Dr. Elinor M. Lichtenberg

The University of Texas Department of Integrative Biology 2415 Speedway #C0930 Austin, TX 78712 elichten@utexas.edu, elichten@unt.edu Twitter: @DrEMLichtenberg

EDUCATION

- **Ph.D.** 2011 University of California, San Diego. Division of Biological Sciences *Eavesdropping, Foraging and Dominance in Keystone Neotropical Pollinators: Stingless Bees*, Advisor: James Nieh
- **B.S.** 2003 University of Maryland, College Park. Biology: Behavior, Evolution, Ecology, and Systematics, *Summa cum Laude*, Biology High Honors, French Concentration Honors Thesis: *Abdomen Bobbing in Stalk-eyed Flies*, Advisor: Gerald Wilkinson

APPOINTMENTS

- 2020- Assistant Professor, Department of Biological Sciences, University of North Texas
- 2017-2019 Research Fellow, Department of Integrative Biology, The University of Texas at Austin, Austin, TX. Advisor: Shalene Jha
- 2015-2017 Postdoctoral Research Associate, Department of Ecology and Evolutionary Biology, The University of Arizona, Tucson, AZ. Advisor: Judith Bronstein
- 2013-2015 Postdoctoral Research Associate, Department of Entomology, Washington State University, Pullman, WA. Advisor: David Crowder

GRANTS AND FELLOWSHIPS

2018	Prairie Biotic Research, Small Grant (\$1,500) "Diversity of beetle and fly
	pollinators at experimentally restored prairies." PI.
2017	American Association of University Women, American Postdoctoral Fellowship
	(Declined; \$30,000)
2013	WSU College of Agricultural, Human, and Natural Resource Sciences,
	internship grant (\$2,500). "Aphid pest management." Co-PI with David Crowder.
2010-2011	ARCS Foundation, Graduate Scholar Award (\$7,500). PI.
2009-2012	National Science Foundation, Doctoral Dissertation Improvement Grant
	(\$13,000). "DISSERTATION RESEARCH: Landscape-scale effects of
	competition and eavesdropping in stingless bees." Co-PI with James Nieh.
2009	Animal Behavior Society, Research Grant (\$1,000). "Context-dependent
	eavesdropping in stingless bees." PI.
2006-2009	National Science Foundation, Graduate Research Fellowship (\$125,645)
2006	Association of Women in Science San Diego Chapter, Scholarship Award
	(\$1,000). PI.
2005-2009	University of California, San Diego, Chancellor's Graduate Fellowship
	(\$20,000)
2001-2003	Howard Hughes Medical Institute, Undergraduate Research Fellowship
	(\$14,000)

AWARDS AND HONORS

2018	International Union for the Study of Social Insects (IUSSI)-North American
	Section, Travel Award
2018	University of Texas College of Natural Sciences, Rom Rhome International
	Professional Development Award
2017	Ecological Society of America Early Career Ecologist Section, Outstanding
	Publication Award Finalist
2016	National Science Foundation, early career investigator travel award,
	International Society for Behavioral Ecology 2016 conference
2012	IUSSI-North American Section , Travel Award
2012	IUSSI-North American Section, Conference Award
2010	IUSSI-North American Section, travel grant
2008	Entomological Society of America, President's Prize - First Place
2002	University of Maryland, Baltimore County, First Place, Biological Sciences
	Group 2 Poster Session, 5th Annual Undergraduate Research Symposium in the
	Chemical and Biological Sciences
2002	Animal Behavior Society, Genesis Award (Best Undergraduate Poster) -
	Honorable Mention
2002-present	Phi Beta Kappa
2002	Phi Beta Kappa Gamma of Maryland, Junior Award (Outstanding Junior
	Inductee)

