


9-2013

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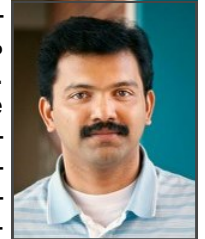
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Welcome

Dr. Joe Louis will assume the plant-arthropod interactions assistant professor position in the Entomology and Biochemistry Departments on October 7, with an academic year appointment of 80% research and 20% teaching. He is currently a postdoctoral scholar at Pennsylvania State University. Dr. Louis received his Ph.D. degree in 2011 from the University of North Texas and his M.S. degree in 2006 from Kansas State University. He has a number of publications including three book chapters and is active in grant submissions. Dr. Louis was part of a NIFA grant proposal recently submitted as well as a Life Sciences Research Foundation for a postdoctoral research fellowship. His responsibilities will include contributing to IANR's stress biology team and understanding the molecular biology and physiology of plant responses to arthropod feeding; and developing graduate and/or undergraduate courses in an identified area of specialization.



Dr. Julie Peterson will assume the agroecosystem ecologist assistant professor position at the West Central Research and Extension Center at North Platte starting next March. Dr. Peterson's appointment will be 50% research and 50% extension. She is currently a post-doctoral research associate in the Entomology Department at the University of Minnesota. Julie completed her Ph.D. in 2012 from the University of Kentucky and her B.A. in zoology from Ohio Wesleyan University in 2007. She has been very active in the Entomological Society of America both at the branch and national levels. Julie is the recipient of several awards and fellowships, including the John Comstock and Robert O'Neil Outstanding PhD student in Biological Control. She was very involved in teaching, outreach and extension activities while a student. Her initial duties will include contributing to IANR's Stress Biology team by developing a research program in Integrated Pest Management and Resistance Management of arthropod pests of field crops and in developing proactive educational programs of excellence in this area.



Maria "Melina" Florez-Cuadros is a new Ph.D. student who will be working under the supervision of Dr. David Taylor and Dr. Gary Brewer. Melina received her bachelor's degree in veterinary medicine in 2007 from the University of Caldas, Manizales, Caldas, Columbia, and a master's degree in veterinary sciences in 2010 also from the University of Caldas. Melina's research will be on the effects of biting flies on cattle grazing behavior.



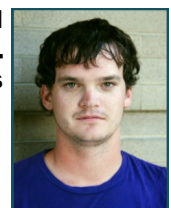
Kyle Koch is not new to the Entomology Department, as he just received his masters degree from UNL in entomology on August 16, 2013, but he is new to the Ph.D. program where he will be again working under the supervision of Drs. Jeff Bradshaw and Tiffany Heng-Moss. Kyle, originally from Scottsbluff, NE, received his bachelor's degree in biology from Creighton University in 2009 and worked as a research tech/entomology intern at the Panhandle Research and Extension Center until he started his masters program in September 2011. His doctoral research will focus on switchgrass-aphid interactions.



Louise Lynch is a new Ph.D. student who will be working under the supervision of Dr. Doug Golick. Louise is originally from Cornwall-on-Hudson, NY. She received her bachelor's degree in biological sciences from Farleigh Dickinson University and her masters degree in entomology from UNL. Louise's area of study will involve citizen science programs - their implications for entomology research and their effect on participants.



Christopher McCullough is a new masters student who will be joining the Panhandle Research and Extension Center's entomology program. He will be co-advised by Drs. Jeff Bradshaw and Gary Hein. Chris received his undergraduate degree in biology from Concordia College. He enjoys the outdoors and has experience in wetland restoration and biological control in Minnesota and Wisconsin. He also has spent a little time in La Paz, Mexico as a summer intern for an oyster fishery. Chris' masters program will focus on topics and problems related to the wheat stem sawfly, *Cephus cinctus*, in winter wheat.



Welcome, con't.

