

Welcome

Off-Campus M.S. Students: **Summer 2015: Ivana Terry**, Saint Leonard, MD; **Fall 2015: Michael Ricks**, San Pedro, CA; **Buddy Roper**, Gainesville, FL; **Sarah Zuehlke**, Millersville, MD.

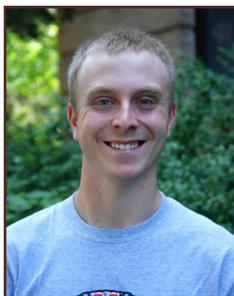
Jordan Reinders is a new masters student who will be working under the supervision of **Dr. Lance Meinke**. Jordan received his B.A. degree in history and biology with a secondary education endorsement from Northwestern College in Orange City, IA this past May. His research will be in the area of resistance management of western corn rootworm.

Erin Bauer will join the Department as a Lecturer this month. She will be working with the online masters degree program and continue her teaching duties with online undergraduate and graduate courses. Erin previously worked at the Pesticide Safety Education Program (PSEP) Office in the Agronomy and Horticulture Department. Erin received her B.S. degree in education from UNO in 1995; her MLIS (Master's of Library and Information Science) degree from Rosary College (now Dominican University) in River Forest, IL, in 1996; and her M.S. in entomology from UNL in 2013.

Rodolfo Buzinaro is a new research scholar who has joined **Dr. Peter Baenziger** of the Agronomy and Horticulture Department and **Dr. John Foster** on a project to incorporate the known wheat genes for Hessian fly resistance into **Dr. Baenziger's** wheat breeding germplasm. Rudolfo holds a Bachelor's in Engenharia Agrônômica and Masters of Agronomy degree from the Faculdade de Ciências Agrárias e Veterinárias - UNESP - Jaboticabal/SP, Brazil. He is currently enrolled for a doctoral degree with emphasis on genetics and plant breeding. He will be at UNL for one year on a "sandwich" program and is funded by a scholarship from Coordenação de Aperfeiçoamento de Pessoal de Nível Superior.

Wiktoría Szydło is a short term visiting scholar working in **Dr. Gary Hein's** Vector Ecology Lab. She arrived in early May and will be here through the end of July. Wiktoría is completing her Ph.D. in the Department of Animal Taxonomy and Ecology at Adam Mickiewicz University in Poznan, Poland. She (along with Dr. Hein and others), recently published a paper in the *Journal of Economic Entomology* entitled 'Exceptionally high levels of genetic diversity in wheat curl mite (*Acari: Eriophyidae*) populations from Turkey' that highlights this mite's extensive diversity in Poland and Turkey. Wiktoría is here to collect wheat curl mites (*Aceria tosichella*) from various grasses throughout the state. She is seeking potential *A. tosichella* haplotypes that may be surviving on grass hosts comparable to those she has found in Poland and Turkey, but different than those found on wheat in North America to date.

Renata Ramos Pereira is back again to work with **Dr. Tom Hunt**. Renata was here in 2012 and then returned to Brazil to complete her masters degree in entomology from the Federal University of Viçosa, where she also received her bachelor's degree in entomology. She is now a doctoral student at the same university. She will be here for one year with her research emphasis on behavior of corn Lepidoptera larvae and *Aphis glycines* projects.



Jordan Reinders



Erin Bauer



Rodolfo Buzinaro



Wiktoría Szydło



Renata Ramos Pereira

Faculty Changes

We are sad to announce that **Dr. Blair Siegfried** is leaving the Entomology Department on August 1, to be the department chair at the University of Florida. Blair joined the Department in 1990 and has a tremendously successful research and teaching career. His legacy includes leadership on resistance management, a major IPM topic now and for the foreseeable future. He will be missed but we know he will continue to serve entomology well in his new role in Florida. We wish him the best and look forward to expanded collaborations with UF Entomology in research, teaching, and extension.

