

# HEXAPOD HERALD

Entomology Department  
University of Nebraska-Lincoln

April 2021  
Vol. 33, No. 1

## UNL Welcomes Students Back after COVID Closure

Entomology students at the University of Nebraska-Lincoln saw a vastly different campus in August and January after the COVID-19 pandemic reached Nebraska. In March 2020, UNL suspended in-person learning and moved its classes online while many students returned home to wait for the end of the pandemic.

The campus community learned how to prevent the spread of the virus and terms like

- Continued to page 3



A virtual graduation celebration was held May 8, 2020, for Entomology Department graduates. The department graduated two Ph.D. students — Natalia Bjorklund and Jennifer Williams; nine master's students — Jeff Coco, Elisa Gonzalez, Robert LeFevre, William Noundou, Lindsay Overmyer, Glynnys Pentecoste, Jennifer Albrecht Weisbrod, Heather Wilkins and Jonathan Wischmeyer, and three dual Insect Science/Forensic Science students — Emily Cumming, Victoria Dougherty, and Danica Meierhenry. Congratulations all!



Dr. Susan Weller

## Weller named ESA Fellow

Congratulations to **Dr. Susan Weller**, who was selected as a 2020 Fellow of the Entomological Society of America (ESA)! Up to 10 Fellows are named each year from more than 7,000 members in the ESA. Elections as a Fellow highlights outstanding contributions to entomology through research, teaching, extension and outreach, administration, or the military.

Weller is currently director of the University of Nebraska State Museum and a UNL professor of entomology.

She is internationally recognized for her research on the evolution of arctiine moths and other Noctuoidea, as well as nationally recognized for her administrative leadership to promote entomology and science education. ESA Fellows were recognized at the ESA Virtual Annual Meeting, Nov. 11-25, 2020.

## From the Department Head

By *Dr. John Ruberson, Entomology Department Head*

What a challenging year we have passed through! My heart goes out to all who have had their lives impacted by the pandemic and experienced social upheaval – whether by personal illness, distress through isolation or trauma, sick loved ones, loss of loved ones, loss of employment or financial security, loss of faith and trust, and so on. All of us have been deeply affected, which has the potential to create a remarkable universal compassion in a globally shared experience.

I marvel to see this potential realized in abundance in the Entomology Department as people have reached out to one another in quiet acts of service, kindness, and grace. I feel a deeper sense that we are indeed one people, and that together we can do great things. I sincerely hope that we, like the remarkable animals we study and admire, can adapt and shape the new world emerging from pandemic and chaos into a place where there are no glass ceilings, no compulsory backs of buses, and

- Continued to page 5



John Ruberson

## In This Issue of Hexapod Herald

- Student News - p. 2-3
- Alumni News - p. 4
- Faculty News - p. 5
- Dr. Scott Hutchins visits UNL campus - p. 6
- Publications - p. 6

# Students Win Scholarships and Recognition



**Molly Darlington**

**Molly Darlington** (left, mentored by Ana Vélez) was selected for a one-year internship with NUTech, where she was involved in evaluating novel ideas and patent considerations.

**Sajjan Grover** (right, mentored by Joe Louis) participated in an internship during the summer of 2020 at Corteva Agriscience, Indianapolis, IN. As a biochemistry intern, he worked with Research and Development team project focusing on determining the flux and bottlenecks of a microbial secondary metabolite pathways for insecticides.



**Sajjan Grover**

## Departmental Graduate Fellowship Winners are:

- **Mia Luong** - Earl and Bertha Ramsey Fellowship
- **Jordy Reinders** - Milton E. Mohr Fellowship; and Charles Murphy Memorial Fellowship
- **Sajjan Grover** - Shear-Miles Fellowship by ARD
- **Rogan Tokach** - Cooper/Sharpless Fellowship; & Christi Heintz Scholarship from the Apis m. organization
- **Annie Krueger** - 2020 Friends of Sunset Zoo (Manhattan, KS) Robert Klemm Ph.D. Conservation Scholar Award. The award honors and supports promising students working in conservation.
- **Sajjan Grover** - 2020 ESA P-IE Kenneth & Barbara Starks Plant Resistance to Insects Grad. Student Award

## Graduate Students win Travel Scholarships:

- The Daniel H. & Annie E. Larrick Memorial Travel Award to attend the North Central Branch meeting of the Entomology Society of America (ESA) was awarded to:
  - \* **Blessing Ademokoya** (Ph.D. student mentored by Tom Hunt and Bob Wright) and
  - \* **Samantha Daniel** (M.S. mentored by Julie Peterson and Bob Wright)
- Ph.D. student **Ellis Johnson** mentored by Troy Anderson, received an AGRO Division Travel Award to attend the 2021 American Chemical Society National Meeting.
- **Sajjan Grover** won the 2020 Lillian and Alex Feir Graduate Student Travel Award in Insect Physiology, Biochemistry, or Molecular Biology by the ESA. He also won a Graduate Student Travel Award from the UNL Foundation in the name of Warren & Edith Day to attend the North Central Branch meeting.

