# CURRICULUM VITAE Dawn H. Gouge Ph.D. B.Sc.

## **Current Employer and Position**

## **Professor and Specialist**

**Public Health Pest Entomologist and Integrated Pest Management Specialist** University of Arizona, Department of Entomology.

Physical Location MAC Experiment Station, 37860 West Smith-Enke Road, Maricopa, AZ 85138. (520) 374-6223; Fax (520) 374-6394; Lab 104 (520) 374-6222 dhgouge@email.arizona.edu; <u>http://cals.arizona.edu/ento/faculty/gouge.htm</u>

Entomologist and Integrated Pest Management (IPM) specialist working on public health related pests, and IPM in the built environment. Translational research studies focus on pest ecology and reduced-hazard management of key mosquito vectors, and the common bed bug. Extension efforts include IPM implementation and outreach programs addressing a wide spectrum of health related pests in homes, public schools, and medical facilities. I support state and government agencies regarding emerging public health pest issues, pesticide related pollution prevention, and vector management. I provide technical support for industry members including pest management, environmental health, and public health professionals.

I serve as a Board member of the IPM Institute of North America. Co-direct the IPM for Sensitive Sites in the Built Environment - Western Region Work Group, and am an active member of the Arizona Arboviral Workgroup, and Western Region Bed Bug Working Group. I co-chair the National School IPM Steering Committee, and serve on the Advisory Board of the IPM Institute Green Shield Certification program.

I teach guest lectures on public health pest ecology and IPM, serve on graduate student committees, and host graduate and undergraduate student interns.

#### **Chronology of Education**

University of Bangor (Wales), United Kingdom
B.Sc. (Honors) Applied Biology, September 1986-Graduated June 1990
Undergraduate Project Title: Physiology of asexual sporulation in *Phytophthora palmivora*Advisors: Drs. Richard Shattock and Malcolm Cherrett
Major Fields: Crop Protection and Applied Zoology

University of Reading, Department of Agriculture, United Kingdom Ph.D. Entomology and Nematology, October 1990-Graduated July 1994 Thesis Title: Biological Control of Sciarid Flies (Diptera: Sciaridae) with Entomopathogenic Nematodes (Nematoda: Rhabditida), Including Reference to Other Diptera Advisor: Dr. Nigel G. M. Hague Major Fields: Applied Nematology and Entomology

#### **Chronology of Employment**

June 1989-August 1989, Research Assistant, Plant Physiology. Imperial Chemical Industries (ICI). Jealott's Hill Research Station, United Kingdom.

November 1990-December 1993, Teachers Assistant, Nematology. Reading University, United Kingdom.

October 1992-October 1993, Part-time Research Technician, Plant Pathology. Reading University, United Kingdom.

June 1994-December 1995, Seasonal Position, National Trust for Places of Historic Interest or Natural Beauty, United Kingdom.

March 1995-September 1998, Postdoctoral Researcher, Cotton Entomology. USDA – Agricultural Research Service, Western Cotton Research Laboratory, Arizona.

October 1998-March 2000, Assistant Professor and Extension Entomologist, Texas Agricultural Extension Service, Texas A & M University System.

March 2000-June 2007, Assistant Specialist and Assistant Professor, Urban Entomologist, Department of Entomology, University of Arizona. 10% Teaching, 30% Research, 60% Extension. July 2007-August 2010, Associate Specialist and Associate Professor, Urban Entomologist, Department of Entomology, University of Arizona. 10% Teaching, 30% Research, 60% Extension.

September 2010-June 2016, Associate Specialist and Associate Professor, Urban Entomologist, Department of Entomology, University of Arizona. 30% Research, 70% Extension.

July 2016- July 2018, Specialist and Professor, Public Health Entomologist, Department of Entomology, University of Arizona. 30% Research, 70% Extension.

August 2018-present, Specialist and Professor, Public Health Entomologist, Department of Entomology, University of Arizona. 20% Research, 70% Extension, 10% Service.

#### **Honors and Awards**

- 2001 Awarded to Gouge, D. H. U. S. Environmental Protection Agency, Region IX Award. http://www.pesp.org/2000/mccsc00.htm
- 2002 Awarded to Gouge, D. H. National Foundation for IPM Education Award.
- 2005 Awarded to all members participating in the national implementation program, U. S. Environmental Protection Agency, Children's Environmental Health Recognition Awards. <u>http://yosemite.epa.gov/ochp/ochpweb.nsf/content/2005\_CEH\_Awards.htm</u>
- 2005 Awarded to the Children's Environmental Health Coalition. Valley Forward, Environmental Excellence Award of Merit. <u>http://www.valleyforward.org/news-updates/news-release-eeawinner-05.php</u>
- 2006 Awarded to Gouge, D. H. U. S. Environmental Protection Agency, Region IX 2006 Environmental Achievement Award. <u>http://yosemite.epa.gov/opa/admpress.nsf/9e50770d29adb32685257018004d06fd/f1f7254</u> <u>ccd34aa9c852571540060c78e!OpenDocument</u>
- 2009 Awarded to Green Shield Certified committee members. 6<sup>th</sup> International IPM Symposium. International IPM Excellence Award. <u>http://www.ipmcenters.org/ipmsymposium09/AchievementAwards.cfm</u>

- 2009 Awarded to Gouge, D. H. Childcare and School IPM Recognition Awardees. This award was presented by the four regional school IPM working groups, and the IPM Institute of North America. <u>http://www.ipminstitute.org/school\_ipm\_2020/awardwinners.htm</u>
- 2009 Awarded to Arizona IPM Program Team (Arizona Pest Management Center). Award of Excellence - Honorable Mention by The Western Extension Directors' Association. <u>http://extension.oregonstate.edu/weda/secure/files/documents/orginfo/wedawardprogram</u> \_web1.pdf
- 2012 Awarded to University of Arizona –Arizona Pest Management Center, Arizona. The EPA Pesticide Environmental Stewardship Program Gold Tier Shining Star Award. <u>http://www.epa.gov/oppfead1/cb/csb\_page/updates/2012/pestwise-2012.html</u>
- 2015 Awarded to StopPests in Housing Program committee members. 8<sup>th</sup> International IPM Symposium. International IPM Excellence Award. <u>http://www.ipmcenters.org/ipmsymposium15/awards.html</u>
- 2018 Awarded to Gouge, D. H. 9<sup>th</sup> International IPM Symposium. Practitioner International IPM Award of Excellence. <u>https://ipmsymposium.org/2018/awards.html</u>

## Service/Outreach

## Local/State Outreach

- 1. 2000-present, medicocriminal support of law enforcement agents upon request.
- 2. 2015-2016, serve on Department of Agriculture, Division of Pest Management, licensing exam writing committee for the Industrial and Institutional license category.
- 3. 2015-present, Arizona Arboviral Workgroup.
- 4. 2018-present, Arizona Women in Pest Management.