PUBLICATIONS

- Koch, JB, Looney C, Hopkins B, Lichtenberg EM, Sheppard WS and Strange JP. Projected climate change wll reduce habitat suitability for bumble bees in the Pacific Northwest. In revision for *PLOS ONE*.
- 14) Lichtenberg EM, Irwin RE and Bronstein JB. 2018. Bee-flower interactions alter bees' motivations to cheat vs. cooperate in a pollination mutualism. *Ecology* 99: 1815-1824.
 Data: https://zenodo.org/record/1243208
- 13) Lichtenberg EM, Mendenhall CM and Brosi BJ. 2017. Stingless bee species' traits alter responses to deforestation. *Journal of Animal Ecology* 86: 1404-1416.
 Data: https://zenodo.org/record/843615
- 12) vanEngelsdorp D, Traynor KS, Andree M, Lichtenberg EM, Chen Y, Saegerman C and Cox-Foster DL. 2017. Colony collapse disorder (CCD) and bee age impact honey bee pathophysiology. *PLOS ONE* 12: e0179535.
- 11) Bronstein JB, Barker JL, Lichtenberg EM, Richardson LL and Irwin RE. 2017. The behavioral ecology of nectar robbing: why be tactic constant? *Current Opinion in Insect Science* 21: 14-18.
- 10) Lichtenberg EM, Kennedy CK, Kremen C, [60 additional authors] and Crowder DC. 2017. A global synthesis of the effects of diversified farming systems on arthropod diversity at field and landscape scales. *Global Change Biology* 23: 4946-4957.
 Data: https://zenodo.org/record/439109
- 9) Lichtenberg EM, Graff Zivin J, Hrncir M and Nieh JC. 2014. Eavesdropping selects for conspicuous signals. *Current Biology* 24: R598-R599.
- 8) Pettis JS, **Lichtenberg EM**, Andree M, Stitzinger J, Rose R and vanEngelsdorp D. 2013. Crop pollination exposes honey bees to pesticides which alter their susceptibility to the gut pathogen *Nosema ceranae*. *PLOS ONE* 8: e70182.

- Highly Cited Paper in Web of Science
- Used as a teaching model for how to structure a scientific paper by the World Health Organization's Hinari Access to Research for Health program. (http://slideplayer.com/slide/4121536/ slide 28; I principally wrote the PLOS ONE article.)
- 7) Pettis JS, Rose R, Lichtenberg EM, Chantawankul P, Buawangpong N, Somana W, Prachaval S and vanEngesldorp D. 2013. A rapid survey technique for *Tropilaelaps* mite detection. *Journal of Economic Entomology* 106: 1535-1544.
- 6) Lichtenberg EM and Brosi BJ. 2012. Expanded ranges of two stingless bee species: *Aparatriona isopterophila* and *Ptilotrigona occidentalis*. *Journal of the Kansas Entomological Society* 85: 374-377.
- 5) Lichtenberg EM, Hrncir M, Turatti IC and Nieh JC. 2011. Olfactory eavesdropping by two competing stingless bee species. *Behavioral Ecology and Sociobiology* 65: 763-774.
- Lichtenberg EM, Imperatriz-Fonseca VL and Nieh JC. 2010. Behavioral suites mediate group-level foraging dynamics in communities of tropical stingless bees. *Insectes Sociaux* 57: 105-113.
- 3) Lichtenberg EM, Hrncir M and Nieh JC. 2009. A scientific note: Foragers deposit attractive scent marks in a stingless bee that does not communicate food location. *Apidologie* 40: 1-2.
- 2) Lichtenberg EM and Hallager S. 2008. A description of commonly observed behaviors for the kori bustard (*Ardeotis kori*). *Journal of Ethology* 26: 17-34.
- 1) Hallager S and Lichtenberg EM. 2007. New display behavior in male kori bustard (*Ardeotis kori strunthiunculus*). *The Wilson Journal of Ornithology* 119: 750-755.