## Departmental Undergraduate Scholarship Winners for 2020 are:

- Insect Science major **Earl Agpawa** (researching with **Joe Louis** and **Eileen Hebets**) was named the 2020 winner of the ESA's Plant-Insect Ecosystems Undergraduate Student Achievement Award. He also won the 2020 ESA P-IE Undergraduate Student Achievement Award and the Ephriam and Veallon Hixson Memorial Scholarship;
- **Rachel Abbott** won the Insect Science Scholarship;
- **Courtney Wallner** won the Charles Murphy Memorial Scholarship. Courtney also received UCARE funding for a project with **Doug Golick** and **Roberto Cortinas**.
- **Shelby Kittle** and **Madison King** received UCARE funding to work with **Judy Wu-Smart**.

Graduate student **Samantha Daniel** did an awesome job being interviewed by KODY radio about overwintering insects!! <http://www.huskeradio.com/mugs-in-the-morning/>. Samantha is an MS student mentored by **Julie Peterson**.

## Entomology Graduate Students win and place at Elevator Speech Contest

Congratulations to our graduate students who took 3 of the top 5 positions in the final round of the recent Elevator Speech contest, which included 15 contestants each from the Entomology, Plant Pathology, and Agronomy and Horticulture at UNL. Entomology winners were: **1st Place—Courtney Brummel** (MS student co-mentored by **Judy Wu-Smart** and **Louise Lynch-O'Brien**), **4th Place—Annie Krueger** (PhD student mentored by **Troy Anderson**), and **People's Choice Award—Julia Campos** (MS student; co-mentored by **Justin McMechan** and **Bob Wright**). We're proud of all of our participating students, including **Heena Puri** (PhD student mentored by **Joe Louis**) and **Jeffrey Cluever** (PhD student; co-mentored by **Jeff Bradshaw** and **Bob Wright**). Great work all! - Continued to page 3

## 2020-21 Officers Lead Bruner Club

The Lawrence Bruner Club was once again led by an excellent cadre of officers in 2020-21. They will be reshuffled soon, but those for the 2020-21 year are:

President – **Gabi Carmona**

V.P. – **Jordy Reinders**

Sec. – **Vilma Montenegro**

Treas. – **Ellis Johnson**

Student rep. to Faculty

– **Sajjan Grover**

GSA rep. – **Molly Darlington**

Student rep. to Seminar Comm.

– **Annie Krueger**

NCB-SAC rep. - **Gabi Carmona**

## Student News

- Continued from page 2

Insect Science student **Skyler Gubbels'** summer UCARE project was funded. It's called "Ticks and Tick-Borne Pathogens in Pollinator Gardens of Nebraska." **Troy Anderson** is her primary faculty mentor with Liz VanWormer and **Louise Lynch-O'Brien** supporting.

**Courtney Wallner**, Insect Science major, was featured in a nice [Nebraska Today article](#) about her unique interest in becoming a bee veterinarian and her future goals and aspirations. Courtney is graduating in May and will start Vet School at prestigious Tufts University in the fall. Great job, Courtney!

PhD candidate **Jordan Reinders** (mentored by **Lance Meinke**) was named the 2020 Outstanding Graduate Student by the UNL Chapter of Gamma Sigma Delta.

Jordy was also featured in the [IANR Student Spotlight](#) on April 19, 2021. Congratulations Jordy!

## Department welcomes new students

The UNL Entomology Department welcomed three new graduate students: **Luis Ochoa Cadena**, **Xi Xian Ng**, and **Rogan Tokach**.

Luis began working in spring 2021 in Scottsbluff as a Master's of Science student. He is involved on a project with Drs. Jeff Bradshaw, Autumn Smart and Gary Brewer. Luis earned his undergraduate degree from Zamorano University in Tegucigalpa, Honduras.



**Luis Ochoa Cadena**

Xi Xian is a master's student working under the guidance of Dr. Troy

Anderson. He is a UNL alumnus and earned his Bachelor's of Science from UNL in Insect Science.

Rogan Tokach is a master's student studying bees with Dr. Judy Wu-Smart and Dr. Autumn Smart. Rogan earned his Bachelor's of Science degree in agronomy from Kansas State University in



**Xi Xian Ng**



**Rogan Tokach**

Manhattan, KS.