## National/International Service/Outreach

Host visiting scientists: (e.g., Senior Scientist, Nuclear Institute for Food and Agriculture, Peshawar Pakistan), industry professionals (e.g., Intelligent Pest Management Inc.) and interns from other universities (e.g., Indiana University). Journal Reviewer for: Annals of Applied Nematology, BioControl, Biocontrol Science and Technology, Environmental Entomology, Florida Entomologist, Insect Sociaux, Insects, International Journal of Parasitology, Journal Helmintology, Journal of Economic Entomology, Journal of Nematology, Journal of the Kansas Entomological Society, Neurotoxicology, Parasitology, Phytoparasitica, Thai Journal of Agricultural Science.

Peer reviewer for federal scientists: USDA, Agricultural Research Service

Ad hoc peer reviewer for grant programs: Current Research Information System (CRIS), International Science and Technology Center proposals, U. S. Civilian Research & Development Foundation, NIH Small Business Innovation Research (SBIR), Regional IPM Center Technical Committee, 2008, Regional IPM Center Relevancy Committee, University of California Division of Agriculture and Natural Resources (ANR) Competitive Grants Program.

Editorial Board member: 2011-present, subject editor Entomological Society of America Journal of Integrated Pest Management <u>https://academic.oup.com/jipm/pages/editorial\_board</u>

#### Working Groups and Information Networks

- 1. 2004-2016, Western Plant Diagnostic Network Member https://www.wpdn.org/
- 2006-present, IPM for Sensitive Sites in the Built Environment Western Region Work Group <u>http://ag.arizona.edu/apmc/westernschoolIPM.html</u>
- 2012-present, Subject Matter Expert for Urban IPM Community of Practice for eXtension. <u>http://www.extension.org/pages/22018/urban-integrated-pest-management-</u> <u>membership#.VSv-a11FCEA</u>
- 2015-present, Western Region Bed Bug. Working Group Member <u>http://westernbedbugipm.ucanr.edu/</u>
- 2016-present, WERA1017: Coordination of Integrated Pest Management Research and Extension/Educational Programs for the Western States and Pacific Basin Territories. Work Group Member <u>http://www.nimss.org/projects/view/mrp/outline/13896</u>
- 2016-present, WERA1017 Western Pesticide Risk Reduction Project. Workgroup member. Goal: To provide participants with the knowledge and skills needed to integrate

pesticide hazard and risk communication within IPM extension education programing. <u>https://agsci.oregonstate.edu/integrated-plant-protection-center/western-pesticide-risk-</u> <u>reduction-project</u>

National/Regional Committee Service

- 2006-2009, Awards Committee Member, 6<sup>th</sup> International IPM Symposium 2009 <u>http://www.ipmcenters.org/ipmsymposium09/</u>
- 2006-2015, Western Region IPM Center Advisory Committee <u>http://www.wrpmc.ucdavis.edu/aboutthiscenter.html</u>
- 2008-present, The National School IPM steering committee is composed of Integrated Pest Management professionals, scientists, researchers and experts from land grant university IPM programs, government, private industry, and the nonprofit world, and meets monthly via conference call. <u>https://ipminstitute.org/projects/school-ipm-</u> <u>2020/steering-committee/</u>
- 2009-2012, Steering Committee Member and Program Committee Co-chair, 7<sup>th</sup> International IPM Symposium 2012 <u>http://www.ipmcenters.org/ipmsymposium12/</u>
- 2010-2014, Orkin Gold Medal IPM Partner Awards Committee Member (includes U. S. and Canadian Food and Median Facility Auditing and Certification)
- 2012-2017 U. S. Environmental Protection Agency, Pesticide Program Dialog Committee, Community Integrated Pest Management Subcommittee, and Core Federal Advisory Committee Act (FACA) Member <u>http://www.epa.gov/pesticides/ppdc/ipm/index.html</u>
- 2012-2015, Steering Committee Member, Silent Auction Committee Member, and Program Committee Co-chair, 8th International IPM Symposium 2015 <u>http://www.ipmcenters.org/ipmsymposium15/committees.html</u>
- 2015-2016, Entomological Society of America (ESA), Associate Certified Entomologist (ACE) certification program committee
- 2015-2018, Steering Committee Member, Poster Committee Co-chair, 9th International IPM Symposium 2018 <u>https://ipmsymposium.org/2018/</u>
- 10. 2017-present U. S. Environmental Protection Agency, Pesticide Program Dialog

Committee, Public Health Subcommittee Member <u>https://www.epa.gov/pesticide-</u> advisory-committees-and-regulatory-partners/pesticide-program-dialogue-committeepublic

11. 2018-present Steering Committee Member, 10th International IPM Symposium 2021

# Departmental Committees

- 2000-present (as necessary), Department of Entomology, Annual Performance Report Review Committee Member
- 2004-present, Arizona Pest Management Center, IPM Coordinating Committee Member <u>http://cals.arizona.edu/apmc/about\_us.html#organization</u>
- 3. 2014-present, Community IPM Leadership Team Chair
- 4. 2015-2018, Pesticide Safety Education Leadership Team Member
- 5. 2016-present, Maricopa Agricultural Center, CORE Team Member
- 6. 2016-present, Department of Entomology Diversity and Inclusion Chair
- 7. 2016-present, MAC Faculty Council
- 8. 2017-present, Public Health Leadership Team Chair

# University and College Committees

- 2010-present, University of Arizona, Division of Agriculture, Life and Veterinary Sciences and Cooperative Extension Diversity and Inclusiveness Council Member <u>https://cals.arizona.edu/about/cals-d%26i/our-council</u>
- 2. 2016-2017, University of Arizona, Diversity Task Force Committee Member
- 3. 2018-present, Pesticide Safety Education Program hiring committee.