Dr. Tiffany Heng-Moss is also leaving the Entomology Department, but not UNL. Tiffany joined the Entomology faculty as an assistant professor in 2001. On July 1, she assumed a full time role as Associate Dean of Teaching. Tiffany has had a part-time appointment in the CASNR Dean's Office for several years now. While we knew her transition to full-time administration was coming, we wish it had been later. Tiffany's research program characterizing plant response to insect feeding has been very successful, and her teaching and mentoring has touched thousands of students. We will try to fill the holes she is leaving, but we know we can't replace a person of her talents and energy.

We are very pleased to introduce a new addition to the Entomology faculty, **Dr. Judy Wu-Smart**. Judy will be joining us from the University of Minnesota on October 1 as an Assistant Professor of Bee Health. Her position has a research extension split. We also welcome Judy's husband, **Dr. Matthew Smart**. Matthew is a bee researcher with the US Geological Service and will be based in the Entomology Department.

Meeting News

The 2015 North Central Branch ESA meeting was held May 31—June 3, 2015 in Manhattan, KS. The UNL Entomology Department was well represented with the following faculty and student awards and participation:

Dr. Bob Wright, NCB-ESA Distinguished Achievement Award in Extension

Drs. Bob Wright and **Lance Meinke**, Educational Project Award for the webinar; "Corn rootworm management In the Transgenic era"

Carolina Camargo, 1st Place Ph.D. oral presentation award

Justin McMechan, 2nd place Ph.D. oral presentation award

Adriano Pereira, 2nd place Ph.D. poster presentation award

Dr. Doug Golick and **Louise Lynch** organized and presented papers for the symposium *Entomology Literacy: Research in the Human Dimensions of Entomology Education, Extension, and Citizen Science*. **Dr. Tom Welsling**, **Natalia Bjorklund**, and **Erin Ingram** also presented papers as a part of this symposium. The symposium averaged 27 attendees across 14 presentations.

Sanjay Basnet and **Dr. Shripat Kamble** presented a poster on "Potential application of CRISPR/Cas9 to control insect pests". Dr. Kamble and **Ralph Narain** presented a talk on "Genetic variation in bed bugs from geographically isolated populations". Dr. Kamble also organized and moderated a symposium on: "Potential of RNAi Technology in Entomology".

Sanjay Basnet, (co-authors T.P. Kuhar, and D. G. Pfeiffer) gave an invited presentation on "Ecology and impact of the invasive brown marmorated stink bug, *Halyomorpha halys* (Stål) in Mid-Atlantic States".

Dr. Doug Golick was an invited speaker at the Nebraska Beekeepers Association meeting where 75 attendees heard Dr. Golick give a presentation on planting for pollinators. Dr. Golick also presented research results on post-secondary agricultural teachers' use of educational technology at the North American College Teachers of Agriculture Annual Meeting in Athens, GA.

Ralph Narain and **Dr. Shripat Kamble** presented an invited paper on "Determining genetic variability and geographic diversity of the common bed bug populations" at the Southwestern Branch of Entomological Society of America Meeting in Tulsa, OK.

Grants

Doug Golick/Justin Evertson

Nebraska Environmental Trust \$148,943

“Community as Habitat”

Lance Meinke

Bayer CropScience \$4,000

“*Diabrotica* Biology, Ecology, and Management”

Robert Wright

Syngenta Crop Protection \$13,750

“Crop Insect Management Research”

Bayer CropScience \$3,500

“Crop Insect Management Research”

FMC Corporation \$18,000

“Crop Insect Management Research”

Publications

Basnet S., T. P. Kuhar, C. A. Laub and D. G. Pfeiffer. 2015. Seasonal phenology and population dynamics of brown marmorated stink bug (Hemiptera: Pentatomidae) in Virginia Vineyards. *J. Econ. Entomol.* DOI: <http://dx.doi.org/10.1093/jee/tov124>.

Chaudhury, M. F., H. Chen, A. Sagel, and S. R. Skoda. 2015. Effects of New Dietary Ingredients Used in Artificial Diet for Screwworm Larvae (Diptera: Calliphoridae). *J. Econ. Entomol.* 108(3): 1429-1434.