## UNL takes COVID Precautions

- Continued from page 1  
"flattening the curve" and "Social Distancing" became part of everyday language for the Huskers. Masks are currently required on campus and have become part of NU wardrobes.

A majority of classes were delivered online last fall with in-person classes seeing a resurgence this spring. The semesters were shortened to include popular three-week mini-sessions.

Marilyn Weidner and Kathy Schindler are returning to the Entomology office on April 26, 2021. Marissa Kemp will still work from home and may be reached via email or phone. Dr. Ruberson is also returning to the office April 26 and continues to hold office hours the 2nd and 4th Fridays of the month from 3-4 p.m. at <https://unl.zoom.us/j/96080058212>.

## Weidner wins 2020 IANR Exemplary Service Award

**Marilyn Weidner** (right) received the 2020 Exemplary Employee Award for the Institute of Agriculture and Natural Resources (IANR) last fall! Congratulations, Marilyn, on a well-deserved recognition!

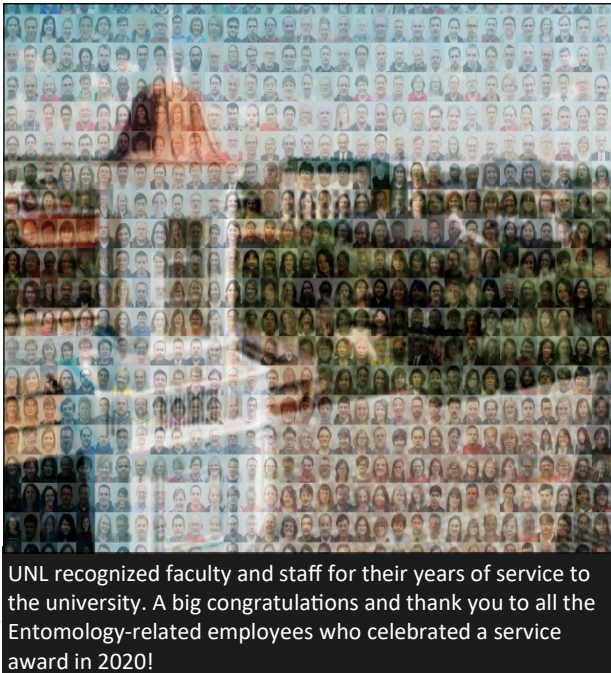
(Screen Capture by Jody Green.)





# UNL Creates Unique Online Celebration for Service Awards

Each fall, the University of Nebraska-Lincoln recognizes employees for their years of service in five-year increments. In 2020, nearly 1,000 faculty and staff celebrated their awards virtually due to COVID-19 protocols. The online celebration included a video narrated by Rick Alloway, professor of broadcasting, a dedicated website at <https://celebrationofservice.unl.edu/welcome>, and a mosaic picture that wraps employee pictures within a larger campus picture (right).



UNL recognized faculty and staff for their years of service to the university. A big congratulations and thank you to all the Entomology-related employees who celebrated a service award in 2020!

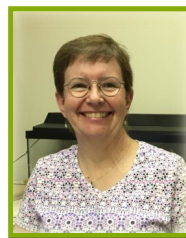
Below is a list of Entomology-related employees and their years of service:

- **50 years**  
Tom Aspinall, FM&P Custodial
- **45 years**  
Dave Boxler, WCREEC
- **40 years**  
Stephen M. Spomer
- **20 years**  
Erin C. Bauer
- **10 years**  
Jeff Bradshaw
- **5 years**  
Ana Velez  
Susan Weller  
Judy Y. Wu-Smart  
Matthew K. Mueller, AEM  
Business Center

## Entomology Bids Farewell to Retirees

Congratulations to four Entomology Department employees and collaborators who retired at the end of 2020.

Lisa Silberman worked for the department as a research technologist, recruiter, advisor, technology specialist, and webmaster.



**Lisa Silberman**



**Steve Spomer**

Steve Spomer served as an instructor for ENTO 818 and ENTO 116 and a researcher. He has an extensive insect collection and discovered more than [700 insects](#), including the [Salt Creek Tiger Beetle](#).

Dr. Dave Taylor officially retired from the USDA-ARS but will still collaborate with researchers and graduate students.



**Dave Taylor**

Tom Aspinall, long-time custodian for Entomology Hall, retired in October 2020 after 50 years with the university. (not pictured).

Happy Retirement and thanks for your years of service!

## Alumni News

Alumna Dr. **Silvana Paula-Moraes** has named the recipient of the 2021 Department of Entomology Alumni Recognition Award by the



**Silvana Paula-Moraes**

Lawrence Bruner Club! She presented an online seminar in connection with the award on Monday, March 1st, at noon. Congratulations, Silvana!