## Other Committees

- 2007-present, Green Shield Advisory Committee, IPM Institute of North America Green Shield Certification Program
- 2. 2010-present, Board member IPM Institute of North America, Inc. <u>http://www.ipminstitute.org/about.htm#IPMInstituteBoardofDirectors</u>

 2018-present, National Pest Management Association, QualityPro Public Health Task Force

## Association Memberships

- 1. 1997-present, Entomological Society of America (ESA) Member http://www.entsoc.org/
- 2000-present, National Pest Management Association (NPMA) Member <u>https://npmapestworld.org/index.cfm</u>
- 3. 2004-2012, International Urban IPM Association Member

## **Publications/Creative Activity**

## Scholarly Books and Monographs

 Nair S., D. H. Gouge, M. Rust, S. Li, U.K. Schuch, A. J. Fournier, D. M. Kopec, K. Umeda, P. B. Baker, L. M. Brown, N. Duggal. 2015. Handbook on pests of community environments in the desert southwest United States. University of Arizona College of Agriculture and Life Sciences Cooperative Extension, Arizona Pest Management Center. pp. 278. <u>http://cals.arizona.edu/apmc/Handbook.html</u> <u>Textbook</u>

## Chapters in Scholarly Books and Monographs (peer reviewed)

- Young, S. Y., D. C. Steinkraus, and D. H. Gouge. 2000. Microbial Insecticide Application: Cotton. *In* L.A. Lacey and H. K. Kaya, eds., Field Manual of Techniques in Invertebrate Pathology. Kluwer Academic Publishers. pp. 467-495. <u>Textbook</u>
- Shapiro, D., D. H. Gouge, and A. Koppenhöfer. 2002. Factors Affecting Commercial Success: Case Studies in Cotton, Turf and Citrus. *In* R. Gaugler, ed. Entomopathogenic Nematology. CABI Publishing. pp. 333-355. <u>Textbook</u>
- Gouge, D. H. 2005. Applications for Social Insects. *In* P. S. Grewal, R-U. Ehlers, and D. I. Shapiro-Ilan, eds. Nematodes as Biocontrol Agents. CABI Publishing. pp. 317-329. <u>Textbook</u>
- Steinkraus, D. C., S. Y. Young, D. H. Gouge and J. E. Leland. 2007. Microbial Insecticide Application: Cotton. *In* L.A. Lacey and H. K. Kaya, eds., Field Manual of

Techniques in Invertebrate Pathology. Kluwer Academic Publishers. pp. 427-455. <u>Textbook</u>

#### Refereed Journal Articles \*publications as a graduate student

- \*Gouge, D. H. and N. G. M. Hague. 1992. Biological control of sciarids in ornamentals using the entomopathogenic nematode *Steinernema feltiae*. Bulletin International Organization for Biological and Integrated Control of Noxious Animals and Plants / Section Régionale Ouest Paléarctique. 16: 86-91.
- \*Gouge, D. H. and N. G. M. Hague. 1993. Effects of *Steinernema feltiae* against sciarids infesting conifers in a propagation house. Annals of Applied Biology (Tests of Agrochemicals and Cultivars). 122: 184-185.
- \*Gouge, D. H. and N. G. M. Hague. 1994. Development of Steinernema feltiae (Steinernematidae: Nematoda) in Bradysia paupera (Sciaridae: Diptera). Bulletin International Organization for Biological and Integrated Control of Noxious Animals and Plants / West Palaearctic Regional Section. 17: 132-135.
- \*Gouge, D. H. and N. G. M. Hague. 1994. The development of *Steinernema feltiae* (Nematoda: Steinernematidae) in the sciarid fly *Bradysia paupera* (Diptera: Sciaridae). Annals of Applied Biology. 126: 395-401.
- \*Gouge, D. H., A. A. Otto, A. Schirocki, and N. G. M. Hague. 1994. Effect of steinernematids on the root-knot nematode *Meloidogyne javanica*. Annals of Applied Biology (Tests of Agrochemicals and Cultivars). 124: 134-135.
- \*Gouge, D. H. and N. G. M. Hague. 1995. Glasshouse control of fungus gnats, *Bradysia paupera*, on fuchsias by *Steinernema feltiae*. Fundamental and Applied Nematology, 18: 77-80.
- \*Gouge, D. H. and N. G. M. Hague. 1995. The susceptibility of different species of sciarid flies to entomopathogenic nematodes. Journal of Helminthology. 69: 313-318.
- \*Peters, A., D. H. Gouge, R-U. Ehlers, and N. G. M. Hague. 1997. Avoidance of encapsulation by *Heterorhabditis* spp. infecting larvae of *Tipula oleracea*. Journal of Invertebrate Pathology. 70(2): 161-164.

