasitoid of the Mediterranean fruit fly and related tephritids and a supplement to her existing NSF grant to support research experience for three students in the Research Experience for Undergraduates program.

Drs. **Julio Medal** and **James Cuda** received a one-year \$50,000 grant from the Florida Department of Agriculture and Consumer Services - Division of Plant Industry to initiate the mass rearing and field release of the South American leaf-beetle *Gratiana boliviana* for biocontrol of tropical soda apple. So far, this beetle has been released in

four counties (Alachua, Hendry, Collier and Polk) in Florida.

Fall Seminar Series

The remaining seminars are:

11/13 - Dr. **B. Unruh** (University of Florida, West Florida REC - Jay) "The role of the extension specialist: past, present, and future."

11/20 - Dr. **L. Morrison** (USDA, Gainesville) "The island biogeography and metapopulation dynamics of Bahamian ants."

11/27 - Happy Thanksgiving. Eat all the turkey you want, but remember you are what you eat.

12/4 - Dr. **L. Duncan** (University of Florida, Citrus REC - Lake Alfred) "Food webs and the biological control of a pest-disease complex by entomopathogenic nematodes"

Student Seminar Requirement

Faculty and students are reminded that graduate students are required to take seminar courses: M.S. - 1 credit; Ph.D. - 2 credits. Some or all of these courses have an oral presentation requirement. Check with Debbie Hall, Student Services Coordinator, for scheduled Spring semester seminar courses.

Best of the Bugs

The **Cornell University Beetle Science** Web site is the latest insect- or nematode related site to receive the UF/IFAS Department of Entomology and Nematology Best of the Bugs Award. This site states that, "The

abundance of beetle species and their countless interactions with other life forms make the study of beetles important to the biological sciences overall." Entomologists at Cornell developed a wonderful Web site that allows you to better appreciate this diverse order of insects. You can examine beetle time lines, videos, interaction with other life, 360 degree views and carbon dust illustrations. However, you will need both the Flash and Quick Time plug-ins to view the better aspects of this site. Fortunately, links to the plug-ins are available on site. The Best of the Bugs Web site is available at <http://pests.ifas.ufl.edu/bestbugs/>.

Distance Education

Although the department has several online and other distance education courses available, these were developed by each instructor with no adherence to a department-wide standard. So a committee was formed early in the year to develop general guidelines. At the October faculty meeting, **Phil Koehler** presented the results of the Distance Education Committee's work and recommended curriculum. The committee consists of: **Phil Koehler**, Chair, **Rebecca Baldwin**, **Eileen Buss**, **John Capinera**, **Skip Choate**, **Pete Coon**, **Debbie Hall**, **Nick Hostettler**, **Heather McAuslane**, **Jane Medley** and **Faith Oi**.

Koehler passed out a copy of the proposed curriculum and method of delivery of the courses and labs. He also passed out a listing of the different certificates to be earned, the courses and number of credits required to obtain these certificates and the semester in which the course would be offered. The department plans to implement the Distance Education Program in January 2004.

Job Wanted

Jeff White is completing his M.S. in December and is searching for full time hours: "...either two part time jobs or an internship, as long as I get 35 or more hours, in the Gainesville area starting around January 1st and running till April. I have experience in bio-control, IPM, behavior and ecology as well as the taxonomy of insects. I would like to work in an entomological project or a related field. If anyone is looking for OPS workers or knows of an internship position please contact me at 392-1901 ex. 182 or you can find me in room 2111 in the Entomology Dept. (Dr. Liburd's lab)."

Bug Joke

Caterpallor (n.): The color you turn after finding half a "worm" in the fruit you are eating.

Halloween Creeps

Speaking of jokes... It is amazing what some people will do for a little attention. :-)
Graduate students **Justin Harbison**, who currently holds the department's Outreach Assistantship, and **Scott Weilman** posed for an UF/IFAS Halloween news release with a tarantula and scorpion crawling on their faces. See <http://news.ifas.ufl.edu/> for their photograph (dated 10/30/03). By the way, the "Creeps" in this section title refers to the arachnids, not Justin or Scott. :-)

Our students are very active in local outreach programs, partially because the department considers this effort so important that we have designated an assistantship for that purpose. We are also fortunate that all of the graduate students who received this

assistantship have been very active in this effort. However, I am sure that Justin and all his predecessors will admit that they could not fulfill all the requests for departmental tours, school visits and more without the participation of many of our other fine students. Our thanks to all of them.

Featured Creatures

The UF/IFAS Department of Entomology and Nematology and the FDACS Division of Plant Industry now have over 310 UF/IFAS publications on the Featured Creatures Web site at <http://creatures.ifas.ufl.edu/>, with more undergoing development. During October 2003, the Featured Creatures Web site recorded 139,055 distinct visitors and 243,958 page views.

"I am really excited to learn more about these interesting creatures (cicada killers)...having this file available online will be very helpful in convincing alarmed callers that this insect maybe ain't so bad after all. I do appreciate your kindness writing this up for us Dr. **Stange**, I promise to put it to good use! Thanks again!!! - JoAnn Hoffman, Urban Horticulture Program Assistant, Hillsborough County Cooperative Extension Service

New text and/or photographs were added to the files on: white-footed ant and giant water bugs.

During the period 1 July - 30 September 2003, the most popular Featured Creatures were (in order): brown recluse spider (**GB Edwards DPI**), lovebug (**HA Denmark/FW Mead DPI**); yellowjackets (**EE Grissell DPI**); bed bug (**SE Brooks UF**); house fly (**H Sanchez-Arroyo UF**); common house spider (**GB Edwards DPI**); southern house spider

(**GB Edwards** DPI) and deer flies (**JM Squitier** UF).

Bug Tutorials

The latest Bug Tutorial CEU/Training CD (SW 170) contains two tutorials: Mole Crickets and

Enemies of Mole Crickets and is authorized by the Bureau of Entomology and Pest Control and the Bureau of Compliance Monitoring for 1 (one) CEU each in any of the following categories:

Commercial Lawn and Ornamental, Ornamental and Turf. Limited Lawn Ornamental. Limited Lawn Maintenance, Private Agricultural Applicator and Agricultural Row Crop.

Developers are **Aaron Weed** and **Thomas Fasulo**. Aaron Weed was a MS student under **Howard Frank**, our mole cricket researcher and biological control specialist, and currently works in Dartmouth, MA. Details are available on the UF/IFAS Buggy Software Web site at <http://pests.ifas.ufl.edu/software/>.

Newsletter Minutia

Thomas Fasulo is the newsletter editor. Please send submissions to him at **fasulo@ufl.edu**. Issues are published about the middle of each month. Items for each month's issue should be sent no later than the 10th of that month.

Printed copies are distributed only within Building 970. A notice is sent to all those on the **UF-Bugnews-I** listserv when HTML and PDF copies are posted on the newsletter Web site at <http://entnews.ifas.ufl.edu/>, which contains instructions for subscribing and

unsubscribing to the listserv. **Andy Koehler** does the coding for the HTML version.

During September 2003, the UF/IFAS Department of Entomology and Nematology Newsletter Web site recorded 3,456 distinct visitors and 4,835 page views. The newsletter listserv contains 215 subscribers.