**Jennifer Weisbrod**

**Jennifer Weisbrod**, a 2020 graduate of the Entomology Department, was hired as the Pesticide

Safety Education Program coordinator and an assistant extension educator for the UNL Department of Agronomy and Horticulture. This position was previously held by Clyde Ogg, Emeritus Extension Educator.

More details about her new position may be found on the [UNL Newsroom web site](#). (Photo and story courtesy Fran Benne, Agronomy & Horticulture).



**Sajjan Grover**

**Sajjan Grover** has started as a post-doc for the Department of Entomology. Grover is working with Joe Louis' Lab on independent and collaborative research projects. His work is related to sorghum defenses against fall armyworm and sugarcane aphids. He will also mentor undergraduate and graduate students in the lab.



## Peterson, Weller speak at Virtual Graduations

**Dr. Bob Peterson** was the featured speaker at the department's Aug. 14, 2020, virtual graduation celebration. Peterson graduated in 1995 with a Ph.D. in Entomology from UNL. He served as 2019 president of the Entomology Society of America (ESA) and is currently a faculty member at Montana State University.

August graduates were: **Timothy Thielen**, Bachelor's of Science (BS) with dual Insect Science/Forensic Science majors, and **Kaitlin Chapman, Sylvia Kenmuir, Giancarlo Maddaloni, Sarah Parker** and **Daniel Taylor**, Masters' of Science.

**Dr. Susan Weller** spoke at the December 18, 2020, department virtual graduation celebration. In 2020, Weller was named an ESA Fellow (see page 1). Weller is currently director of the University of Nebraska State Museum and a UNL professor of entomology. Weller served as ESA president in 2017. She earned her Ph.D. at the University of Texas-Austin (1989) and her bachelor's degree at Grinnell College (1984).

December graduates were: **Braden Wojahn**, Bachelor's of Science in Insect Science; Jonathan **Bishop, Marissa Cornish, Bridget Gross, Joshua Matta, Abbey Rardin, Carter Synhorst**, and **Anna Wright**, Master's of Science; and **Surabhi Gupta Vakil**, Ph.D. Congratulations graduates!

## Entomology Faculty in the News

**Jeff Bradshaw** was named the Interim Director of the Panhandle Research and Extension Center in Scottsbluff. Thanks Jeff!

**Kyle Koch** was appointed to the UNL Graduate Faculty last summer. This is the first Extension Educator to be so appointed at UNL. Congratulations Kyle!

**Joe Louis** received funding from the U.S. Department of Agriculture's Agriculture and Food Research Initiative's competitive grants program. Louis received a three-year grant for \$430,000 to research sorghum's natural defenses against the fall armyworm. Sorghum is an important crop that is grown for both grain and bioenergy. The fall armyworm is one of the most devastating pests affecting grasses in the Americas and more recently in Africa. The fall armyworm can reduce grain yields by 55-80%. The full story about this grant may be found on the [UNL news website](#). Great work Joe!

**Justin McMechan** (pictured right) was named the 2020 recipient of the Epsilon Sigma Phi Early Career Leadership Award by the Alpha Upsilon Chapter University of Nebraska). Epsilon Sigma Phi is a national organization for extension professionals. Congratulations, Justin!



Justin McMechan

**John Ruberson** was elected as the North Central Branch representative to the Governing Board of the Entomological Society of America (ESA). **Gary Brewer** is an outgoing representative and served for two terms.

**Julie Peterson** (pictured right) was a featured expert in an NPR article "As Biotech Crops Lose Their Power, Scientists Push for New Restrictions" released Oct. 30, 2020, to a national audience. She did a great job representing Entomology, West Central Research Extension and Education Center, and UNL. Well done, Julie! Read the article here: <https://www.npr.org/2020/10/29/927111009/as-biotech-crops-lose-their-power-scientists-push-for-new-restrictions>.



Julie Peterson



Judy Wu-Smart

**Judy Wu-Smart** has received considerable media attention for her outstanding work with the environmental contaminants associated with the AltEn ethanol facility in Mead, NE. Her careful and patient work has been pivotal in bringing very significant change. Two excellent articles about it are in [The Guardian](#) and in the [Lincoln Journal Star](#). Great work Judy!

## Department Head News

- Continued from page 1 no belittling words or actions. We can each start to make our own spaces better and choose to find universal humanity in our shared experiences so that inclusion and equity are who we are and not just what we say. Thank you to all who have made your fellow pilgrims on this planet find welcome and respite during very trying times. It is truly an honor to be able to work with and learn from such fine souls. I wish you an abundance of health, peace, and success in the months ahead.