Manuscripts in preparation

- Lichtenberg EM, Irwin RE and Bronstein JB. Bumble bees are constant to nectar robbing behavior despite low switching costs. In preparation for *Animal Behaviour*.
- Lichtenberg EM, Richman SK, Irwin RE and Bronstein JB. Nectar robbing constancy is unaffected by nectar competition levels. In preparation for *Ecological Entomology*.
- Campbell AJ*, Lichtenberg EM*, Carvalheiro L, Cabral R, Coelho B, Freitas M, Giannini C, Maues MM, Menezes C, Olivera FF and Silva TF. Functional traits can inform tropical bee conservation but not ecosystem services. In preparation for *Proceedings of the Royal Society B*. *Joint first authors

Non-peer-reviewed-publications

Strange JP, Koch JB, Sheperd WS, Hopkins B, Long J, **Lichtenberg EM** and Looney C. 2014. Bumble bee community composition and population genetic diversity in the North Cascades and coast network: 2013 progress report. Seattle, WA: Pacific NW Cooperative Ecosystem Studies Unit.

INVITED TALKS

^UUndergraduate co-author

- Feb. 2019 Lichtenberg EM. "Insect biodiversity and foraging under habitat restoration." Department of Biological Sciences, University of North Texas (Denton, TX).
- Feb. 2019 Lichtenberg EM. "Insect biodiversity and foraging in dynamic landscapes." Department of Biological Sciences, Fordham University (Bronx, NY).
- Jan. 2019 Lichtenberg EM. "Improving ecological management through understanding plant-animal interactions." School of Biological Sciences, Queens University Belfast (Belfast, UK).

Nov. 2018	Lichtenberg EM , Crowder DW Milosavljević I, Jha S, Heiser J ^U . "Pollinator responses to habitat loss and sustainability-oriented farming practices."
	Entomological Society of America Annual Meeting (Vancouver, Canada).
June 2018	Lichtenberg EM . "My plans in research and teaching." School of Biological Sciences, University of Bristol (Bristol, UK).
May 2018	Lichtenberg EM. "Insect biodiversity and foraging in dynamic landscapes."
	Department of Ecology and Evolution, Université de Lausanne (Lausanne, Switzerland).
Mar. 2018	Lichtenberg EM . "Multifunctionality and insect foraging in dynamic landscapes." Department of Biology, Georgia Southern University (Statesboro, GA).
Aug. 2017	Lichtenberg EM, Kennedy CK, Crowder DW. "Can environmental heterogeneity support multiple ecosystem services in agricultural landscapes? A global perspective." Early career perspectives on Future Earth: ecology & civilization webinar.
Feb. 2017	Lichtenberg EM . "Multi-scale pollination dynamics in a changing world." Department of Biology, New Mexico State University (Las Cruces, NM).
Mar. 2016	Lichtenberg EM . "Bee foraging behavior and ecology in anthropogenic landscapes." Department of Ecology and Plant Pathology, Auburn University (Auburn, AL).
Feb. 2016	Lichtenberg EM . "Plant-pollinator interactions in a changing world." Department of Biology, Geology and Environmental Science, University of
Sep. 2015	Tennessee Chattanooga (Chattanooga, TN). Lichtenberg EM. "Eavesdropping, foraging and dominance in keystone Neotropical pollinators: stingless bees." Department of Entomology, The University of Arizona (Tucson, AZ).
Feb. 2015	 Lichtenberg EM. "Eavesdropping, foraging and habitat loss in keystone Neotropical pollinators, stingless bees." Department of Entomology, University of California, Riverside (Riverside, CA).
Feb. 2015	Lichtenberg EM. "Effects of community-level interactions on bee foraging." Department of Biological Sciences, Mississippi State University (Starkville, MS).
Nov. 2014	Lichtenberg EM , Kennedy C, Crowder D. "Effects of agricultural management and landscapes on the abundance and diversity of arthropods: a global analysis." Entomology 2014 (Portland, OR).
Dec. 2013	Lichtenberg EM . "Eavesdropping, foraging and dominance in keystone Neotropical pollinators: stingless bees." Department of Entomology, Washington State University (Pullman, WA).
Oct. 2013	Lichtenberg EM and Brosi BJ. "Stingless bee species' traits alter responses to deforestation." WSU School of Biological Sciences Ecolunch (Pullman, WA).
Sep. 2013	Lichtenberg EM . "Eavesdropping selects for conspicuous signals." Palouse Ecologists, Evolutionary Biologists and Systematists (Moscow, ID).
Aug. 2012	Lichtenberg EM , Nieh JC. "Heterospecific recruitment pheromones facilitate efficient foraging by keystone Neotropical pollinators." Ecological Society of America Annual Meeting (Portland, OR).
May 2012	Lichtenberg EM. "Eavesdropping, foraging and dominance in keystone Neotropical pollinators: stingless bees." Department of Entomology, National Museum of Natural History (Washington, D.C.).