- Gouge, D. H., L. L. Lee, A. Bartlett, and T. J. Henneberry. 1998. *Pectinophora gossypiella*, (Lepidoptera: Gelechiidae): Susceptibility of F<sub>1</sub> larvae from irradiated parents to entomopathogenic nematodes (Rhabditida: Steinernematidae, Heterorhabditidae). Journal of Economic Entomology. 91(4): 869-874.
- 10) Gouge, D. H., K. A. Smith, L. L. Lee, and T. J. Henneberry. 1998. Control of pink bollworm *Pectinophora gossypiella* (Saunders) (Lepidoptera: Gelechiidae) with entomopathogenic nematodes (Rhabditida: Steinernematidae) and gossyplure in cotton. Recent Research Developments in Entomology. 2: 55-85.
- 11) Gouge, D. H., L. L. Lee, and T. J. Henneberry. 1999. Effect of temperature and lepidopteran host species on entomopathogenic nematode (Nematoda: Steinernematidae, Heterorhabditidae) infection. Journal of Environmental Entomology. 28: 876-883.
- 12) Gouge, D. H., L. L. Lee, and T. J. Henneberry. 1999. Parasitism of *Pectinophora* gossypiella (Lepidoptera: Gelechiidae) larvae by entomopathogenic nematodes (Rhabditida: Steinernematidae, Heterorhabditidae). Crop Protection. 18: 531-537.
- 13) Gouge, D. H., K. A. Smith, L. L. Lee, and T. J. Henneberry. 2000. Effect of soil depth and moisture on the vertical distribution of *Steinernema riobrave* (Nematoda: Steinernematidae). Journal of Nematology. 32: 223-228.
- 14) Gouge, D. H, and D. Shapiro-Ilan. 2003. Case studies in cotton and citrus: Use of entomopathogenic nematodes. Indian Journal of Nematology. 33: 91-102.
- 15) Gouge, D. H., and J. L. Snyder. 2005. Parasitism of bark scorpions *Centruroides exilicauda* (Scorpiones: Buthidae) by entomopathogenic nematodes (Rhabditida: Steinernematidae; Heterorhabditidae). Journal of Economic Entomology. 98: 1486-1493.
- 16) Shapiro-Ilan, D., Gouge, D. H., Piggott, S. J., and Patterson Fife, J. 2006. Application technology and environmental considerations for use of entomopathogenic nematodes in biological control. Biological Control. Volume 38 (1): 124-133.
- 17) Gouge, D. H., and J. L. Snyder. 2006. Temporal association of entomopathogenic nematodes (Rhabditida: Steinernematidae and Heterorhabditidae) and bacteria. Journal of Invertebrate Pathology. 91: 147-157.
- 18) Shapiro-Ilan, D. I., D. H. Gouge, S. J. Piggott, and J. Patterson Fife. 2006. Application technology and environmental considerations for the use of entomopathogenic nematodes in biological control. Biological Control. 38: 124-133.

- 19) Yu, H., D. H. Gouge, and P. Baker. 2006. Parasitism of subterranean termites (Isoptera: Rhinotermitidae; Termitidae) by entomopathogenic nematodes (Rhabditida: Steinernematidae; Heterorhabditidae). Journal of Economic Entomology. 99: 1112-1119.
- 20) Gouge, D. H., M. L. Lame, and J. L. Snyder. 2006. Use of an implementation model and diffusion process for establishing Integrated Pest Management in Arizona Schools. American Entomology 52 (3): 190-196.
- 21) Gouge, D. H. and M. L. Lame. 2006. Integrated Pest Management A Healthy Alternative for Arizona's Schoolchildren. Journal of Environmental Management. December 2005/January. Vol 3 (6): 8-19.
- 22) Green, T. A., Gouge, D. H., Braband, L. A., Foss, C. R., and Graham L. C. 2007. IPM STAR Certification for School Systems: Rewarding Pest Management Excellence in Schools and Childcare Facilities. American Entomology 53 (3): 168-174.
- 23) Yu, H., D. H. Gouge, S. P. Stock and P. Baker. 2008. Development of Entomopathogenic Nematodes (Rhabditida: Steinernematidae; Heterorhabditidae) in the Desert Subterranean Termite *Heterotermes aureus* (Isoptera: Rhinotermitidae). Journal of Nematology 40 (4): 311-317.
- 24) Yu, H., D. H. Gouge, and D. I. Shapiro-Ilan. 2010. A Novel Strain of *Steinernema riobrave* (Rhabditida: Steinernematidae) Possesses Superior Virulence to Subterranean Termites (Isoptera: Rhinotermitidae). Journal of Nematology 42 (2): 91-95.
- 25) Bibbs, C. S., S. E. Bengston, and D. H. Gouge. 2014. Exploration of Refuge Preference in the Arizona Bark Scorpion (Scorpiones: Buthidae). Environmental Entomology 43 (5): 1345-1353.
- 26) Bibbs, C. S., S. E. Bengston, and D. H. Gouge. 2014. Activity Trends and Movement Distances in the Arizona Bark Scorpion (Scorpiones: Buthidae). Environmental Entomology 43 (6): 1613-1620.
- 27) Hurley, J. A., T. A. Green, D. H. Gouge, Z. T. Bruns, T. Stock, L. Braband, K. Murray, C. Westinghouse, S. T. Ratcliffe, D. Pehlman and L. Crane. 2014. Regulating pesticide use in United States schools. American Entomologist 60: 105-114.
- 28) Gouge, D. H. and M. L. Lame. 2015. Environmental Health Professionals Work the Bugs Out - School Integrated Pest Management. Journal of Environmental Health. Journal of Environmental Health 77 (10): 42–44.