## Faculty, Students, and Staff Publish Articles

**Inveninato Carmona, G., L.M. Delserone, J. Nogueira Duarte Campos, T. Ferreira de Almeida, D. Vieira Branco Ozório, J.D. Betancurt Cardona, R. Wright, and A.J. McMechan.** (2021). Does cover crop management affect arthropods in the subsequent corn and soybean crops in the United States? A Systematic Review. *Ann. Entomol. Soc. Am.* 0013-8746. <https://doi.org/10.1093/aesa/saaa049>.

**Krueger, A.J., K. Hanford, T.J. Weissing, A.M. Vélez, and T.D. Anderson** (2021). Pyrethroid Exposure Reduces Growth and Development of Monarch Butterfly (Lepidoptera: Nymphalidae) Caterpillars. *J. Insect Sci.* 21(2). <https://academic.oup.com/jinsectscience/article/21/2/2/6158511>.

**Luong, T.K.N. (Mia), F. Forcella, S.A. Clay, M.S. Douglass, and S.E. Wortman** (2021). Abrasive weeding as a vehicle for precision fertilizer management in organic vegetable production. *HortTechnology* 31: 136-143. <https://journals.ashs.org/horttech/view/journals/horttech/31/1/article-p136.xml>.

Ndung'u, J.M., ... **Georgina V. Bingham** (16th of 45 authors). (2020). Trypano-NO! Contributes to the elimination of *gambiese* human African trypanosomiasis by combining tsetse control with "screen, diagnose and treat" using innovative tools and strategies. *PLoS Negl. Trop. Dis.* 14(11): e0008738. <https://doi.org/10.1371/journal.pntd.0008738>.

**Pingault, L., N. Palmer, K.G. Koch, T. Heng-Moss, J.D. Bradshaw, J. Seravalli, P. Twigg, J. Louis, and G. Sarath** (2020). Differential defense responses of upland and lowland switchgrass cultivars to a cereal aphid pest. *Int. J. Mol. Sci.*, 21(21) 7966. <https://doi.org/10.3390/ijms21217966>.

**Zogli, P., L. Pingault, S. Grover and Joe Louis.** (2020). Ento(o)mics: the intersection of "omic" approaches to decipher plant defense against sap-sucking insect pests. *Curr. Opin. Plant Biol.*, 56: 153-161. <https://www.sciencedirect.com/science/article/pii/S1369526620300820>.

Several of our Entomology co-workers are authors on papers in a recent special issue of the *J. Insect Sci.: Special Collection: Protocols in Medical and Veterinary Entomology*, (2020). 20(6): <https://academic.oup.com/jinsectscience/pages/protocols-in-medical-and-veterinary-entomology>:

- C.J. Geden, D.M. Johnson, and **D.B. Taylor**. Improved sentinel method for surveillance and collection of filth fly parasitoids. p. 3. <https://doi.org/10.1093/jisesa/ieaa026>.
- B. Smythe, **D. Boxler, G. Brewer**, E. Psota, and D.W. Watson. Using visual and digital imagery to quantify horn fly (Diptera: Muscidae) Densities, p. 16. <https://doi.org/10.1093/jisesa/ieaa110>.
- **D.B. Taylor, K. Harrison, and J.J. Zhu**. Methods for Surveying Stable Fly Populations. p. 17. <https://doi.org/10.1093/jisesa/ieaa094>.



**Dr. Scott Hutchins**

Dr. Scott Hutchins, under-secretary for Agricultural Research, Education & Economics at the U.S. Department of Agriculture, presented a seminar and held an open forum on Wed., Oct. 21, in 110 Entomology Hall.

Hutchins' presentation was held in Entomology Hall and broadcast via Zoom. UNL graduate students were able to meet with Dr. Hutchins to discuss career path opportunities and the mission of the USDA's Research, Education & Economics.

An adjunct professor of Entomology at UNL, Hutchins also met with Chancellor Ronnie Green, IANR Vice Chancellor Mike Boehm, CASNR Dean Tiffany Heng-Moss, Dr. Ron Yoder, IANR Associate Vice Chancellor.

Hexapod Herald Contact Details: University of Nebraska-Lincoln Entomology Department, 103 ENTO Hall, Lincoln, NE 68583-0816, Attn: Kathy Schindler. Located on the web at <https://entomology.unl.edu>, or by email at [entomology@unl.edu](mailto:entomology@unl.edu). Copyright ©2021.



**ENTOMOLOGY**

*College of Agricultural Sciences  
and Natural Resources*