- Feb. 2012 Lichtenberg EM. "Eavesdropping, foraging and dominance in keystone Neotropical pollinators: stingless bees." Biology Department, Georgetown University (Washington, D.C.).
- Jan. 2012 Lichtenberg EM. "Eavesdropping, foraging and dominance in keystone Neotropical pollinators: stingless bees." Bee Research Laboratory, Agricultural Research Service, US Department of Agriculture (Beltsville, MD).
- Nov. 2011 Lichtenberg EM. "Eavesdropping, foraging and dominance in keystone Neotropical pollinators: stingless bees." Department of Entomology, University of Maryland, College Park (College Park, MD).
- Feb. 2011 Lichtenberg EM. "Context-dependent eavesdropping by stingless bees." UCSD Division of Biological Sciences Recruitment (La Jolla, CA).
- Aug. 2010 Lichtenberg EM. "Eavesdropping, foraging and dominance in keystone Neotropical pollinators: stingless bees." Department of Biological Sciences, Aarhus University (Aarhus, Denmark).
- Aug. 2010 Lichtenberg EM. "Eavesdropping, foraging and dominance in keystone Neotropical pollinators: stingless bees." School of Biological and Environmental Sciences, University of Stirling (Stirling, Scotland).
- July 2010 Lichtenberg EM. "Dominance and context-dependent eavesdropping by stingless bees." IX Encontro sobre Abelhas: Genética e Biologia Evolutiva de Abelhas (Ribeirão Preto, Brazil).
- Feb. 2010 Lichtenberg EM. "Context-dependent eavesdropping by stingless bees." UCSD Division of Biological Sciences Recruitment (La Jolla, CA).
- July 2008 Lichtenberg EM. "Scent marking by stingless bees." VIII Encontro sobre Abelhas: Biodiversidade e Uso Sustentado de Abelhas (Ribeirão Preto, Brazil).

PRESENTATIONS

^UUndergraduate co-author

- Aug. 2019 Lichtenberg EM, Heiser J^U, Baum KA, Jha S. "Resource requirements at local and landscape scales underlie trade-offs for conserving diverse pollinators." Ecological Society of America Annual Meeting (Louisville, KY). Oral presentation.
 Jul. 2019 Lichtenberg EM, Gross BJ, Zilberman D, Kremen C, Lichtenberg E. "Managing
- pollination services: a model of substitution between wild pollinator habitat and honey bee hive rental." International Pollinator Conference (Davis, CA). Poster.
- Dec. 2018 Campbell AJ, Lichtenberg EM, Cabral RB, Carvalheiro LG, Coelho BTW, Freitas MAB, Oliveira FF de, Maués MM, Menezes C, Giannini TC. "Functional traits can inform tropical bee conservation but not ecosystem services." III Simpósio Brasileiro de Polinização (Botucato, Brazil). Oral presentation.
- Aug. 2018 Lichtenberg EM, Mendenhall CM, Brosi B. "Foraging traits drive outcomes of Neotropical stingless bee community disassembly under land use change." International Union for the Study of Social Insects Congress (Guarujá, Brazil). Oral presentation.
- Mar. 2018 Lichtenberg EM. "Alternative food handling tactics and exploitation of pollination mutualisms: bumble bee nectar robbing decisions." Brain, Behavior, and Evolution Seminar, University of Texas (Austin, TX). Oral presentation.
- Jan. 2018 Bronstein J, Barker JL, **Lichtenberg EM**, Richardson LL, Irwin RE. "The behavioral ecology of nectar-robbing: how alluring is 'the Temptation to Cheat'?"

