Adam G. Dolezal, Ph.D.
Assistant Professor
Department of Entomology
University of Illinois Urbana-Champaign
320 Morrill Hall
505 S. Goodwin Ave.
Urbana, IL 61801
Email: adolezal@illinois.edu; phone: 1-217-300-6762

Background Information

Professional Appointments

Assistant Professor, Department of Entomology, University of Illinois Urbana-Champaign **2017-present**

Affiliate, Program in Ecology, Evolution, and Conservation Biology, University of Illinois **2017-present**

Affiliate, Carl Woese Institute for Genomic Biology, Infection Genomics for One Health **2019-present**

Postdoctoral Research Associate, Iowa State University, Department of Ecology, Evolution, and Organismal Biology **2012-2017**

Education

Arizona State University **2012**
Degree: Ph.D., Biology

University of Illinois Urbana-Champaign **2006**
Degree: BS, Integrative Biology, with distinction; minor in Chemistry

Research

Peer-reviewed Publications:

h-index: 17 (15 since 2016)
i10 index: 19 (18 since 2016)

Submitted or in post-review revision

Walton, A. R., Toth, A. L., **Dolezal, A. G.**, Developmental environment shapes honey bee worker response to virus infection. *(in revision)*

Zhang, G., St. Clair, A.L., **Dolezal, A. G.,** Toth, A. L., O'Neal, M. E. Variation in annual weather, rather than land use, affects honey bee pollen collection in an agricultural landscape *(in revision)*

St. Clair, A.L., Zhang, G., **Dolezal, A. G.,** O'Neal, M. E., Toth, A. L. Landscape diversity but not honey bee presence shapes wild bee communities in soybean agroecosystems. *(in revision)*

Published or Accepted Peer-reviewed Publications (33)

At University of Illinois at Urbana-Champaign (UIUC; 16)

33 **Dolezal, A. G.,** Torres, J., O'Neal, M. E. Can solar energy fuel pollinator conservation? (*Accepted,* Environmental Entomology)

32 Zhang, G., St. Clair, A.L., **Dolezal, A. G.,** Toth, A. L., O'Neal, M. E. North American prairie is a source of pollen for managed honey bees. Journal of Insect Science. Volume 21, Issue 1, January 2021, 17, https://doi.org/10.1093/jisesa/ieab001

31 Pritchard, Z.A., Hendriksma, H.P., Stein, D.S., St. Clair, A.L., **Dolezal, A.G.,** O'Neal, M.E., Toth, A.L. 2021. Do viruses of managed honey bees ([Hymenoptera]: [Apidae]) endanger wild bees in native prairies? Environmental Entomology https://doi.org/10.1093/ee/nvaa181

30 Hsieh, E. M., Berenbaum, M. R., **Dolezal, A. G.** 2020b. Ameliorative effects of phytochemical ingestion on viral infection in honey bees. Insects 11(10), 698; https://doi.org/10.3390/insects11100698

29 Hsieh, E. M., Carrillo-Tripp, J., **Dolezal, A. G.** 2020a. Preparation of virus-enriched inoculum for oral infection of honey bees (Apis mellifera). J. Visualized Experiments (162), e61725, doi:10.3791/61725. +Invited methods paper

28 St. Clair, A. L., **Dolezal, A. G.,** O'Neal, M. E., Toth, A. L. 2020b Pan traps for tracking honey bee activity-density: a case study in soybeans. Insects 11(6), 366; https://doi.org/10.3390/insects11060366

27 Harwood, G. P., **Dolezal, A. G.** Pesticide-virus interactions in honey bees: challenges and opportunities for understanding drivers of bee declines. Viruses: 12(5), 566; https://doi.org/10.3390/v12050566

26 Geffre, A. C., Gernat, T., Harwood, G. P., Jones, B. M., Morselli Gysi, D., Hamilton, A. R., Bonning, B. C., Toth, A. L., Robinson, G. E., **Dolezal, A. G.** 2020. Honey bee virus causes context-dependent changes in host social behavior. Proceedings of the National Academy of Sciences: 202002268; https://doi.org/10.1073/pnas.2002268117

25 St. Clair, A. L., Zhang, G., **Dolezal, A. G.**, O'Neal, M. E. and Toth, A. L. 2020. Diversified Farming in a Monoculture Landscape: Effects on Honey Bee Health and Wild Bee Communities. Environmental Entomology. https://doi.org/10.1093/ee/nvaa031

24 Zhang, G., St. Clair, A. L., **Dolezal, A. G**., Toth, A. L., O'Neal, M. E. Honey bee pollen forage in a highly cultivated agroecosystem: Limited diet diversity and its relationship to virus resistance. J. of Economic Entomology; https://doi.org/10.1093/jee/toaa055

23 **Dolezal, A. G.,** St. Clair, A. L., Zhang, G., Toth, A. L., O'Neal, M. E. 2019b. Native habitat mitigates feast–famine conditions faced by honey bees in an agricultural landscape. Proceedings of the National Academy of Sciences: 201912801; https://doi.org/10.1073/pnas.1912801116 ***cover article**

22 Rutter, L., Carrillo-Tripp, J., Bonning, B.C., Cook, D., Toth, A.L., **Dolezal, A.G.** 2019. Transcriptomic responses to diet quality and viral infection in Apis mellifera. BMC Genomics 20(1): 412.; https://doi.org/10.1186/s12864-019-5767-1

21 **Dolezal, A. G.**, Carrillo-Tripp, J., Judd, T. M., Miller, W. A., Bonning, B. C., Toth, A. L. 2019a Interacting stressors matter: Diet quality and virus infection in honey bee health. Royal Society Open Science. 6: 181803; http://dx.doi.org/10.1098/rsos.181803

20 Corby-Harris , V., Bowshers, J.H., Carr-Markell, M., Carroll, M. J., Centrall, M., Cook, S.C., Couvillon, M., Degrandi-Hoffman, G., **Dolezal, A. G.,** Jones, J. C., Mogren, C. L., Otto, C. R. V., Lau, P., Rangel, J., Schürch, R., St. Clair, A. 2018. Emerging themes from the ESA symposium entitled "Pollinator Nutrition: Lessons from bees at Individual to Landscape Levels." Bee World 1-15; https://doi.org/10.1080/0005772X.2018.1535951

19 Walton, A., **Dolezal, A. G.,** Bakken, M. A. and Toth, A. L. 2018. Hungry for the queen: Honeybee nutritional environment affects worker pheromone response in a life stage-dependent manner. Functional Ecology **32**, 2699-2706. https://doi.org/10.1111/1365-2435.13222