- 29) Zhang, L., H. Li, S. Li, A. Zhang, F. Kou, H. Xun, P. Wang, Y. Wang, F. Song, J. Cui, D. H. Gouge, and W. Cai. 2015. Phylogeographic structure of cotton pest *Adelphocoris suturalis* (Hemiptera: Miridae): strong subdivision in China inferred from mtDNA and rDNA ITS markers. Scientific Reports. 5, 14009; doi: 10.1038/srep14009. http://www.nature.com/articles/srep14009
- 30) Misbah-ul-Haq, M., I. A. Khan, A. Farid, M. Ullah, D. H. Gouge, and P. B. Baker. 2016.
   Efficacy of Indoxacarb and Chlorfenapyr against Subterranean Termite *Heterotermes indicola* (Isoptera: Rhinotermitidae) in the Laboratory. Turkish Journal of Entomology 40 (3): 227-241.
- 31) Gouge, D. H. 2016. Working in a World of Bed Bugs. Journal of Environmental Management Arizona. Jun/Jul.: 5-6.
- 32) Gouge, D. H., S. Li, S. Nair, N. Pier, C. Sumner. 2016. Mosquitoes and the Great Outdoors. Journal of Environmental Management Arizona. Aug/Sept.: 5-6.
- 33) Cui, J., S. Li, D. W. Spurgeon, W. Jia, Y. Lu, D. H. Gouge. 2016. Flight Capacity of *Sitophilus zeamais* Motschulsky in Relation to Gender and Temperature. Southwestern Entomologist 41 (3): 667-674.
- 34) Romero A., A. M. Sutherland, D. H. Gouge, H. Spafford, S. Nair, V. Lewis, D-H. Choe, S. Li, D. Young. 2017. Pest Management Strategies for Bed Bugs in Multi-Unit Housing: A Literature Review on Field Studies. Journal of IPM: 8(1): 13; 1-10 doi: 10.1093/jipm/pmx009.
- 35) Vetter, R. S., M. L Draney, C. A. Brown, J. T. Trumble, D. H Gouge, N. C. Hinkle, E. F. Pace-Schott. 2018. Spider Fear Versus Scorpion Fear in Undergraduate Students at Five American Universities. American Entomologist: 64(2): 79-82.
- 36) Tarter, K., Levy, C., Yaglom, H., Adams, L., Plante, L., Casal, M., Gouge, D. H., Rathman, R., Stokka, D., Weiss, J., Venkat, H., Walker, K. 2018. Using Citizen Science to Enhance Surveillance of the Mosquito Vector *Aedes aegypti* in Arizona. Journal of the American Mosquito Control Association. Accepted.
- 37) Gouge, D. H., Li, S., Nair, S. Pest Management Strategies for Bed Bugs and German cockroaches in Multi-unit, Low-income Elderly and Disabled Housing: A Case Study. Journal of Integrated Pest Management. 9<sup>th</sup> International IPM Symposium Edison submission.

38) Gouge, D. H., Li, S., Nair, S., LaMorte, R. L., Spurgeon, D. Health and Wellbeing Impacts of Living with Bed Bugs. Journal of Integrated Pest Management. USDA internal review.

*Pest Management Strategic Plans (subject to USDA National Institute of Food and Agriculture review)* 

- Green, T. A., and D. H. Gouge, eds. 2008. School IPM 2015: A Strategic Plan for Integrated Pest Management in Schools in the United States. pp. 284.
- Green, T. A., and D. H. Gouge, eds. 2015. School IPM 2020: A Strategic Plan for Integrated Pest Management in Schools in the United States. pp. 302. <u>http://www.ipminstitute.org/school\_ipm\_2020/SCHOOL\_IPM\_2020\_V3\_070615.pdf</u>

## **Other Publications**

## Curricula

- Byrne, D. N., Ellsworth, P. C, and Gouge, D. H. Entomology 468/568 Insect Pest Management, Spring Semester 2009.
- Ellsworth, P., Baker, P., and Gouge, D. H. Entomology 468/568 Insect Pest Management, Spring Semester 2010. <u>http://cals.arizona.edu/classes/ento468/</u>

## Research Reports

- D. H. Gouge, Smith, K. A., Payne, C., Lee, L. L., Van Berkum, J. R. and Henneberry, T. J. 1997. Suppression of Plant Parasitic Nematodes in Cotton Using the Entomopathogenic Nematode *Steinernema riobravis* (Cabanillas, Poinar, and Raulston) (Rhabditida: Steinernematidae). Cotton: A College of Agriculture Report.
- D. H. Gouge, Smith, K. A., Payne, C., Lee, L. L., Van Berkum, J. R., Ortega, D., and Henneberry, T. J. 1997. Control of pink bollworm, *Pectinophora gossypiella* (Saunders) (Lepidoptera: Gelechiidae) with biocontrol and biorational agents. Cotton: A College of Agriculture Report.

- D. H. Gouge, Smith, K. A., Lee, L. L., and Henneberry, T. J. 1998. Control of pink bollworm *Pectinophora gossypiella* (Saunders) (Lepidoptera: Gelechiidae) with entomopathogenic nematodes (Rhabditida: Steinernematidae) and gossyplure in cotton. Recent research developments in entomology. Pages 55-85.
- Simmons, A. L., Dennehy, T. J., Tabashnik, B. E., Antilla, L., Bartlett, A., Gouge, D., and Staten, R. 1998. Cotton: A College of Agriculture Report.
- D. H. Gouge, and Smith, K. A. 2004. School IPM. Turfgrass, Landscape and Urban IPM Research Summary.
- D. H. Gouge, and T. Stock. 2008. Western IPM Center October 2008 Newsletter. "The Future of Urban IPM".

## Conference Proceedings \*as a graduate student

- \*Gouge, D. H. and N. G. M. Hague. 1994. Control of sciarids in glass and propagation houses, with *Steinernema feltiae*. Proceedings of the Brighton Crop Protection Conference - Pests and Diseases, 1994. pp. 1073-1078.
- \*Gouge, D. H., A. A. Otto, and T. Kakouli, and N. G. M. Hague. 1994. Low temperature infection of *Galleria mellonella* by *Steinernema feltiae* and *S. carpocapsae* between 6.4°C and 19.2°C. Proceedings of the COST 819 Symposium and Working Group Meeting, Luxembourg EUR EN, 1994. p. 225.
- Gouge, D. H., L. L. Reaves, M. M. Stoltman, J. R. Van Berkum, R. A. Burke, L. J. Forlow - Jech, and T. J. Henneberry. 1996. Control of pink bollworm *Pectinophora gossypiella* (Saunders) (Lepidoptera: Gelechiidae) larvae in Arizona and Texas cotton fields using the entomopathogenic nematode *Steinernema riobravis* (Cabanillas, Poinar and Raulston) (Rhabditida: Steinernematidae). Proceedings of the Beltwide Cotton Production and Research Conference, 1996. pp. 1078-1082.
- Gouge, D. H., K. A. Smith, C. Payne, L. L. Lee, J. R. Van Berkum, D. Ortega, and T. J. Henneberry. 1997. Control of pink bollworm *Pectinophora gossypiella* (Saunders) (Lepidoptera: Gelechiidae) with biocontrol and biorational agents. Proceedings of the Beltwide Cotton Production and Research Conference, 1997. pp. 1066-1072.