	American Society of Naturalists Annual Meeting (Asilomar, CA). Oral presentation.
Aug. 2017	Lichtenberg EM , Irwin RE, Bronstein JL. "Exploitation of pollination mutualisms: Tactic constancy of nectar robbing." Ecological Society of America Annual Meeting (Portland, OR). Oral presentation
Aug. 2017	Bronstein JL, Lichtenberg EM , Irwin RE. "The ecology of cheating: why nectar- rob a flower more than once?" Ecological Society of America Annual Meeting (Portland, OR). Oral presentation
Sept. 2016	Lichtenberg EM , Irwin RE, Bronstein JL. "Context dependency of bumble bee nectar robbing." XXV International Congress of Entomology (Orlando, FL). Oral presentation.
Sept. 2016	Lichtenberg EM , Mendenhall CM, Brosi B. "Diet breadth impacts tropical eusocial bee species' sensitivity to forest lost." International Union for the Study of Social Insects-North America Section Colloquium (Orlando, FL). Oral presentation.
Aug. 2016	Lichtenberg EM , Irwin RE, Bronstein JL. "Impacts of alternative food handling tactics on bee foraging efficiencies." International Society for Behavioral Ecology Conference (Exeter, UK). Oral presentation.
Jul. 2015	Lichtenberg EM and Brosi BJ. "Stingless bee species' traits alter responses to deforestation." Graduate Seminar, Rocky Mountain Biological Lab (Gothic, CO). Oral presentation.
Aug. 2014	Lichtenberg EM , Nieh JC. "Eavesdropping selects for conspicuous signals." International Society for Behavioral Ecology Conference (New York, NY). Oral presentation.
Nov. 2013	Lichtenberg EM , Kennedy C and Crowder D. "Effects of farming practices on local and regional abundance, richness and evenness of arthropods." Entomological Society of America Annual Meeting (Austin, TX). Oral presentation.
Aug. 2013	Lichtenberg EM and Brosi BJ. "Stingless bee species' traits alter responses to deforestation." 2 nd International Conference on Pollinator Biology, Health and Policy (State College, PA). Oral presentation.
Jan. 2013	Lichtenberg EM , Pettis JS, Andree M, Stitzinger J, Rose R and vanEngelsdorp D. "Colony health implications of pollen and pesticide diversity in colonies rented for crop pollination." American Bee Research Conference (Hershey, PA). Oral presentation.
Oct. 2012	Lichtenberg EM . "Eavesdropping on heterospecific recruitment pheromones facilitates efficient foraging by stingless bees." International Union for the Study of Social Insects-North America Section Meeting (Greensboro, NC). Oral presentation.
Aug. 2011	Lichtenberg EM and Nieh JC. "Cost-effective eavesdropping between competing bee species: Empirical and theoretical support." Ecological Society of America Annual Meeting (Austin, TX). Oral presentation.
July 2011	Lichtenberg EM and Nieh JC. "Fight or flight? Conflict costs drive heterospecific eavesdropping by competing stingless bees." Behavior 2011 (Bloomington, IN). Oral presentation.