18 **Dolezal, A. G**. and Toth, A. L.. 2018. Feedbacks between nutrition and disease in honey bee health. Current Opinion in Insect Science **26**: 114-119; https://doi.org/10.1016/j.cois.2018.02.006

Pre-UIUC appointment (17)

17 Toth, A. L., and **Dolezal, A. G.** Editorial overview: Social insects: Integrative approaches to understanding insect sociality: why physiology is still highly relevant. 2017. Current Opinion Insect Science 22: viii-ix; https://doi.org/10.1016/j.cois.2017.07.011

16 **Dolezal, A. G**., Hendrix, S. D., Scavo, N. A., Carrillo-Tripp, J., Harris, M. A., Wheelock, M. J., O'Neal, M. E., Toth, A. L. Honey bee viruses in wild bees: Viral prevalence, loads, and experimental inoculation. 2016. Plos One, https://doi.org/10.1371/journal.pone.0166190

15 Zinna, R., Gotoh, H., Brent, C., **Dolezal A. G.** , Kraus, A., Niimi, T., Emlen, D., Lavine, L.C. Endocrine control of exaggerated traits in rhinoceros beetles. 2016. Integrative & Comparative Biology 56(2): 247-259. https://doi.org/10.1093/icb/icw042

14 **Dolezal, A. G.,** Carrillo-Tripp, J., Miller, W. A., Bonning, B.C., Toth, A.L. Intensively cultivated landscape and Varroa mite infestation are associated with reduced honey bee nutritional state. 2016 Plos One, https://doi.org/10.1371/journal.pone.0153531

13 Carrillo-Tripp, J., **Dolezal, A. G.,** Goblirsch, M. J., Miller, W. A., Toth, A.L., Bonning, B.C., 2016. In vivo and in vitro infection dynamics of honey bee viruses. Scientific Reports. 6:22265, https://doi.org/10.1038/srep22265

12 **Dolezal, A. G.,** Carrillo-Tripp, J., Miller, W. A., Bonning, B.C., Toth, A.L. 2016. Honey bees preferentially reject pollen contaminated with field-relevant levels of an insecticide., J. of Economic Entomology. 109(1):41-48. http://dx.doi.org/10.1101/025189

11 Ligon, R. A., **Dolezal, A. G.,** Hicks, M. R., Butler, M. W., Morehouse, N. I., Tirupalavanam, G. 2014. Territorial Ants: Using ant colonies and the scientific process to engage students in the study of animal behavior. American Biology Teacher. 76,8:525-534; https://doi.org/10.1525/abt.2014.76.8.6

10 Miller, W.A., Carrillo-Tripp, J., Bonning, B.C., **Dolezal, A.G.**, Toth, A.L., 2014. Conclusive evidence of replication of a plant virus in honeybees is lacking. Mbio 5; https://doi.org/10.1128/mBio.00985-14

9 **Dolezal, A.G.**, Toth, A.L., 2013. Honey bee sociogenomics: a genome-scale perspective on bee social behavior and health. Apidologie 45, 375-395; https://doi.org/10.1007/s13592-013-0251-4

8 Yamamoto, R., Bai, H., **Dolezal, A.G.**, Amdam, G., Tatar, M., 2013. Juvenile hormone regulation of Drosophila aging. BMC Biol 11:85; https://doi.org/10.1186/1741-7007-11-85.

7 **Dolezal, A.G.**, Johnson, J., Hoelldobler, B., Amdam, G.V., 2013. Division of labor is associated with age-independent changes in ovarian activity in Pogonomyrmex californicus harvester ants. J Insect Physiol 59, 519-524; https://doi.org/10.1016/j.jinsphys.2013.02.008

6 **Dolezal, A.G.**, Brent, C.S., Holldobler, B., Amdam, G.V., 2012. Worker division of labor and endocrine physiology are associated in the harvester ant, Pogonomyrmex californicus. J Exp Biol 215, 454-460; https://doi.org/10.1242/jeb.060822

5 Mutti, N.S., **Dolezal, A.G.***, Wolschin, F., Mutti, J.S., Gill, K.S., Amdam, G.V., 2011. IRS and TOR nutrient-signaling pathways act via juvenile hormone to influence honey bee caste fate. J Exp Biol 214, 3977-3984; https://doi.org/10.1242/jeb.061499 *co-lead author

4 Blumstein, D.T., Ebensperger, L.A., Hayes, L.D., Vasquez, R.A., Ahern, T.H., Burger, J.R., **Dolezal, A.G.**, Dosmann, A., Gonzalez-Mariscal, G., Harris, B.N., Herrera, E.A., Lacey, E.A., Mateo, J., McGraw, L.A., Olazabal, D., Ramenofsky, M., Rubenstein, D.R., Sakhai, S.A., Saltzman, W., Sainz-Borgo, C., Soto-Gamboa, M., Stewart, M.L., Wey, T.W., Wingfield, J.C., Young, L.J., 2010. Toward an integrative understanding of social behavior: new models and new opportunities. Front Behav Neurosci 4; https://doi.org/10.3389/fnbeh.2010.00034

3 Wang, Y., Mutti, N.S., Ihle, K.E., Siegel, A., **Dolezal, A.G.**, Kaftanoglu, O., Amdam, G.V., 2010. Down-Regulation of honey bee IRS gene biases behavior toward food rich in protein. Plos Genet 6; https://doi.org/ 10.1371/journal.pgen.1000896

2 **Dolezal, A.G.**, Brent, C.S., Gadau, J., Holldobler, B., Amdam, G.V., 2009. Endocrine physiology of the division of labour in Pogonomyrmex californicus founding queens. Anim Behav 77, 1005-1010; https://doi.org/10.1016/j.anbehav.2009.01.010

1 Tillberg, C.V., McCarthy, D.P., **Dolezal, A.G.**, Suarez, A.V., 2006. Measuring the trophic ecology of ants using stable isotopes. Insect Soc 53, 65-69; https://doi.org/ 10.1007/s00040-005-0836-7

Book Chapters (5):

5 **Dolezal, Adam G.** 2019. Caste Determination in Arthropods, In Choe, J.C. (eds) Encyclopedia of Animal Behavior 2nd Edition, vol. 4, pp 691-698, Elsevier: Academic Press, ISBN: 9780128132517

4 Ihle, K. E., Amdam, G. V., **Dolezal, A. G.** 2016. Evo-devo of Social Behavior. In Nuño de la Rosa, L. and G.B. Müller (eds.), Evolutionary Developmental Biology - A Reference Guide. doi:10.1007/978-3-319-33038-9_45-1

3 **Dolezal, A. G**., Flores, K.B., Traynor, K.S., & Amdam, G.V. 2013. The Evolution and Development of Eusocial Insect Behavior, In Streelman, J.T. (ed.) Advances in Evolution and Development; Wiley-Blackwell, Hoboken, NJ, USA. ISBN: 978-1-118-13111-4