Chaudhury, M. F., J. J. Zhu, and S. R. Skoda. 2015. Response of *Lucilia sericata* (Diptera: Calliphoridae) to Screwworm Oviposition Attractant. *J. Med. Entomol.* 52(4): 527-531.

Frank, Daniel L., Ryan Kurtz, Nicholas A. Tinsley, Aaron J. Gassmann, **Lance J. Meinke, Daniel Moellenbeck, Michael E. Gray, Larry W. Bledsoe, Christian H. Krupke, Ronald E. Estes, Patrick Weber, and Bruce E. Hibbard.** 2015. Effect of Seed Blends and Soil-Insecticide on Western and Northern Corn Rootworm Emergence from mCry3A + eCry3.1Ab Bt Maize. *J. Econ. Entomol.* 108(3): 1260-1270.

Friesen, Kristina, Han Chen, Jerry Zhu, and David B. Taylor. 2015. External Morphology of Stable Fly (Diptera: Muscidae) Larvae. *J. Med. Entomol.* 52(4): 626-637.

Miwa, Kentaro and Lance J. Meinke. 2015. Developmental Biology and Effects of Adult Diet on Consumption, Longevity, and Fecundity of *Colaspis crinicornis* (Coleoptera: Chrysomelidae) *J. Insect Sci.* 15(1): 78.

Narain, Ralph B., Sreedevi Lalithambika, and Shripat T. Kamble. 2015. Genetic Variability and Geographic Diversity of the Common Bed Bug (Hemiptera: Cimicidae) Populations from the Midwest Using Microsatellite Markers. *J. Med. Entomol.* 52(4): 566-572.

Narain, Ralph B. and Shripat T. Kamble. 2015. Effect of Ibuprofen and Caffeine concentrations on the common bed bug (*Cimex lectularius* L.) feeding and fecundity. *Journal of Entomology, Ornithology and Herpetology.* 4:152. DOI:10.4172/2161-0983.1000152.

Palizada, S. A., B. Tiroesele, D. B. Kondidie, M. I. Ullah, F. Mustafa, T. E. Hunt, P. L. Clark, J. Molina-Ochoa, S. R. Skoda and J. E. Foster. 2014. Minute pirate bug [*Orius insidiosus* (Say)] populations on transgenic and non-transgenic maize using different sampling techniques. *Pakistan Entomologist.* 36(1): 1-6.

Payne, J., E. Lindroth, K. M. Kneeland, S. R. Skoda, Fatima Mustafa, Muhammad Irfan Ullah and J. E. Foster. 2014. Bootsie - estimation of coefficient of variation of AFLP data by bootstrap analysis. *Pakistan Entomologist.* 36(2): 79-81.

Publications con't.

Ratcliffe, B. C. 2015. A Review of the Neotropical Genus *Marmarina* Kirby, 1827 with Description of a New Species from Argentina (Coleoptera: Scarabaeidae: Cetoniinae: Gymnetini). *The Coleopterists Bulletin* 69: 183–201.

Ramm, Crystal, Michael Wachholtz, Keenan Amundsen, Teresa Donze, Tiffany Heng-Moss, Paul Twigg, Nathan A. Palmer, Gautam Sarath, and Fred Baxendale. 2015. Transcriptional Profiling of Resistant and Susceptible Buffalograsses in Response to *Blissus occiduus* (Hemiptera: Blissidae) Feeding. *J. Econ. Entomol.* 108(3): 1354-1362.