- Aug. 2010 Lichtenberg EM. "Context-dependent eavesdropping by a dominant stingless bee species." International Union for the Study of Social Insects Congress (Copenhagen, Denmark). Poster.
- Aug. 2009 Lichtenberg EM, Imperatriz-Fonseca VL and Nieh JC. "Group foraging is beneficial for stingless bees." Ecological Society of America Annual Meeting (Albuquerque, NM). Poster.
- June 2009 Lichtenberg EM and Nieh JC. "Risk-sensitive eavesdropping by stingless bees." Animal Behavior Society Annual Meeting (Pirenópolis, Brazil). Oral presentation.
- Nov. 2008 Lichtenberg EM and Nieh JC. "Olfactory eavesdropping mediates stingless bee foraging patterns." Entomological Society of America Annual Meeting (Reno, NV). Oral presentation.
- July 2008 Lichtenberg EM, Imperatriz-Fonseca VL and Nieh JC. "Group foraging is beneficial for stingless bees." VIII Encontro sobre Abelhas: Biodiversidade e Uso Sustentado de Abelhas (Ribeirão Preto, Brazil). Poster.
- Dec. 2007 Lichtenberg EM and Nieh JC. "Stingless bee competition: dominance, aggression and coexistence in a Brazilian meliponine community." Entomological Society of America Annual Meeting (San Diego, CA). Oral presentation.
- Mar. 2007 Lichtenberg EM and Nieh JC. "Rethinking stingless bee competition: dominance, aggression and coexistence in a Brazilian meliponine community." Southern California Animal Behavior Symposium (Santa Barbara, CA). Oral presentation.
- Mar. 2006 Lichtenberg EM and Hallager S. "Factors affecting breeding success in captive kori bustards (*Ardeotis kori*)." California Animal Behavior Symposium (San Diego, CA). Oral presentation.
- Oct. 2005 Lichtenberg EM and Hallager S. "Factors affecting breeding success in captive kori bustards (*Ardeotis kori*)." Section of Ecology, Behavior and Evolution retreat (San Diego, CA). Oral presentation.
- 2002-2003 Lichtenberg EM and Wilkinson JS. "Abdominal oscillations and status discrimination in stalk-eyed flies."
 - Undergraduate Research Day, College Park, MD, April 2003. Oral presentation.
 - 5th Undergraduate Research Symposium in the Chemical and Biological Sciences, Baltimore, MD, October 2002. Poster.
 - Animal Behavior Society Meetings, Bloomington, IN, July 2002. Poster.
 - Undergraduate Research Day, College Park, MD, April 2002. Poster.

RESEARCH POSITIONS

- 2011-2015 **Research Associate** (part time), Dennis vanEngelsdorp (Department of Entomology, University of Maryland, College Park) and Jeffery Pettis (Bee Research Lab, Agricultural Research Service, US Department of Agriculture, Beltsville, MD)
- 2011-2013 **Visiting Researcher**, Department of Biology, University of Maryland, College Park

2005-2006 Graduate Rotation Student

- Ronald Burton, Scripps Institute of Oceanography molecular techniques
- Russell Lande, University of California, San Diego game theory

Sep. 2004Kori Bustard Behavior Research Intern, Smithsonian National Zoological-Aug. 2005Society

- Jan. 2001 Undergraduate Researcher, Gerald Wilkinson's lab, University of Manual College Dark
- -May 2003 Maryland, College Park
- Summer 2000 Research Assistant, Gerald Borgia's lab, University of Maryland, College Park