2 **Dolezal, Adam G.** 2010. Caste Determination in Arthropods (Chapter 334), In Breed, M. D. and Moore J. (eds.) Encyclopedia of Animal Behavior, pp 247-253,Oxford: Academic Press, **ISBN-13:** 978-0080453330

1 Smith, C. R., **Dolezal, A. G.**, Eliyahu D., Holbrook C. T. & Gadau, J. 2009.Ants (Formicidae): Models for Social Complexity. CSH Protocols; doi:10.1101/pdb.emo125

Research Support: Grants and Awards

At UIUC, as PI, co-PI, or senior personnel. Total: $16,651,196; Total to Dolezal Lab:$1,545,172

10 North American Pollinator Protection Campaign Honey Bee Health Improvement Grant. **Dolezal, A.G**. (PI) & Hsieh, E. M. (PhD student) 2021-2022. *Can improved diet quality ameliorate the interactive effects of sublethal pesticide exposure and viral infection in honey bees?* $10,000

9 Department of Energy-Solar Energy Technologies Office. Caldwell, I. (PI), Hartmann, H. (Research Coordinator), Walston, L., Hlohowskyj, Ben Campbell (Research Leads), Mueller, S. (Principal Economist), **Dolezal, A.**, Bhandari, I., McCall, J., Burton, R. (Research Support), Macknick, J. (Outreach support), Salas, D. (Implementation Tools Lead), Kline, C., Hernandez, C. (Implementation Tools Support), Crane, J., Pinger, A. (Industry Advisory Group Chairs). 2021-2024. *Evaluation of Economic, Ecological, and Performance Impacts of Co-Located Pollinator Plantings at Large-Scale Solar Installations* $2,078,855 in federal funds + $527,305 in cost share; ($220,836 federal funds to Dolezal).

8 United States Department of Agriculture: Agriculture and Food Research Initiative (USDA-AFRI). Bonning, B. C. & **Dolezal, A.G** . 2021-2024. *Bee safe, pathogen based tools for small hive beetle management.* $499,201 ($235,144 to Dolezal)

7 National Science Foundation, Biological Integration Institute Implementation Grant. Whitaker, R. (PI), co-PIs: Caceres, C., Newton, I., Pascual, M. (**Dolezal is senior personnel**, of 23 senior personnel in the institute). 2020-2025. *GEMS: Genomics and eco-evolution of multi-scale symbioses* (focal system: bee / clover symbioses interactions). $12,500,000 ($151,421 to Dolezal to date (budget assigned to labs each year))

6 United States Department of Agriculture: Agriculture and Food Research Initiative (USDA-AFRI). Bonning, B. C. & **Dolezal, A.G**. 2020-2023, *Targeting receptors to mitigate virus burden in the honey bee* $396,985 ($150,877 to Dolezal)

5 Illinois Specialty Crop Block Grant. (2019-2022). **Dolezal, A.G.** *Combining apiary inspections and self-reported stakeholder data to understand honey bee pest pressure and success.* $123,944

4 Birmingham-Illinois Partnership for Discovery, Engagement and Education Seed Grant; Hayward, S. and **Dolezal, A.G.**, *Declining nutritional quality of pollen under elevated CO_2 impacts on pollinator health.* $6500 + £6500 (approx., $14,700; $6500 to Dolezal)

3 United States Department of Agriculture: Agriculture and Food Research Initiative (USDA-AFRI), (2019-2021; 2019-67013-29300) **Dolezal, A.G**. (Lead PI), Co-PIs: Bonning, B.C., Brent, C.S., Robinson, G.E. *Viral Hijackers: Can Viral Pathogens Manipulate Honey Bee Behavior to Increase Disease Transmission?* $499,900 ($476,542 to Dolezal).

2 Penn State Extension Multistate & Integrated Program Grants, (2019-2020) Grozinger, C., **Dolezal, A.G.** (Lead of Illinois component), Harpur, B., Lopez-Uribe, M. M., Butzler, T. M. *Context is key: partnering with beekeepers to generate digital geospatial tools to support bee health*. $24,583 ($3960 to Dolezal, $11,000 for collaborative training workshop).

1 Foundation for Food and Agriculture Research: Pollinator Health Fund. (2018-2020) Schulte-Moore, L. Bradbury, S. P., **A. G. Dolezal,** M. O. O'Neal, A.L. Toth, J. C. Tyndall. *Impact of Prairie on Reducing Interacting Stressors on Pollinator Health.* $503,028 ($165,948 to Dolezal)

Pre-UIUC appointment (Total $1,448,808)

7 USDA-AFRI: Food Security Challenge Area: New Frontiers in Pollinator Health: From Research to Application. (2017-2019) Toth, A., M. O'Neal., E. Hodgson, **A. Dolezal.** *Combining crop production and conservation for improved bee health*. $999,317

6 North American Pollinator Protection Campaign (NAPPC; 2015). **Dolezal, A.** and A. Toth. *Do viruses manipulate honey bee behavior in ways that increase their transmission?* $10,000

5 Center for Global and Regional Environmental Research (CGRER; 2015). Toth, A. and **A. Dolezal.** *Effects of larval nutritional stress on honey bee disease susceptibility and immunocompetence*, $30,000

4 Leopold Center for Sustainable Agriculture, competitive grant program 2015-2017; Toth, A., **A. Dolezal,** M. O'Neal, E. Hodgson. *Impacts of landscape diversity and organic practices on the abundance and health of bee pollinators.*, $103,626

3 United Soybean Board, (USB; 2014-2016); O'Neal, M., A. Toth, and **A. Dolezal**. *How much do soybeans benefit from honey bee pollination (and vice-versa)?*, $300,665

2 Journal of Experimental Biology Travelling Fellowship (2012), $3200

1 Research Grant, Graduate and Professional Students Association (2008), Arizona State University, $2000

Trainee collaboration grants

Postdoctoral Fellowships Program, USDA-NIFA. St. Clair, A. L. *Effects of nutritional and agrochemical stress on honey bee queen fecundity and physiological health* $164,968.