- Gouge, D. H., K. A. Smith, L. L. Lee, J. R. Van Berkum, and T. J. Henneberry. 1997. Suppression of plant parasitic nematodes in cotton using the entomopathogenic nematode *Steinernema riobravis* (Cabanillas, Poinar, and Raulston) (Rhabditida: Steinernematidae). Proceedings of the Beltwide Cotton Production and Research Conference, 1997. pp. 1324-1326.
- Gouge, D. H., J. R. Van Berkum, L. L. Lee, and T. J. Henneberry. 1997. Temporal association of entomopathogenic nematodes and bacteria. Proceedings of the Annual Meeting of the Society of Nematology. Journal of Nematology. 29 (4) pp. 579.
- Simmons, A. L., T. J. Dennehy, B. E. Tabashnik, A. Bartlett, D. H. Gouge, and R. Staten. 1998. Evaluation of B.t. cotton deployment strategies and efficacy against pink bollworm in Arizona. Proceedings of the Beltwide Cotton Production and Research Conference, 1998. pp. 1025-1030.
- Davies, K. G. and D. H. Gouge. 1998. Identification of the entomopathogenic nematode bacterial symbiont *Xenorhabdus* sp. Proceedings of the International Nematology Congress. European Society of Nematologists, Invergowrie, Dundee, Scotland 4-8 August 1998.
- Davies, K. G. and D. H. Gouge. 1999. Identification of the entomopathogenic nematode bacterial symbiont *Xenorhabdus* sp. International Symposium Biological Control Agents in Crop and Animal Protection, University of Swansea, Wales, 24-28 August.
- Patin, A. L., T. J. Dennehy, M. A. Sims, B. E. Tabashnik, Y. B. Liu, L. A. Antilla, D. H. Gouge, T. J. Henneberry, and R. Staten. 1999. Status of pink bollworm susceptibility to B.t. in Arizona. Proceedings of the Beltwide Cotton Production and Research Conference, 1999. pp. 991-996.
- Gouge, D. H., Y. Hao. 2005. Parasitism of the bark scorpion *Centruroides exilicauda* (Wood) (Scorpiones: Buthidae) by entomopathogenic nematodes (Rhabditida: Steinernematidae; Heterorhabditidae). Proceedings of the Entomological Society of America Annual Conference, Fort Lauderdale, Florida, 15-18 December.

Professional Pamphlets 4 pages or less (peer reviewed)

- Gouge, D. H., K. A. Smith, C. Olson, M. Lame, and P. Baker. 2001. IPM in Schools. University of Arizona Cooperative Extension AZ1234, tri-fold. http://ag.arizona.edu/pubs/insects/az1234.pdf
- Gouge, D. H., Green, T., Lame, M., Shour, M., Hurley, J., Braband, L., Glick, S., Graham, F., and Murray, K. 2009. Integrated Pest Management: The Most Effective Way to Manage Pests in Your School! University of Arizona Cooperative Extension AZ1234. pp. 4. <u>http://cals.arizona.edu/pubs/insects/az1234.pdf</u>
- Gouge, D., U. Schuch, D. Kopec, P. Baker, K. Umeda, and B. Stevens. 2012. Integrated Pest Management Works Inside and Outside School Buildings. University of Arizona Cooperative Extension AZ1579, trifold. <u>http://cals.arizona.edu/pubs/insects/az1579.pdf</u>
- Stevens B., D. H. Gouge, P. Baker, and K. Umeda. 2012. Preventing and Treating Bed Bugs. University of Arizona Cooperative Extension AZ1580, trifold. <u>http://cals.arizona.edu/pubs/insects/az1580.pdf</u>
- Li, S., Gouge, D. H., and Fournier, A. 2013. School Integrated Pest Management (in Chinese). University of Arizona Cooperative Extension. Publication no. AZ1579C, trifold. <u>http://cals.arizona.edu/pubs/insects/az1579C.pdf</u>
- Nair S., D. H. Gouge, S. Li, K. Umeda, A. J. Fournier, P. C. Ellsworth, U. K. Schuch, D.M. Kopec, and P. B. Baker. 2014. Integrated Pest Management Works Inside and Outside School Buildings. Publication no. AZ1579, trifold. http://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1579-2014.pdf
- Li, S., Gouge, D. H., and Fournier, A. 2014. Practical Methods of Controlling Bed Bugs at Home. University of Arizona Cooperative Extension. Publication no. AZ1642. pp 4. <u>https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1642-2014.pdf</u>

Extension Bulletins 5 pages or greater (peer reviewed)

 Gouge, D. H., M. O. Way, A. Knutson, G. Cronholm, and C. Patrick. 1999. Managing Soybean Insects. Texas Agricultural Extension Service, B-1501, pp. 34.