Jennifer Shaughney joins **Dr. Brett Ratcliffe** and the Team Scarab lab to conduct research on scarab beetle for her masters degree. Jennifer graduated with a bachelor's degree in Biology from Salisbury University in Salisbury, MD, in December 2012. While at Salisbury, she worked with Dr. Dana Price curating the scarab collection at Salisbury and collecting scarabs in eight counties on the eastern shore of Maryland to contribute to a taxonomic guide of the scarabs of Maryland. Jen's professional interests are the taxonomy and systematics of Coleoptera, research and extension, habitat sampling and inventory, and insect photography. Her masters research will consist of a monographic revision of the Neotropical genus *Hoplopyga* (Scarabaeidae: Cetoniinae: Gymnetini).



Leslie Rault is a new doctoral student co-advised by **Drs. Nick Miller** and **Blair Siegfried**. Leslie received her bachelor's degree in Life and Health Sciences from the Université de Nice in Sophia Antopolis, France and her masters degree in ecology and evolution from the Université Pierre & Marie Curie in Paris, France. Leslie will be conducting research to compare gene expression in Bt resistant western corn rootworms.



New Distance Masters Students: **Peter Burkhart**, Woodside, NY; **Daryl Goodaker**, Elizabethtown, KY; **Isa Hakima**, Washington, DC; **Todd Moran**, Poplar Grove, IL; **Joseph Palmer**, Omaha, NE; **Ryan Rodriguez**, Ridgeland, MS; **Waleska Rodriguez-Pettit**, Holloman, AFB, NM; **Nadia Ruffin**, Cincinnati, OH; **Lena TeSelle**, Phoenix, AZ.

New Insect Science Students: **Michael Craig**, Omaha, NE; **Erica Heidenreich**, Mt. Pleasant, WI; **Emily Kirkvold**, Omaha, NE

Grants

Fred Baxendale and Tiffany Heng-Moss

Syngenta \$18,000
 "Turfgrass Pest"

Doug Golick and Tom Weissling

Kickstarter.com \$ 6,300
 "Bumble Boosters: Building a Better Bumble Bee Domicile"

Shripat Kamble

FMC Corp. \$ 3,000
 "Termite research"

BASF Corp. \$ 9,000
 "Ant research"

Dow AgroSciences \$11,000
 "Termite research"

Lance Meinke

Dow AgroSciences \$17,000
 "Diabrotica Biology Ecology & Mgmt"

Etsuko Moriyama, H. Moriyama, and B.D. Siegfried

Nebraska Corn Board. \$57,092
 "Functional Validation of Carbon Dioxide Receptors for Corn Rootworm Control by RNAi"

Lance C. Perez, Kevin M. Lee, Ruth M. Heaton, Leilani Arthurs, Marilynne Stains, Doug Golick, and Brian Couch

NSF WIDER \$1,990,279
 "Adopting Research-Eased Instructional Strategies for Enhancing STEM Education"

Robert J. Wright

Dow AgroSciences. \$ 6,000
 "Crop Insect Management Research"

BUGFEST 2013

Come one, come all to BugFest!, the Department of Entomology's open house on Sunday, September 15th from 1:00 to 4:00 p.m. at Entomology Hall on the University of Nebraska-Lincoln's East Campus. Meet and hold insects, cure a patient at Dr. Bug, see a fly tying demonstration, tour the research labs, and learn about native and domestic bees and bedbugs. Admission is free, and we'd love to see you there! For more information, contact Lisa Silberman at lsilberman1@unl.edu.

Congratulations

The following students graduated August 2013:

Ph.D. in Entomology: **Fatima Mustafa**, Advisors— **Drs. John Foster**, and **W. Wyatt Hoback**

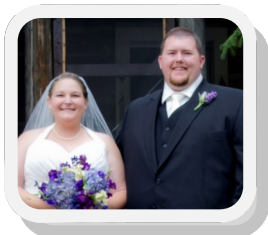
M.S. in Entomology, Resident: **Kyle Koch**, Advisors— **Drs. Jeff Bradshaw** and **Tiffany Heng-Moss**; **Julianne Matczyszyn**, Advisor— **Dr. Roberto Cortinas**; **Zixiao Zhao**, Advisors— **Drs. Nick Miller**, and **Lance Meinke**; M.S. in Entomology, Off Campus: **Erin Bauer**, **Bradley Dutoit**, **Elizabeth Foley**, **Michele Griffin**, **Charlene Legerton**, **Noel MacNeil**, **Sean Moudy**, **Jon Pruitt**, **Jenna Ryan-Snow**, and **Molly Ryan- Mahmutagic**, Advisor— **Dr. Tom Weissling**