Travel Grants

Travel grant to attend "IPM4Bees Midwest Working Group" workshop (2019), Ames, IA. $500

Professional Development Travel Grant (2011), Graduate Professional Students Association, ASU, $950

Student Travel Grant (2010), Gordon Research Conferences, Genes and Behavior, $890

Student Travel Grant (2009), Gordon Research Conferences, Ecological and Evolutionary Functional Genomics, $500

Student Travel Grant (2008), International Union for the Study of Social Insects North American Section Meeting, $200 + Registration

Conference Travel Grant (2006-2011, School of Life Sciences, ASU, awarded multiple times, totaling $1950

Other Awards

List of Teachers Ranked As Excellent By Their Students, University of Illinois, IB 432: Genes and Behavior, Spring 2020

List of Teachers Ranked As Excellent By Their Students, , University of Illinois, IB 432: Genes and Behavior, Spring 2019

Graduate Citizen Scholar Award, ASU Division of Graduate Studies (2011)

2nd Place, Competition for the President's Prize , 10-Minute papers, Meeting of the Entomological Society of America, San Diego, CA (2007)

Fellowship, Undergraduate Mentoring in Environmental Biology, University of Illinois Urbana-Champaign (2004-2005), $7000

Scientific Presentations

Invited Symposium Presentations and Seminars

19	Invited seminar, Dept. of Entomology, Purdue University, West Lafayette, IN.	2020
18	Invited seminar, Dept. of Entomology, University of California-Riverside, Riverside, CA.	2020
17	Invited symposium speaker, Entomological Society of America National Meeting, St. Louis, MO. In Section Symposium *How to Speak for the Pollinators: Using Big Data to Manage and Conserve Pollinator Communities.*	2019
16	Invited Seminar, Dept. of Entomology seminar series, University of Wisconsin-Madison, Madison, WI.	2019
15	Invited Seminar, Dept. of Biology seminar series, Northern Illinois University, DeKalb, IL	2019
14	Invited Seminar, School of Biology seminar series, Illinois State University, Bloomington, IL.	2019
13	Invited symposium speaker, Entomological Society of America North Central Branch meeting, Cincinnati, OH. In Program Symposium *Monitoring, miticide, and mitigation: What IPM strategies improve honey bee and native bee health*.	2019
12	Invited symposium speaker, Entomological Society of America National Meeting, Vancouver, BC, Canada. In Section Symposium *From Genes to Communities: Quantifying Diverse Responses of Pollinators to Multiple Anthropogenic Stressors*.	2018
11	Invited Seminar, Pennsylvania State University, Department of Entomology	2018
10	Plenary speaker, Integrative Pest Management for Early Season Pests Workshop, Ames, Iowa.	2018
9	Invited symposium speaker, Entomological Society of America North Central Branch meeting, Madison, WI. Program symposium: *Pollination research in the North Central Region*	2018
8	Invited Seminar, Natural Sciences Colloquium, Illinois Weslyan University, Bloomington, IL.	2018
7	Invited Seminar, Social Insect Research Group, Arizona State University, Tempe, AZ.	2017
6	Entomological Society of America National Meeting, Denver, CO. In Member Symposium *Pollinator Nutrition: Lessons from Bees at Individual to Landscape Levels*	2017
5	Invited Seminar, Dept. of Entomology, Iowa State University, Ames, IA.	2015
4	Entomological Society of America National Meeting, Portland, OR . In Member Symposium *Nutrition and the Health and Behavior of Wild and Managed Bees*	2014
3	Invited Seminar, Dept. of Entomology, Washington State University, Pullman, WA.	2014
2	Entomological Society of America North Central Branch, Des Moines, IA. In Member Symposium *Protection our pollinators: Current pollinator health and conservation efforts in the Midwest*	2014
1	Entomological Society of America National Meeting, Reno, NV In Section Symposium *Social Insect Evolution Today.*	2011

Other Scientific Presentations, including those by student co-authors, at UIUC only

28	Hsieh, E., **Dolezal, A.G.,** Diet quality can influence honey bee response to viral and pesticide exposure. Entomological society of America, Virtual meeting	2020
27	Harwood, G., **Dolezal, A.G.** . Honey bee pathogen effects vary with worker age. Entomological society of America, Virtual meeting	2020
26	St. Clair, A.L., **Dolezal, A.G.**, Zhang, G., O'Neal, M.E. and Toth, A.L. . Impacts of landscape complexity and honey bee presence on wild bee community in a highly cultivated landscape, Entomological society of America, St. Louis, MO	2019
25	Hsieh, E., **Dolezal, A.G.,** Berenbaum, M.R. The effects of phytochemicals of virally infected honey bees. In Section Symposium: "Callows" and "Pre-Imaginal" Professionals of Pollination Research, Entomological society of America, St. Louis, MO	2019
24	Torres, J. D., Bush, D.S., Liao, L.H., Berenbaum, M. R., **Dolezal, A. G.** . Biological attributes of Aspergillus flavus found in bee pollen in the presence and absence of pesticide contamination. Entomological society of America, St. Louis, MO	2019
23	Zhang, G., St. Clair, A.L., Murray, C., **Dolezal, A.G.**, Cass, R., Schulte Moore, L, Toth, A.L., and O'Neal, M.E. . Entomological society of America, St. Louis, MO	2019
22	St. Clair, A.L., **Dolezal, A.G.**, Zhang, G., O'Neal, M.E. and Toth, A.L. . Diversified farming in a monoculture landscape: Effects on honey bee health and wild bee communities. In Section Symposium: "Callows" and "Pre-Imaginal" Professionals of Pollination Research, Entomological society of America, St. Louis, MO	2019
21	Cass, R.P., **Dolezal, A.G.**, Toth, A., O'Neal, M., Hodgson, E., Hendriksma, H., St. Clair, A., Zhang, G. . Colony health in intensified agricultural landscapes: monitoring the impact of forage availability on honey bee hives in heavily cultivated areas. Apimondia: International Apicultural Congress, Montreal, Canada	2019
20	Zhang, G., David Stein, **Dolezal, A.G.**, Hendriksma, H.P., Cass, R.P., O'Neal, M.E. and Toth, A.L. . Honey bees Apis mellifera [Hymenoptera: Apidae]. in prairie strips integrated into cropland can obtain improved forage in agricultural landscape. Entomological Society of America North Central Branch Meeting, Cincinnati, OH.	2019
19	St. Clair, A.L., Zhang, G., David Stein, **Dolezal, A.G.**, Hendriksma, H.P., Cass, R.P., O'Neal, M.E. and Toth, A.L. . Combining crop production and conservation for improved bee health: Impacts on honey bee queen quality? Entomological Society of America North Central Branch Meeting, Cincinnati, OH.	2019
18	Cass, R. P., Hodgson, E.W., O'Neal, M.E., Toth, A.L. and **Dolezal, A.G.,** . What does "save the bees" even mean?: A survey of farmers, beekeepers, and landowners about best practices for bee health in Iowa. Entomological Society of America North Central Branch Meeting, Cincinnati, OH.	2019
17	Cass, R. P., Hodgson, E.W., O'Neal, M.E., Toth, A.L. and **Dolezal, A.G.**, . Extension tailored to fit your audience: Enhancing survey tools with Importance Performance Analysis. Entomological Society of America Annual Meeting, Vancouver, BC.	2018
16	Hendriksma, H.P., St. Clair, A.L., Zhang, G., Cass, R. P., Stein, D. S., Hodgson, E.W.1, **Dolezal, A.G.**, O'Neal, M.E. and Toth, A.L. . Impact of native, perennial forage on the health of honey bee colonies Apis mellifera. in an annual crop landscape. Entomological Society of America Annual Meeting, Vancouver, BC.	2018
15	O'Neal, M.E., Toth, A.L., Schulte, L.A., St. Clair, A.L., Zhang, G., **Dolezal, A.G.**, Tyndall, J., Bradbury, S., and Hodgson, E.W. . Prairie STRIPS, a collaboration that provides more than just forage for bees. Entomological Society of America Annual Meeting, Vancouver, BC.	2018
14	Zhang, G., **Dolezal, A.G.**, Schulte, L.A., Toth, A.L. and O'Neal, M.E. . Do prairies provide enhanced forage for the honey bee Apis mellifera Hymenoptera: Apidae. in an intensively cultivated landscape? Entomological Society of America Annual Meeting, Vancouver, BC.	2018