- Gouge, D. H., K. A. Smith, and D. Wilkerson. 1999. Field Guide to Insects, Mites, and Mollusks of Nursery and Floral Crops. Texas Agricultural Extension Service, B-6089, pp. 156.
- Gouge, D. H., K. A. Smith, C. Olson, and P. Baker. 2001. Mosquitoes. University of Arizona Cooperative Extension AZ1221, pp. 8. http://ag.arizona.edu/pubs/insects/az1221.pdf
- Gouge, D. H., C. Olson, K. A. Smith, and P. Baker. 2001. Scorpions. University of Arizona Cooperative Extension AZ1223, pp. 7. http://ag.arizona.edu/pubs/insects/az1223.pdf
- Gouge, D. H., K. A. Smith, C. Olson, and P. Baker. 2001. Drywood Termites. University of Arizona Cooperative Extension AZ1232, pp. 8. <u>http://ag.arizona.edu/pubs/insects/az1232.pdf</u>
- Gouge, D. H., C. Olson, and K. A Smith. 2003. Insect Repellents. University of Arizona Cooperative Extension AZ1311, pp. 6. <u>http://ag.arizona.edu/pubs/insects/az1311.pdf</u>
- Gouge, D. H., A. J. Stoltman, J. L. Snyder, and C. Olson. 2004. How to Bug Proof Your Home. University of Arizona Cooperative Extension AZ1320, pp. 30. <u>http://ag.arizona.edu/pubs/insects/az1320.pdf</u>
- Gouge, D. H., E. Lawaczeck, J. L. Snyder, N. Renison, and D. H. Gouge. 2008. Batty About Bats. University of Arizona Cooperative Extension AZ1456, pp. 16. <u>http://ag.arizona.edu/pubs/insects/az1456.pdf</u>
- Gouge, D. H., C. Olson, and P. Baker. 2009 revision of 2003. Drywood Termites. University of Arizona Cooperative Extension AZ1232, pp. 8. <u>http://cals.arizona.edu/pubs/insects/az1232.pdf</u>
- Gouge, D. H., and C. Olson. 2009 revision of 2004. How to Bug Proof Your Home. University of Arizona Cooperative Extension AZ1320, pp. 30. <u>http://cals.arizona.edu/pubs/insects/az1320.pdf</u>
- Gouge, D. H. and C. Olson. 2011 revision of 2001. Scorpions. University of Arizona Cooperative Extension AZ1223, pp. 6. <u>http://cals.arizona.edu/pubs/insects/az1223.pdf</u>
- Gouge, D. H. and C. Olson. 2011 revision of 2003. Choosing a Bug Repellent. University of Arizona Cooperative Extension AZ1311, pp. 5. <u>http://cals.arizona.edu/pubs/insects/az1311.pdf</u>

- Gouge, D. H., C. Olson, A. Fournier and P. Baker. 2012. Working the Bugs Out, Bed Bug Control—What Landlords and Tenants in Multi-Family Housing Need to Know in Arizona. University of Arizona Cooperative Extension AZ1563, pp. 6. <u>http://cals.arizona.edu/pubs/insects/az1563.pdf</u>
- Li, S., Gouge, D., Fournier, A., Nair, S., Baker, P. and Olsen, C. 2013 revision of 2001. Mosquitoes. University of Arizona Cooperative Extension. Publication no. AZ1221, pp. 11. <u>http://ag.arizona.edu/pubs/insects/az1221.pdf</u>
- Gouge, D. H., S. Li, S. Nair, T. Stock, S. Bryks, C. Foss, A. Romero, D. J. Young, and A. Code. 2014. Bed Bugs. University of Arizona Cooperative Extension. Publication no. AZ1625, pp. 47.

http://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1625-2014.pdf

- Gouge D. H., T. Stock, S. Nair, S. Li, S. Bryks, J. Hurley, A. J. Fournier. 2015. Generic School IPM Plan Template. University of Arizona Cooperative Extension AZ1669, pp. 12. <u>https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1669-2015.pdf</u>
- Gouge, D. H., S. Li, and S. Nair. 2015 revision of 2008. Bats. University of Arizona Cooperative Extension AZ1456, pp. 11. <u>https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1675-2015.pdf</u>
- Gouge, D.H., S. Nair, and T. Stock. 2015 revision of 2009. Pest-proofing your home. University of Arizona Cooperative Extension AZ1677, pp. 31. https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1677-2015.pdf
- 19. Stock, T., R. Corrigan and D. H. Gouge. 2015 revision of 2013. Integrated Pest Management of the House Mouse in Schools. Oregon State University EM 9062, pp. 6. <u>https://catalog.extension.oregonstate.edu/sites/catalog.extension.oregonstate.edu/files/pr</u> oject/pdf/em9062\_1.pdf
- 20. Li, S., D. H. Gouge, S. Nair, A. Fournier, and M. Wierda. 2015. Head Lice: Identification, Biology, and Integrated Pest Management. University of Arizona Cooperative Extension AZ1687, pp. 8. <u>https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1687-2015.pdf</u>
- Gouge, D. H., S. Li, K. Walker, C. Sumner, S. Nair, and C. Olson. 2016. Mosquitoes: Biology and Integrated Pest Management. University of Arizona Cooperative Extension

AZ1706, pp. 12.

http://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1706-2016.pdf

 Gouge, D. H., J. Hagler, N. Nair, K. Walker, S. Li, C. Sumner, C. Bibbs, and K. A. Smith. 2017. Human Disease Causing Viruses Vectored by Mosquitoes. University of Arizona Cooperative Extension AZ1744, pp. 7.

https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1744-2017.pdf.

- Gouge, D. H., S. Li, S. Nair, K. Walker, and C. S. Bibbs. 2018. Mosquito and Tick Repellents. University of Arizona Cooperative Extension AZ1761, pp. 7. https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1761-2018.pdf.
- 24. Gouge, D. H., S. Li, C. S. Bibbs and S. Nair. 2018. Scorpions of the Desert Southwest United States. University of Arizona Cooperative Extension AZ1768, pp. 8. <u>https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1768-2018.pdf</u>
- 25. Walker, K., H. Yaglom, D. H. Gouge, M. Brophy, M. Casal, V. O. Encinas. 2018. The Brown Dog Tick and Epidemic Rocky Mountain Spotted Fever in Arizona, and northwestern Mexico. University of Arizona Cooperative Extension AZ1769, pp. 11. <u>https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1769-2018.pdf</u>
- 26. Rivadeneira, P. and D. H. Gouge. 2018. Roof Rats: Identification, Ecology, and Signs. University of Arizona Cooperative Extension AZ1775, pp. 7. https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1775-2018.pdf
- 27. Gouge, D. H. P. Rivadeneira, and S. Li. 2018. Roof Rats: Pathogens and Parasites. University of Arizona Cooperative Extension AZ1784, pp. 6. https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1784-2018.pdf
- 28. Leonard, V. and D. H. Gouge. Head Lice. Pest Notes, University of California, Agriculture and Natural Resources - Publication No. xxxx. in UC ANR review.
- Li, S., Gouge, D. H., Nair, S., Fournier, A. J., Hall, W. E. Arizona Kissing Bugs. University of Arizona Cooperative Extension AZxxxx, pp. accepted.
- 30. Li, S., Gouge, D. H., Walker, K., and Fournier, A. J. Asian Longhorned Tick, an Invasive Tick in the United States. University of Arizona Cooperative Extension AZxxxx, pp. in review.