Rodrigues, J. C. V., **D. K. Belay**, Consuelo Esteves-Jensen, Elliot W. Kitajima, Randy Huckaba, **John E. Foster.** 2014. Infection in soybeans and on multiple host plants in Puerto Rico by an isolate of cowpea mild mottle virus. *Virus Reviews and Research.* Vol. 19(1): 1-5, DOI: <http://dx.doi.org/10.17525/vrr.v19i1.101>

Ullah, Muhammad Irfan, Fatima Mustafa, K. M. Kneeland, M. L. Brust, W. W. Hoback, S. T. Kamble and J. E. Foster. 2014. Forms of *Melanoplus bowditchi* (Orthoptera: Acrididae) collected from different host plants are indistinguishable genetically and in aedeagal morphology. *PeerJ* 2:418; DOI 10.7717/peerj.418

Student News

Kyle Koch and **Louise Lynch** were each awarded a Dean's Fellowship from the Office of Graduate Studies for the 2015-2016 academic year.

Sanjay Basnet received a Travel Award from the North Central Branch-ESA to attend the branch meetings in Manhattan, KS. Sanjay was also awarded a Fred Clute Memorial Fellowship for 2015-2016.

Camila Oliveira Hofman attended an insect pathology course at Cornell University offered by the International Organization of Biological Control and Cornell June 8 -12, 2015.

Jennifer Shaughney, May graduate from the masters degree program, is now working as Curator of the New Mexico State University Arthropod Collection.

Tessa Blair, Emily Kirkvold, and Makenzie Nansel were each awarded a scholarship from the Insect Science Scholarship fund. **Hillary Fischer** received an award from the Earl & Bertha Ramsey Memorial Fund. **Carter Westerhold** was awarded a scholarship from the Ephriam and Veallon Hixson Memorial Scholarship Fund.

The following students have been awarded UCARE funding for the 2015 Summer Term:

Cheyann Lovett - Advisor - Dr. Kristina Friesen
Melanie Blum - Advisor - Dr. Ashley Hall
Nichole Leacock - Advisor—Dr. Ashley Hall

<i>Calendar of Events</i>	
July 13, 2015	2nd 5-week session begins
August 13, 2015	2nd 5-week session ends and final examinations
August 15, 2015	All University Commencement Ceremony, 9:00 a.m., Pinnacle Bank Arena
August 24, 2015	Fall Semester begins
September 7, 2015	Labor Day (Student and Staff Holiday—JNL offices closed)
September 25, 2015	Final day to apply for a degree in December

Meet an Off-Campus Student

Pat Kelley

I am so excited to be a part of this *Hexapod Herald* because, as a distance student, it is a great connection to the UNL entomology program! My interest in entomology began when I was growing up in the Indiana Dunes off of Lake Michigan. Ant wars between rival ant colonies grabbed my attention for hours and when those wars subsided, I could drop a few stragglers down into the pits of the Neuropteran ant-lions for another show!



I received my undergrad in the late 80's from Purdue University in engineering geology, but fate led me back to the bugs! For the past 29 years I have been working for the company, Insects Limited Inc. outside of Indianapolis, where I am now the vice-president. My company has the fun task of synthesizing insect pheromones for stored product insects that destroy dried food goods and museum artifacts. My job as vice-president is to oversee the research and development of new products and manage our global sales.

I was fortunate enough to connect with a few of my UNL professors at the national ESA meeting a few years back in Nashville, TN. I also enjoyed visits from **Dr. Tom Weissling** during one of his daughter's hockey road trips to Indiana and from fellow student (now on-campus doctoral student at UNL) **Louise Lynch** as she travelled across the US! I am currently taking **Dr. Gary Brewer's** class, ENTO 812, Entomology and Pest Management. It looks like it will be a wonderful class and by a great coincidence, fellow classmate **Alexandria Reed** has worked professionally with me in the past on stored product insect pest issues, so that is very fun!

Besides all of the knowledge that I am gaining from my coursework, a M.S. degree in entomology from UNL will greatly add to my credentials as I continue to provide consultation in IPM to professional markets in the food and museum industries. I hope to finish in the spring semester of 2016 with my masters project on the discovery of the sex pheromone for the museum pest, Odd beetle, *Thylognathus contractus*. My experience with the distance graduate program at UNL has been great, and even though I don't get to share the on-campus experience with everyone in my classes, I know that I have made some valuable professional connections and life-long friends in the program.