13 Rutter, L., Cook, D., Toth, A.L., **Dolezal, A.G.** Gene expression responses to diet quality and viral infection in Apis mellifera . Arthropod Genomics Symposium, Urbana, IL 2018

12 Walton, A.R., **Dolezal, A.G.**, Bakken, M.A., Toth, A.L. Starve a worker, feed a colony: nutrition, ovary size, and cooperation in social insect societies. . IUSSI International Congress, Guaruja, Brazil 2018

11 Hendriksma, H.P. , St. Clair, A.L. , Zhang, G. , Stein, D.S., , Cass, R.P., **Dolezal, A.G.**, Hodgson, E.W., O'Neal, M.E., Toth, A.L. Bee nutritional health amidst newcomers and new landscapes: social benefits or misfits? . IUSSI International Congress, Guaruja, Brazil 2018

10 Gernat, T., Jagla, T., Geffre, A.C., Hamilton, A.R., Jones, B.M., Middendorf, M., Toth, A.L., **Dolezal, A.G.**, Robinson, G.E. Reduced trophallactic activity in response to virus infection in automatically monitored honeybee colonies . International Union for the Study of Social Insects IUSSI. International Congress, Guaruja, Brazil. 2018

9 St. Clair, A.L., Hsieh, E., David Stein, **Dolezal, A.G.**, O'Neal, M.E. and Toth, A.L. Queen of the prairie: Can honey bee queen fecundity be rescued by prairie in a cultivated landscape? . ESA, North Central Branch Meeting, Madison, WI. 2018

8 Zhang, G., **Dolezal, A.G.**, Hendriksma, H.P., Toth, A.L. and O'Neal, M.E. Do honey bees Apis mellifera [Hymenoptera: Apidae]. forage in prairies? . ESA, North Central Branch Meeting, Madison, WI. 2018

7 O'Neal, M.E., Toth, A.L., Hodgson, E.W., Hendriksma, H.P., St. Clair, A.L., Zhang, G., and **Dolezal, A.G.**, Can we grow soybeans and protect pollinators while managing invasive pests? A: maybe. . ESA, North Central Branch Meeting, Madison, WI. 2018

6 O'Neal, M.O., **Dolezal, A.G.**, Implementing best practices for conserving pollinators in soybeans: what will it help? . ESA, Southeastern Branch Meeting, Orlando, FL 2018

5 St. Clair, A.L., **Dolezal, A.G.**, Zhang, G., Kate Hunter, Hsieh, E., Toth, A.L., O'Neal, M.E. . Combining soybean and prairie to mitigate declining honey bee health in Iowa. ESA, Southeastern Branch Meeting, Orlando, FL 2018

4 St. Clair, A.L., **Dolezal, A.G.**, Zhang, G., Hsieh, E.1, O'Neal, M.E. and Toth, A.L. . Can providing diverse fall habitat for honey bees rescue colonies from pre-overwintering health declines in Iowa? ESA Annual Meeting, Denver, CO 2017

3 Hendriksma, H.P., St. Clair, A.L., Zhang, G., **Dolezal, A.G.**, Hodgson, E.W., O'Neal, M.E. and Toth, A.L. . A prairie hive companion: Can prairies help honey bee colonies thrive in intensively cultivated landscapes? ESA Annual Meeting, Denver, CO 2017

2 Geffre, A. C., Bonning, B.C., **Dolezal, A.G.** and Toth, A.L. . Infiltrating the hive mind: Immune and viral effects in honey bees *Apis mellifera*. ESA Annual Meeting, Denver, CO 2017

1 St. Clair, A.L., **Dolezal, A.G.**, Zhang, G., Hsieh, E., O'Neal, M.E. and Toth, A.L. . Does on-farm diversity affect bee health and communities in highly cultivated landscapes? Entomological Society of America (ESA) Annual Meeting, Denver, CO 2017

Pre-UIUC appointment

15 International Congress of Entomology/Entomological Society of America, Orlando, FL. "Effects of larval nutritional stress on honey bee disease susceptibility" 2016

14 International Conference in Pollinator Biology, Health and Policy, State College, PA. *Poster:* "Wild bees commonly harbor, but are not affected by honey bee viruses" 2016

13 Entomological Society of America National Meeting, Minneapolis, MN. "Diversity of pollen diet and viral infection affect honey bee survival and physiology in honey bees" 2015