TEACHING EXPERIENCE

- Fall 2017 Guest Lecturer, "Topics & Skills for Grad-students in Biology" (BIO389D),
- & 2018 University of Texas at Austin
- Fall 2015 Mentor, "Honors Introductory Biology" (MCB181), University of Arizona
- Spring 2014 **Primary Instructor**, "Insect Behavior" (ENTOM593), Department of Entomology, Washington State University
- Summer 2009 Lecturer, "English for Biologists" mini-course, Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto, Universidade de São Paulo
- Summer 2008 Lecturer, "Uma Introdução a Estatísica Análise Prática dos Dados" mini-course [Translated title: An Introduction to Statistics: Practical Data Analysis], Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto, Universidade de São Paulo
- Summer 2007 Lecturer, "Stingless bee competition and foraging" mini-course, Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto, Universidade de São Paulo
- 2007-2011 **Teaching Assistant**, Division of Biological Sciences, UCSD "Biodiversity," Spring 2011; "Animal Behavior and Communication," Winter 2011; "Introductory Ecology: Organisms and Habitats," Fall 2008; "Biometry," Fall 2007; "Animal Behavior & Communication," Spring 2007
- 2003-2004 **Peace Corps Volunteer Math Teacher**, 8th and 9th grades, Collège de Lafou, Guinea, West Africa

PROFESSIONAL TRAINING

- Oct. 2018 **Bystander training**, BeVocal, University of Texas, Austin, TX
- Oct. 2018 Modern R for Data Science, Locke Data, Austin, TX
- Oct. 2015 Scientific Computing Skills Workshop, University of Arizona, Tucson, AZ
- Feb. 2014 **Transformational Women's Leadership Symposium**, Washington State University, Pullman, WA
- Aug. 2012 Getting off the Ground with Individual-Based Modeling: A Primer for Instructors and Researchers, Ecological Society of America Annual Meeting workshop, Portland, OR
- 2009 The Bee Course, American Museum of Natural History, Portal, AZ
- Winter 2007 **Tropical Rainforest and Canopy Ecology**, Institute for Tropical Ecology and Conservation, Bocas del Toro, Panama

UNDERGRADUATES MENTORED

*Under-represented group, ⁺Female, ^GNow in or completed graduate school

- 2018 Jaclyn Heiser⁺ "Analysis of Pollinator and Plant Diversity and Abundance Across the Southern Plains Region"; Capstone Research Project
- 2017 Kathleen Dunleavy⁺ "*Bee behavior and foraging tactics while gathering nectar*"
- 2016 Karen Wang^{*,+} "*Does bee body size affect flower handling*?"; NSF REU Project
- 2014 Laura Rafferty⁺ Horticulture Intern

2014 Bryla Jones⁺ – "*Interactions between predators and bees on canola*"; WSU Funded Internship

2010-2012 Kyle Burks^G – "*Function and chemistry of bumble bee labial gland secretions*"
2006 Shawn Kessler – "*Pattern discrimination by stingless bees*"

Research assistants: Llewyn Blossfeld⁺, John Bosak, Kelsey Brennan⁺, Isabel Brofsky^{+,G}, Shannon Dang^{*,+}, Kayla Fillion^{*,+}, Emily Graber⁺, Bridget Harter⁺, Jaclyn Heiser⁺, Hayley Hunter-Zinck^{+,G}, Rhiana Jones^{*,+}, Michael Joseph, Angie Kemsley⁺, Shawn Kessler, Elizabeth Lopez^{*,+}, Hannah Niland⁺, Cody Phillips, Laura Rafferty⁺, Tín Rodriguez^{*}, Isaac Rubenstein^{*}, Kyle Simpson, Gavin Smetzler, Shelbie Spalding⁺, Michael Stemkovski, Katie Strain⁺, Savannah Troy⁺, Sam Wilhelm, Caity Winterbottom^{+,G}, Kate Wynne⁺

SCIENTIFIC MEMBERSHIPS

Animal Behavior Society Association for Women in Science Ecological Society of America Entomological Society of America International Union for the Study of Social Insects

SERVICE

Departmental/University

- 2016-2017 Chair, UA Postdoc Association Postdoc Guide Committee
- 2016-2017 Founder and Organizer, UA EEB Statistics and R Group
- 2016-2017 **Postdoctoral representative**, Department of Ecology and Evolutionary Biology, The University of Arizona
- 2008-2010 Admissions Committee Member, Division of Biological Sciences, UCSD
- 2007-2011 **Graduate student liaison**, Section of Ecology, Behavior and Evolution, Division of Biological Sciences, UCSD
- 2007-2008 Graduate Student Association Representative, UCSD