Bee Blitz

The Department of Entomology's pollinator plot and outdoor classroom was featured in the June 15th Edition of the *Omaha World Herald's* Living Section.

Gov. Pete Ricketts signed a proclamation submitted by **Dr. Doug Golick** and the Pollinator Partnership declaring the third week of June "Nebraska Pollinator Week".

Dr. Doug Golick, Dr. Jeff Bradshaw, Louise Lynch and Erin Ingram conducted joint Bee Bio Blitzes June 20th in Lincoln and Scottsbluff.

Dr. Doug Golick was a guest on Lincoln channel 10/11's Pure Nebraska program to discuss pollinator conservation.

Dr. Blair Siegfried and Erin Ingram were on the UNL homepage and UNL's *The Scarlet* with this story—<http://news.unl.edu/newsrooms/unltoday/article/study-shows-insecticides-alter-honey-bee-behavior/>

Fond Farewells

Dr. Teresa Donze-Reiner has accepted an assistant professor position at West Chester University, which is located about 25 miles west of Philadelphia, PA. The position is 50% teaching, 35% research and 15% service. She will be teaching genetics, DNA recombinant technology, and cell physiology labs. Teresa also plans to continue working on understanding plant defense systems against pests and pathogens. She is

Fond Farewells con't.

looking forward to using her experiences and skills she obtained as a Post-doc for **Dr. Tiffany Heng-Moss** to help develop successful undergraduate research projects. Also, she has promised that even though she will be in Nittany Lion country, she will keep true to her Husker roots. She will be leaving for Pennsylvania at the end of July and her position at West Chester starts at the end of August.

Dr. Everlyne Wosula, who has been working as a Postdoctoral Research Associate in **Dr. Gary Hein's** Vector Ecology Lab since January 2013, will be leaving at the end of August. Everlyne has accepted a Postdoctoral Research Fellow position at the International Institute of Tropical Agriculture (IITA) to be based in Tanzania. Her position as a vector entomologist will focus on the molecular ecology and management of vectors of cassava viruses. She will be working on this collaborative research program between IITA and USDA to ensure the development of improved management approaches.

Travel

Dr. Brett Ratcliffe conducted collections research at the University of Missouri in June.

Dr. Doug Golick gave an invited talk, "Entomology Literacy: Research in the Human Dimensions of Entomology Education, Extension, and Citizen Science" at the 7th Annual Day of Insects held at the Iowa State Reiman Gardens.

Congratulations

Jenny Freed and **Ryan Enchayan** were married at the Westmark Evangelical Free Church in rural Loomis, NE on June 20, 2015. Jenny worked under the supervision of **Drs. Tiffany Heng-Moss** and **Tom Hunt** and will graduate with her masters degree in entomology this August.

**Blast from the Past**

Dr. Jesús Orozco will start next month as an associate professor of entomology and insect collection curator at El Zamorano, a renowned university in Honduras. Jesús says the field work nearby is not too bad either. Dr. Orozco received his Ph.D. in entomology in 2011 under the supervision of **Dr. Brett Ratcliffe**.

AEM (Agriculture Hall, Entomology Hall, and Miller Hall) Business Center Changes

Scott McAtee is the new Human Resources contact. He will be spending time in the morning in Entomology Hall and afternoons in Keim. If someone needs to visit with him in the afternoon he is more than willing to come over.

Sheryl Williamsen is the Assistant Business Manager.

Sarah Hansen is the pre-awards contact for Entomology grants.

Matthew Mueller, new hire, will be serving the Water Center and processing Entomology travel.

Megan Gaulrapp-Cox serves IANR Media and is the contact for IANR Apartment Rentals.

Marissa Kemp is the post-awards contact for Entomology grants.

Judy Hostetler will be spending a majority of her time at LTAP.

Kathy Ellis, Karen Randall & Shannon Russell have moved to Innovation Campus to serve the greenhouses & Food Science.

Robyn Goodwin will be moving back to Filley Hall.