12	Symposium on Biodiversity Conservation for Food Security and Rural Development, Kunming, Yunnan Province, China. "Interaction of pollen diet and other stressors on honey bee health"	2014
11	Entomological Society of America National Meeting, Austin, TX. "Incidence of honey bee viruses in Iowa's native bees from different landscapes"	2013
10	International Union for the Study of Social Insects Meeting, North American Section, Greensboro, NC. "Oocyte number is linked to behavior, not age, in *Pogonomyrmex californicus*"	2012
9	Gordon Research Conference on Genes and Behavior, Ventura, CA (*poster and selected student talk).* "Reproductive physiology and division of labor in *Pogonomyrmex californicus* workers"	2010
8	Frontiers in Life Sciences Conference: Social Biomimicry, Tempe, AZ *(poster).* "Reproductive physiology and division of labor in *Pogonomyrmex californicus* workers"	2010
7	Gordon Research Conference on Ecological and Evolutionary Functional Genomics, Tilton, NH *(poster).* "Reproductive physiology and division of labor in the California harvester ant, *Pogonomyrmex californicus*"	2009
6	NSF Workshop: Intraspecific variation and social systems, Santiago, Chile. "Reproductive physiology and division of labor in the California harvester ant, *Pogonomyrmex californicus*"	2009
5	International Union for the Study of Social Insects Meeting, North American Section, Arecibo, Puerto Rico. "Endocrinological factors and division of labor in *Pogonomyrmex californicus* founding"	2008
4	Graduates in Earth, Life and Social Sciences Symposium, Tempe, AZ. "Endocrine correlates of division of labor within pleometrotic associations of *Pogonomyrmex californicus* queens"	2008
3	Entomological Society of America National Meeting, San Diego, CA. "Endocrine correlates of division of labor within pleometrotic associations of *Pogonomyrmex californicus* queens"	2007
2	Entomological Society of America National Meeting, Indianapolis, IN. "Understanding the link between physiological and behavioral changes in obligately foraging *Pogonomyrmex californicus* queens"	2006
1	Undergraduate Distinction Research Symposium, University of Illinois Urbana-Champaign. "Sexual Selection in the Florida Harvester Ant, *Pogonomyrmex badius"*	2006

Teaching

Formal Courses

Instructor, Genes and Behavior, IB 432, UIUC — Spring 2019-2021

*Full redesign of course from previous instructor

Enrollment: ~45 (2019,2020), 80 (2021)

Instructor, Physiology, IB 202, UIUC — Spring 2018-2021

Enrollment: ~150

Instructor, Bee Biology, Management, and Beekeeping, ENT 358X, Iowa State U. — Fall 2015

*New experimental course, fully designed by Dolezal

Enrollment: ~25

Instructor, Topics in Insect Physiology, EEB 590, Iowa State U. Spring 2015
Instructor, Undergraduate Seminar, BIO 495, Iowa State U. Spring 2015

Other Teaching Activities

Guest Lecturer
Multiple courses, including Insect Ecology, Pollinator Biology, Animal Behavior (Iowa State U.) and Endocrinology (Colgate U)

Teaching Assistant, Arizona State University
Course curriculum design committee, Biology 181/182 Spring 2012
Multiple courses, including Animal Behavior, Microbiology, Animal Physiology, and Introductory Biology for non-Majors 2006-2012

Student Mentoring

Ph.D. advisees:

3 Tristan Barley (SU2021-present)
2 Edward Hsieh (FA2020-present)
1 Jacob Torres, Entomology, FA2018-FA2020. GAANN Fellow (left program)

Master's advisees:

3 Benjamin Chiavini (SU2021-present)
2 Lincoln Taylor (FA2020-present)
1 Edward Hsieh (FA2017-SP2020). Successful thesis: Ameliorative effects of phytochemical ingestion on viral infection in honey bees. Currently PhD student at UIUC

Graduate student research committees:

12 Annaliese Wargin (Entomology)
11 Wen-Yen Wu (Entomology)
10 Patrick Wilson (Evolution, Ecology, and Behavior)
9 Luke Hearon (Entomology)
8 Elyse McCormick (Biological Sciences, Illinois State University)
7 Daniel Bush (Entomology)
6 Charles Dean (Entomology)
5 S. Maggie Murphree (Entomology)
4 Michael Rivera (Program in Ecology, Evolution, and Conservation)
3 Lauren Lynch, (Natural Resources and Environmental Science)
2 Jonathan Tetlie (Entomology)
1 Daniel Pearlstein (Entomology)

Undergraduate research mentoring:

9 Brittney Bailey (SU2021-present; Parkland College REU student through GEMS Institute)
8 Madeleine Shapiro (SP2021-present)
7 Bella Keys (FA2020-present)

6 Hannah Salzburg (FA2020-present)
5 Bridget Dwyer (FA2020-present)
4 Sofia Anderson (FA2020-present)
3 Vincent Prayugo, FA2018-SP2021 (MCB 490; Distinction Thesis, awarded High Distinction in Research from the School of Molecular and Cellular Biology, "Pesticide-virus interactions in honey bees: Insights from a novel class of insecticide (butenolide)"
2 Lincoln Taylor, Summer 2019-SP2020 (IB490) Distinction Thesis, awarded Highest Distinction, School of Integrative Biology "Israeli Acute Paralysis Virus Modulates Nursing Behavior in Honey Bees"
1 Celeste Thompson, Summer-FA2018

Outreach and Extension

Outreach and Extension Newsletters or Articles

Written Articles for the public:

5 *Varroa and honey bee viruses – current trends and status.* **Dolezal, A. G.** 2021. American Bee Journal. 161:3, 265-267 (national outlet, readership ~15,000).
4 *The stinging truth about murder hornets Entomologist discusses the threats posed by a new insect.* Northwest Q&A for UIUC website: https://las.illinois.edu/news/2020-05-12/stinging-truth-about-murder-hornets. 2020
3 *Are murder hornets here? Not likely in Illinois*. **Dolezal, A. G.,** UIUC Extension, https://extension.illinois.edu/global/resources-food-producers. June 2020
2 *University of Illinois Bee Research: Varroa IPM*. Sankey, A. L., **Dolezal, A. G.** Bee Culture Magazine (national outlet, readership, 19,000 households). Apr. 2020
1 Ongoing bimonthly article in Illinois State Beekeepers Association newsletter (2019-present), articles digest and explain scientific research with goal of improving adult readership understanding of basic science and concepts, like evolution, genetics, etc., within context of group's interest. Readership ~1500 households
   i. *Getting a bee's eye view of your landscape.* Torres, J., **Dolezal, A. G.,** Jan. 2019
   ii. *Not blood suckers but….fat suckers?* Hsieh, E., **Dolezal, A. G.,** Mar**.** 2019
   iii. *Bee conservation genetics.* Torres, J., **Dolezal, A. G.,** July 2019
   iv. *Honey bees use royal jelly to share disease information with nestmates.* Harwood, G., **Dolezal, A. G.,** Sept. 2019
   v. *We 'mite' not know we're losing until its too late.* Sankey, A. L., **Dolezal, A. G.,** Nov. 2019
   vi. *Do managed bees negatively affect wild bees? A Hazy Line.* Hsieh, E., **Dolezal, A. G.** Jan. 2020
   vii. *How scientists are genetically modifying bacteria to fight honey bee diseases.* Taylor, L., **Dolezal, A. G.** Mar. 2020
   viii. *Murder hornets bring attention to honey bees, but for the wrong reasons.* Suresh, S., **Dolezal, A.G.** May 2020
   ix. *Varroa and honey bee viruses – current trends and status Part 1*, **Dolezal, A. G.** Nov. 2020
   x. *Varroa and honey bee viruses – current trends and status Part 2*, **Dolezal, A. G.** Jan. 2021
   xi. *Dealing with Life in a VERY Close Family,* Taylor, L., **Dolezal, A. G.** April 2021