B.S. in Insect Science: **Gabrielle Cooper**, **Matthew Bond**
B.S. in Diversified Agriculture: **Matthew Carl**, **Allie Dorcey**

Tara Wood became the first graduate from the Doctor of Plant Health (D.P.H.) program on May 3, 2013. Originally from Peoria, IL, she graduated from Eureka College in Eureka, IL, with a bachelor's degree in environmental science. She received her master's degree in entomology from the University of Arkansas in 2009 and worked at the University of Arkansas with outreach and extension until she became the first student in the DPH program starting in January 2010. An internship in Ghana solidified her professional goals of taking her educational and training to developing countries to educate extension agents and farmers on good agronomic practices. Tara has an extension agronomy Position as 'Program Coordinator - Sub-Saharan Africa' at the Norman Borlaug Institute for International Agriculture at Texas A&M. **Dr. Gary Hein** is the director of the DPH program.



Chancellor Harvey Perlman's annual State of the University Address and UNL's Employee Service Award recognition program is scheduled for Tuesday, September 17 at the Lied Center for Performing Arts. The following employees will be honored for years of service to the University: **Dr. Brett Ratcliffe**, 45 years; **Dr. Steve Danielson**, 35 years; **Dr. Shripat Kamble**, 35 years; **Dr. Bob Wright**, 25 years; **Lisa Silberman**, 25 years; **Jeri Cunningham**, 20 years; **Dr. Doug Golick**, 10 years; and **Bruce Koehler**, 10 years.



Jess and Geoff

Dr. Jessica Jurzenski and Geoff Putney were married July 20, at the Putney family cabin in the Black Hills of South Dakota. The cabin has been in the family for over 60 years and has electricity but no running water.

Ivy Hoppes and Freddy Orellana were married August 17, just south of Fremont at the Pohocco Lutheran Church. Ivy and her mom grew all of the plants that were used for the centerpieces and decorations at the reception.



Freddy and Ivy

Publications

Ab Majid, **Abdul Hafiz**, **Shripat T. Kamble** and **Nicholas J. Miller**. 2013. Colony Genetic Structure of *Reticulitermes flavipes* (Kollar) from Natural Populations in Nebraska. *Journal of Entomological Science*. 48(3): 222-233.

Backus, Elaine A., **Murugesan Rangasamy**, **Mitchell Stamm**, **Heather J. McAuslane**, and **Ron Cherry**. 2013. Waveform Library for Chinch Bugs (Hemiptera: Heteroptera: Blissidae): Characterization of Electrical Penetration Graph Waveforms at Multiple Input Impedances. *Annals of the Entomological Society of America*. 106(4): 524-539.

Geisert, **Ryan W.** and **Lance J. Meinke**. 2013. Frequency and Distribution of Extended Diapause in Nebraska Populations of *Diabrotica barberi* (Coleoptera: Chrysomelidae). *Journal of Economic Entomology*. 106(4): 1619-1627.

Husen, **Timothy J.** and **Shripat T. Kamble**. 2013. Delayed Toxicity of Two Chitinolytic Enzyme Inhibitors (Psammaphin A and Pentoxifyline) Against Eastern Subterranean Termites. *Journal of Economic Entomology*. 106(4): 1788-1793.

Khajura, **Chitvan**, **Haiyan Wang**, **Xuming Liu**, **Shanda Wheeler**, **John C. Reese**, **Mustapha El Bouhssini**, **R. Jeff Whitworth**, and **Ming-Shun Chen**. June 2013. Mobilization of lipids and fortification of cell wall and cuticle are important in host defense against Hessian fly. *BMC Genomics* 14: 423.



Attending the Entomology Department Graduate Reception were Front L-R, **Bond**, **Matczyszyn**, **Bauer**, and **Moudy**, Back L-R, **Koch**, **Zhao**, and **Ryan-Snow**.