Workshops and Symposia

2016	Organizer, Recruiting Diversity Working Group, UA Women in Natural Sciences
2015	Organizer, Symposium, Annual Meeting of the Pacific Branch of the
	Entomological Society of America (Symposium Title: Celebrating Pollination
	Biology in Changing Landscapes)
2014	Organizer, Section Symposium, Entomology 2014 (Symposium Title:
	Entomology's Role in Sustaining Ecosystem Services in Agroecosystems)
2013, 2014	Instructor, CV workshop, Department of Entomology, Washington State
	University
2010	Organizer, English conversation practice group, Faculdade de Filosofia,
	Ciências e Letras de Ribeirão Preto, Universidade de São Paulo
2009-2011	Translator (French to English), Alliance Guinea

<u>Reviewing</u>

2018	Grant reviewer, UK Natural Resource Environmental Council Newton Fund
2017, 2018	Student Grant Reviewer, Animal Behavior Society
2010-2011	Scholarship Committee, Association for Women in Science San Diego Chapter

2006-present **Manuscript reviewer** for: Acta Zoológica Mexicana, Animal Behaviour, Annals of Botany, Apidologie, Behavioral Ecology and Sociobiology, Biological Control, Ecological Entomology, Ethology, Journal of Comparative Physiology A, Journal of Ecology, Journal of Economic Entomology, Journal of Pollination Ecology, Neotropical Entomology, PLOS ONE, Psyche, Revista Colombiana de Entomologia, Sociobiology

OUTREACH AND SCIENCE EDUCATION

2018-present	Founder and Moderator, "STEM diversity inclusion resources" Slack
-	workspace (https://stemdiversityresource.slack.com/)
2018	Volunteer, Jean Andrews Lecture and Outreach Fair, Austin, TX
2015, 2016	Volunteer, "Pollinator Paradise," Arizona Insect Festival, Tucson, AZ
2014-2015	Planning Committee Member and Presenter, Improving Your Farm with
	Insects: Attracting and Managing Beneficials and Pollinators, Moscow, ID
2011-2012	Organizer, All Things Bugs (prepared part of the Entomology section for the
	2012 USA Science and Engineering Festival in Washington, D.C.)
2009	Lab host, Young Black Scholars visit to UC San Diego
2006-2011	Judge, Association of Women in Science professional society awards,
	Greater San Diego Science & Engineering Fair
2006	Mentor, Expanding Your Horizons conference, San Diego, CA

SOCIAL MEDIA

Lichtenberg EM, Kessler S (research assistant). Jun. 2014. "Stingless bees fighting over a food source." YouTube video. https://www.youtube.com/watch?v=2315f1M3pvA.

• Used by instructors in undergraduate courses

Lichtenberg EM. Sep. 2013. "Tropilaelaps Mites, Part 2." Bee Informed Partnership blog. http://beeinformed.org/2013/09/tropilaelaps-mites-part-2/.

MEDIA COVERAGE

Lichtenberg EM. Jan. 2018. Interview and ongoing research discussed in the Sherman-Denison Herald Democrat: http://www.heralddemocrat.com/news/20180125/hagerman-holds-control-burn-for-wildlife-research.

Lichtenberg EM and colleagues. 2014. "Eavesdropping selects for conspicuous signals" covered by The Eastern Tribune, The Examiner, Entomology Today, Tech Times

Pettis JM, Lichtenberg EM and colleagues. 2013. "Crop pollination exposes honey bees to pesticides which alter their susceptibility to the gut pathogen *Nosema ceranae*" coverage included NBC, US News & World Report, Los Angeles Times, Ag Information Network, Mother Jones, University Herald, Business Week, Bloomberg News, French Tribune, TakePart (>30 outlets in total)