News interviews or research highlights about pollinator health:

23	Interview article, *Stinging truth about murder hornets*. https://las.illinois.edu/news/2020-05-12/stinging-truth-about-murder-hornets 2020	2021
22	Interview for Wired.com article, *Why some ecologists worry about rooftop honey bee programs*, https://www.wired.com/story/why-some-ecologists-worry-about-rooftop-honey-bee-programs/	2020
21	Interviewed for Grist.com article, *An overlooked threat to the honey bee: Air pollution* https://grist.org/food/an-overlooked-threat-to-the-honey-bee-air-pollution/	2020
20	Interview on radio show Top of the Mind with Julie Rose (BYU Radio) http://www.byuradio.org/episode/c7f78528-4cf5-46cd-942a-7effafe0941a/top-of-mind-with-julie-rose-hospitals-struggling-saving-iapari-murder-hornets?playhead=4020&autoplay=true	2020
19	Interview with Deutsche Welle about COVID impacts on beekeeping industry; https://www.dw.com/en/bees-coronavirus-lockdowns-pollination/a-53500622	2020
18	Study highlight in Nature Reviews Genetics: https://rdcu.be/b38Gm	2020
17	Study highlighted in the *In this Issue* section of the Proceedings of the National Academy of Sciences: https://www.pnas.org/content/117/19/10099	2020
16	Interview with FarmWeek (Kay Shipman) about Asian giant hornets and bee health.	2020
15	Interview with CNN (via email) about Asian giant hornet 'invasion.'	2020
14	Interview with WILL NPR Radio about Asian giant hornet 'invasion.'	2020
13	*Viral Battle In The Honey Bee Hive.* Interview for Science Friday on National Public Radio, with Charles Bergquist https://www.sciencefriday.com/segments/honeybee-virus/.	2020
12	*Honey Bee Virus Tricks Hive Guards Into Admitting Sick Intruders*. Smithsonian Magazine. https://www.smithsonianmag.com/smart-news/honey-bee-virus-tricks-guards-admitting-sick-intruders-180974781/.	2020
11	*Virus-Infected Bees Practice Social Distancing*, Scientific American Podcast: 60 Second Science, https://www.scientificamerican.com/podcast/episode/virus-infected-bees-practice-social-distancing/.	2020
10	*Deadly Virus Helps Infected Bees Get Past The Guards Of Healthy Hives.* IFL Science, https://www.iflscience.com/plants-and-animals/deadly-virus-helps-infected-bees-get-past-the-guards-of-healthy-hives/.	2020
9	Deadly Pathogen Alters Honey Bee Behavior to Gain Access to Foreign Hives, Researchers Find. Ecowatch, https://www.ecowatch.com/honey-bee-behavior-virus-pathogen-2645877600.html.	2020
8	*Deadly virus turns honey bees into Trojan horses.* Science, by Erik Stokstad. (https://www.sciencemag.org/news/2020/04/deadly-virus-turns-honey-bees-trojan-horses).	2020
7	*Midwestern corn and soy landscapes can be good for bees when native prairie habitat is included*. In *Notes from the Lab* in American Bee Journal.	2020
6	*Iowa Study Offers New Insights on Honey Bee Health in Ag Landscapes* KIWA Radio, (https://kiwaradio.com/local-news/iowa-study offers-new-insights-on-honey-bee-health-in-ag-landscapes/).	2019
5	*Soybeans could be a link to boost honey bee life.* Soybean Research & Information Network (https://soybeanresearchinfo.com/research-highlight/soybeans-could-be-a-link-to-boost-honey-bee-life/).	2019

4	*How conventional soy farming starves honey bees.* The Counter (formerly New Food Economy), (https://thecounter.org/industrial-soy-production-starves-honey-bees-iowa-state-university-research/).	2019
3	*Bienen in der Agrarwüste: Die fetten und die mageren Zeiten Forschung aktuel.* Deutschlandfunk (German public radio), dubbed in German. (https://us.ivoox.com/es/bienen-in-der-agrarwuste-die-fetten-und-die-audios-mp3_rf_44750952_1.html).	2019
2	*Can Pollinator-Friendly Solar Energy Work for Bees and Farms?* FoodPrint (https://foodprint.org/blog/can-pollinator-friendly-solar-energy-work-for-bees-and-farms/).	2019
1	*Hive Mind: Grad Student Aims To Save Bees With Data*. National Public Radio (online and radio; Interview by lab member Torres) **(**https://www.nprillinois.org/post/hive-mind-grad-student-aims-save-bees-data#stream/0).	2019

Extension Presentations

Selected Outreach and Extension Presentations

29	*Honey bee virus causes context-dependent changes in host social behavior*. Unione Nazionale Associazioni Apicoltori Italiani (Italian National Beekeeping Association), hosted by Apicoltori Campini Associati (Campani Association of Beekeepers). Invited presentation to international beekeeping organization, attendance ~100.	2021
28	*Hive management working group*. Honey bee health coalition. Webinar presentation on honey bee virus effects to stakeholder/researcher audience.	2020
27	*Dolezal lab virtual tour*. Illinois State Beekeeping Association Summer meeting (COVID online).	2020
26	Illinois Regenerative Agriculture, IDEA Farm Network, Webinar, "Feast and famine in the green desert: Studying honey bee declines in an intensively farmed agroecosystem"	2020
25	Apiary Inspectors of America annual meeting (nationwide professional organization of all apiary inspectors), "Cooperating with state apiary inspection programs to track pest incidence and predict success in honey bee colonies"	2020
24	Illinois State beekeepers Association, Springfield, IL "Understanding and reducing mite pressure across Illinois and the Midwest"	2019
23	Illinois Queen Initiative Annual Meeting, Bloomington, IL "Response of Queens and egg laying (among other things) to environmental factors"	2019
22	Energy Resources Center, http://erc.uic.edu/ webinar for several hundred nationwide utilities organizers and similar about the IL Pollinator standard. "Pollinator-Friendly Solar: Setting State Standards" . One of three presenters.	2018
21	Central Eastern Illinois Beekeeping Association, Urbana, IL. "Illinois mite monitoring and state of honey bee health"	2018
20	Illinois State beekeepers Association, Edwardsville, IL "Illinois mite and hive monitoring project"	2018
19	UIUC Short course – Bees and Beekeeping, Urbana, IL. Hands-on instructor in bee biology to 50 participants.	2018