Publications, con't.

Liu, X., C. Khajuria, J. Li, H.N. Trick, H. Li, B.S. Gill, G.R. Reeck, G. Anthony, F.F. White, and M.S. Chen. June 2013. Wheat Mds-1 encodes a heat-shock protein and governs susceptibility towards the Hessian fly. *Nature Communication* 4: 2070.

Nava, K., B.D. Siegfried, and N.P. Storer. 2013. Transgenic approaches to western corn rootworm control. *Advances in Biochem. Engin./Biotch*. doi: 10.1007/10_2013_195.

Narain, Ralph, Shripat T. Kamble, Thomas O. Power and Timothy S. Harris. 2013. DNA Barcode for Thief Ant Complex. *Journal of Entomological Science*. 48(3): 234-242.

Pallzada, Santiago A., Difabachew K. Belay, Bamphitlhi Tiroesele, Fatima Mustafa, Muhammad Irfan Ullah, Thomas Hunt, Jaime Molina-Ochoa, Steven R. Skoda, Pete L. Clark, and John E. Foster. 2013. Non Target Effect of Cry 1 Ab and Cry Ab x Cry3 Bb1 Bt Transgenic Maize on *Orius insidiosus* (Hemiptera: Anthocoridae) Abundance. *Entomol. Ornithol. Herpetol.* 2: 107. Doi 10.4172/2161-0983.10000107

Ratcliffe, B. C. 2013. Best writing and curatorial practices for describing a new species of beetle: a primer. *The Coleopterists Bulletin*. 67: 107-113.

Skoda, Steven R., James L. Figarola, Saowaluck Pornkulwat, and John E. Foster. 2013. Inter- and Intraspecific Identification of the screwworm, *Cochliomyia hominivorax*, using random amplified polymorphic DNA-polymerase chain reaction. *Journal of Insect Science* Vol. 13 Article 77/ <http://www.insectscience.org>

Velez, A.M., T.A. Spencer, A.P. Alves, D. Moellenbeck, R.L. Meagher, H. Chirakkal, and B.D. Siegfried. 2013. Inheritance of Cry1F resistance, cross-resistance and frequency of resistant alleles in *Spodoptera frugiperda* (Lepidoptera: Noctuidae). *Bull. Entomol. Res.* DOI: <http://dx.doi.org/10.1017/S0007485313000448>.

Valencia, A., A.P. Alves, and B.D. Siegfried. 2013. Molecular cloning and functional characterization of an endogenous endoglucanase belonging to GHF45 from the western corn rootworm, *Diabrotica virgifera virgifera*. *Gene* 513: 260-267.

Wang, H., B.S. Coates, H. Chen, T.W. Sappington, T. Guillemaud, and B.D. Siegfried. 2013. Role of gamma-aminobutyric acid (GABA) in the evolution and spread of *Diabrotica virgifera virgifera* resistance to cyclodiene insecticides. *Insect Molec. Biol.* doi: 10.1111/imb.12037

Faculty News

Dr. Roberto Cortinas resigned his joint position in Entomology and VBM, and has assumed an assistant professor of practice position in VBM. The appointment was effective July 16, 2013. His remaining responsibilities to the Entomology Department include finishing his graduate students by December 2013. We are sorry that Roberto will no longer be affiliated with us; he has been a good colleague and an appreciated member of our faculty.

Dr. Tom Hunt, **Dr. Ron Seymour**, **Dr. Bob Wright** and **Wayne Ohnesorg** participated in 2013 Soybean Management Field Days, August 13-16 at Minden, York, Pierce, and Waterloo NE, where they presented information on soybean foliar insecticide treatments.

Dr. Shripat T. Kamble presented a seminar on "Science on 'Omics in Urban Pest Management" in July at the School of Biological Sciences, Universiti Sains, Penang, Malaysia. He also presented a research paper, "Application of Termite Baiting System in Agricultural Cropping Systems and Urban Environment" at the International Conference on Biodiversity and Integrated Pest Management in Manado, Indonesia. Shripat participated in a session on writing exam questions for the "Associate Certified Entomologists" (ACE) at ESA Headquarters on August 7-8, 2013, and also participated in the North Central Regional IR-4 (Minor Use of Pesticides) meeting August 19-20 in East Lansing, MI.