18	Illinois State Beekeepers Association, Springfield, IL "New Bee Research at UIUC"	2017
17	Illinois Certified Crop Advisers Association, Ag-Masters, "Combining Crop Production and Conservation for Improved Bee Health". Presentation to certified crop advisors for continuing education	2017
16	Girl Scouts of America, Altoona, IA. "Bees in agriculture and conservation". Outreach/ mentoring event to help girl scouts produce bee conservation project	2016
15	Iowa Honey Producers Association yearly meeting, Cedar Rapids, IA. "Effects of pollen nutrition, viral stress, and landscape use on honey bees", attendance ~200	2015
14	Field Day for Practical Farmers of Iowa and Iowa Fruit and Vegetable Growers Association, ISU Horticulture Station, Ames, IA. "Honey Bee Health and Research". Field day presentation to two professional associations consisting of farmers and vegetable growers interested in innovative farming approaches, attendance ~150	2015
13	Pollinator Fest, "Honey bee biology", Reiman Gardens, Ames, IA. Public event highlighting pollinator biology; my presentation used hands on materials, including an observation hive, to explain honey bee biology and pollination importance. Attendance several hundred	2015
12	Field Day for Iowa State University Agricultural Recruitment, ISU Horticulture Station, Ames, IA. "Honey Bee Health Research at ISU". Field day event for FFA students from 5 local high schools, intended to recruit students to College of Agriculture. Attendance ~80	2014
11	Iowa Back-to-Basics Bee Club, Oskaloosa, IA. "Honey Bee Viral Infection and Landscape". Invited regional beekeeping club presentation on habitat loss and virus infection of honey bees. Attendance ~50	2014
10	Jefferson Garden Club, Jefferson, IA. "Honey bee and native bee pollination and health". Invited regional gardening club presentation on bee pollinators. Attendance ~40	2014
9	Field Day for Iowa Master Gardeners, ISU Horticulture Station, Ames, IA. "Honey Bee Health Research at ISU". Field day event for state Master Gardeners. Attendance ~100	2014
8	Iowa Honey Producers Association yearly meeting, Marshalltown, IA. "Virus dynamics in our hives, and how we can test virus effects in our bees". Invited presentation to state beekeeping association meeting. Attendance ~200	2013
7	Portal to the Public Presentations, Science Center of Iowa, Des Moines, IA. "You are what you eat – how honey bees develop". Table and oral presentation to public at Science Center on all things honey bee, with a focus on queen/worker development. Repeated multiple times, Attendance 30-75.	2013-2015
6	Central Iowa Beekeeping Association, Des Moines, IA. "Virus detection in Iowa honey bee hives". Invited presentation to regional beekeeping club. Attendance ~25	2013
5	Iowa Fruit and Vegetable Growers Association Meeting, Ankeny, IA. "Interactions Between Honey Bee Nutritional Stress and Viruses: Implications for Bee Health and Colony Collapse". Invited presentation to state fruit and vegetable growers' professional association annual meeting. Attendance ~30	2013
4	Center for Honeybee Research, Asheville, NC. "What turns bees on to sociality?". Presentation to natural beekeeping organization on physiological regulation of social behavior in honey bees. Attendance ~300	2011
3	Audubon Society of Arizona Migration Celebration, Phoenix, AZ. "Insect Pollinators". Public presentation on bee and other insect pollinators. Attendance ~40.	2011

2	Summer Program for Early Literacy and Language (SPELL), Tempe, AZ. "Ants and bees". Children's presentation on ants, bees, and other insects. Attendance ~30.	2010
1	Social Insect Science Expo, Phoenix, AZ. "Harvester Ant Research". Public exposition table on social insect biology and research. Attendance ~ 200	2010

Other Public Engagement Projects

Consultations with Illinois Dept. of Agriculture Bees and Apiaries program to advise on reports of bee pests and other stressors

Developed the "Illinois Pollinator Friendly Solar Scorecard" for use by solar developers to mandate minimum requirements for pollinator habitat in 'pollinator friendly' solar arrays.

Advised on language for Illinois State Bill SB3215 "Solar Site Pollinator Friendly", a bill that legally defines pollinator-friendly solar implementations as described in the "Solar Scorecard". Bill passe and signed 2018.

Advised on Illinois Monarch Project as part of the Science Committee,

Communicate and discuss these policies with numerous stakeholders include Illinois Farm Bureau, agricultural groups, and utility companies. This has included one-on-one and groups calls with stakeholders as well as nationwide webinars.

Service

Society Membership and Service

International Union for the Study of Social Insects
2018-present – Member, nominations committee (elected)
Entomological Society of America
2014 – Co-organizer of symposium at national meeting
2014 – Co-organizer of symposium at North Central Branch meeting
2013 – Judge for student poster competition

Review or Oversight Panels: Genome Canada review oversight committee member (2020-present)

Ad hoc Peer Reviews for State and Federal Funding Agencies: USDA NIFA Exploratory Research Program, NSF Division of Environmental Biology, US-Israel Agricultural Research and Development Fund, US-Israel Binational Science Foundation, Research Foundation of Flanders, USDA Small Business Innovation Research Grant, National Science Center Poland.

Editorial Board: PloS One (2018-present)
Guest Editor: PLoS Pathogens (2020-present)
Guest Editor for Special Issues: Current Opinion in Insect Science; MDPI Insects

Journal and Proposal Peer Reviewer (20+): *Apidologie, Agricultural Science Research Journal, Behavioral Ecology, Biotechnologia, Czech J. of Animal Science, J. Economic Entomology, Environmental Entomology, Insect Biochem. And Mol. Bio., Insectes Sociaux, Insects, J. Insect Mol. Bio., J. Insect Physiology, J. Invertebrate Pathology, Molecular Ecology, Naturwissenschaften, Physiology and Behavior, Plos ONE, Proceedings of the National Academy of Sciences, Proceedings of the Royal Society B., Insects, J. Urban Ecology, J. Visualized Experiments, Scientific Reports, J. Ecological Entomology, Nature Food, Science, J. Applied Ecology, GCB Bioenergy*

University Service

Co-director, Graduate Student Administration Committee, Department of Entomology	2020-present
Committee member , Graduate Fellowship Committee, School of Integrative Biology	2020-present
Committee member and diversity advocate, hiring committee**,** Dept. of Entomology Senior Research Specialist	2020
Committee member, hiring committee, Entomology faculty search	2020
Committee member, hiring committee**,** UIUC Bee Research Facility manager	2019
Committee chair, hiring committee**,** Dept. of Entomology Senior Research Specialist	2019
Member, Bee campus USA committee	2019-present
Committee member, hiring committee, School of Integrative Biology faculty search	2018
Advisory member, Student Sustainability Committee	2018-present
Faculty Sponsor, UIUC Beekeeping Club	2017-present