Dr. Brett Ratcliffe conducted collections research at the Florida State Collection of Arthropods in Gainesville in June, and the American Museum of Natural History in New York City and the Academy of Natural Sciences in Philadelphia in July.

Dr. Blair Siegfried presented a keynote address in Berlin, Germany to the 6th Meeting on Ecological Impact of Genetically Modified Organisms to the IOBC Working Group for GMOs in Integrated Plant Production.

Dr. Bob Wright led a group of UNL Entomology and Doctor of Plant Health students at the Grain Place Foods Summer Field Day and Seminar at Marquette NE, on July 13, 2013. Students attending included **Travis Prochaska**, **Angela De Saplo**, Greg Brittain, Tara Wood, and Kenny Roche. Bob also participated in an external review of the UNL South Central Ag Lab, Clay Center, August 11-12, 2013.

Student News

Ralph Narain was awarded a Fred Clute Memorial Fellowship.

Kait Armitage, **Aaron Gilman**, and **Katie O'Brien** each received an Ephriam and Veallon Hixson Memorial Fund Scholarship for 2013. **Elliot Knoell** and **Justine La Violette** have each been awarded a scholarship from the Earl and Bertha Ramsey Memorial Fund for 2013.

UCARE awards for 2013-2014 have been given to students listed below, along with their adviser and the amount of the award:

Emma Erickson	Dr. Nick Miller	\$2,400 (year 2)
Kody Nelson	Dr. Ashley Hall	\$2,400 (year 1)
Rebecca Osborn	Dr. Nick Miller	\$2,400 (year 2)

Congratulations to the Department of Entomology's new Student Ambassadors! Seniors **Kait Armitage**, **Katie O'Brien**, and junior **Justine La Violette** will be the Insect Science Ambassadors for 2013-14, and seniors **Anastasia Johnson** and **Cole Lewandowski** will be the 2013-14 Applied Science Ambassadors. The student ambassadors will help with prospective student visits, department recruiting outreach, and mentoring underclassmen in each major.

Gabby Cooper, **Stephanie Endrulat**, and **Erin Ingram** manned the native bee conservation booth for the Parks and Rec "Party in the Park" event on July 27. The booth had information on native bees, including live and pinned specimens, as well as handouts. There also were bee domiciles built by **Dr. Tom Weissing**.



L-R, Lewandowski, O'Brien, Johnson, Armitage, La Violette



Ingram, Endrulat, Cooper

This 'n That

Dr. Jessica Jurzenski, a postdoctoral research associate in the **Dr. Blair Siegfried** lab, started a position in June as an environmental scientist with Fesburg Holt & Ullevig, an environmental consulting firm here in Lincoln.

Dr. Chitvan Khajuria, a research assistant professor working with **Dr. Siegfried**, has accepted a position as a research entomologist with the Monsanto Company. Chitvan will begin his position this month.

Dr. Kate Kneeland has accepted a position with IEH Laboratories & Consulting in Seattle, WA. Kate received her Ph.D. in 2011 under the supervision of **Dr. John Foster** and **Steve Skoda**.

Lanae Pierson, our first insect science graduate, is now a biology teacher at Columbus High School. She will be teaching general biology and an accelerated biology class. The accelerated class even starts off with an insect unit!

Dr. Ana Velez, a post-doctoral research associate in the **Dr. Blair Siegfried** lab, was awarded a travel fellowship and received honorable mention in the student oral paper competition at the 46th Annual Meeting of the Society for Invertebrate Pathology in Pittsburg, PA on August 11-15. The meeting was also attended by **Drs. Blair Siegfried** and **Chitvan Khajuria** who presented an invited oral presentation.

Entomology Department Meetings for Fall 2013

Fri., Sept. 13, 10:30 a.m. in ENTO 110
Fri., Oct. 4, 10:00 a.m. in ENTO 110
Fri., Nov. 1, 10:00 a.m. in ENTO 110
Fri., Dec. 6, 10:00 a.m. in ENTO 110