## Extension Bulletins (non-peer reviewed)

 Chambers, K., T. Green, D. Gouge, J. Hurley, T. Stock, Z. Bruns, M. Shour, C. Foss, F. Graham, K. Murray, L. Braband, S. Glick and M. Anderson. 2011. The Business Case for Integrated Pest Management in Schools: Cutting Costs and Increasing Benefits. IPM Institute of North America, Inc. pp. 8.

http://www.ipminstitute.org/school\_ipm\_2015/ipm\_business\_case.pdf

Chambers, K., D. Gouge, T. Green, J. Hurley, T. Stock, Z. Bruns, M. Shour, C. Foss, F. Graham, K. Murray and S. Glick. 2011. Coalition Operating Manual. IPM Institute of North America, Inc. pp. 6.

http://www.ipminstitute.org/school\_ipm\_2015/IPM\_coalition\_manual.pdf

- Gouge, D., T. Green, K. Chambers, J. Hurley, T. Stock, M. Shour, C. Foss, L. Braband, F. Graham, K. Murray, S. Glick, Z. Bruns and M. Anderson. 2011. Reducing Your Child's Asthma Using Integrated Pest Management: A Practical Guide for Parents around the Home. National School IPM Steering Committee. IPM Institute of North America, Inc. pp. 4. <u>http://www.ipminstitute.org/school\_ipm\_2015/ipm\_asthma\_document.pdf</u>
- Bruns, Z. and D. Gouge. January/February 2012. Creating a Healthy School Environment: Think Integrated Pest Management. The Edge. Arizona Association of School Business Officials pp. 10. <u>http://www.aasbo.org/associations/9641/files/Jan-Feb%202012.PDF</u>
- 5. Ellsworth, P., Fournier, A., Dixon, W., Palumbo, Gouge, D. H., Umeda, K., and Peterson, J. 2012. IPM Programs: Legacy and Impacts. USDA-National Institute of Food and Agriculture. USDA-NIFA & North Central IPM Center. 21 pp. {See pp. 19–21 Enhancing capacity for IPM practice and assessment in Arizona.} <u>http://www.ncipmc.org/resources/ncripm\_grants\_publications/NIFA%20IPM%20Programs.pdf</u>
- Gouge, D. H., T. Stock, J. Hurley, S. Nair, A. J. Fournier, S. Li. 2015. School IPM Plan Template for Tribal Communities. University of Arizona. pp. 55. <u>http://ag.arizona.edu/apmc/westernschoolIPM.html#pubs</u>
- Nair, S., R. Senior, K. Umeda, P. Ellsworth, U. Schuch, D. H. Gouge, S. Li. Identification and Biology of the Ficus Whitefly. 2015. University of Arizona. pp. 1. <u>http://cals.arizona.edu/apmc/docs/Ficus\_Whitefly\_Short1.pdf</u>
- 8. Nair, S., R. Senior, K. Umeda, P. Ellsworth, U. Schuch, D. H. Gouge, S. Li. Integrated

Pest Management of the Ficus Whitefly. 2015. University of Arizona. pp. 2. http://cals.arizona.edu/apmc/docs/Ficus\_Whitefly\_Short2.pdf

- Nair, S., R. Senior, K. Umeda, P. Ellsworth, U. Schuch, D. H. Gouge, S. Li. Plant Health Care for Ficus Plants Following Ficus Whitefly Damage. 2015. University of Arizona. pp. 1. <u>http://cals.arizona.edu/apmc/docs/Ficus\_Whitefly\_Short3.pdf</u>
- Li S., D. H. Gouge, A. J. Fournier, N. Pier, S. Nair. 2015. Bed Bug Information Card. University of Arizona. pp2. <u>http://cals.arizona.edu/apmc/docs/Bed-Bugs-Card.pdf</u>
- Sutherland, A., D-H. Choe, V. Lewis, D. Young, A. Romero, H. Spafford, D. Gouge. Sep 2015. Capturing the ABCs of professional bed bug management in low-income multi-unit housing: a summary of survey responses. Pest Control Technology Magazine. <u>https://www.pctonline.com/article/pct0915-bed-bugs-multi-unit-housing</u>
- Wierda, M., A. Fournier, S. Li, S. Nair, D. Gouge, and P. Ellsworth. Jan 2016. Caution! Warning! Danger! Understanding Signal Words on Pesticide Labels. University of Arizona. pp. 1. <u>http://ag.arizona.edu/crops/cotton/files/SignalWords.pdf</u>
- Nair, S., Gouge, D. H., Li, S., Warren, P., Fournier, A., Wierda, M., Umeda, K., Kopec, D. April 2016. Honey Bees in Community Environments – Identification and Biology. University of Arizona. pp2. <u>http://cals.arizona.edu/apmc/docs/WildHoneyBeeIPM1.pdf</u>
- 14. Nair, S., Gouge, D. H., Li, S., Warren, P., Fournier, A., Wierda, M., Umeda, K., Kopec, D. April 2016. Integrated Pest Management for Wild Honey Bees in Community Environments. University of Arizona. pp2. http://cals.arizona.edu/apmc/docs/WildHoneyBeeIPM2.pdf
- 15. Nair, S., Gouge D. H., Li, S., Ellsworth, P. C., Wierda, M., Fournier, A. 2016. Why Pesticide Application Notifications in Schools are Important. University of Arizona Cooperative Extension IPM Short, February 2016. pp2. <u>http://cals.arizona.edu/apmc/docs/Pesticide\_Notification\_Schools.pdf</u>
- Li, S., Gouge, D. H., Walker, K., Fournier, A., Nair, S., Wierda, M., Hurley, J. 2016. The Zika Virus. University of Arizona Cooperative Extension IPM Short, February 2016. pp2. <u>http://cals.arizona.edu/apmc/docs/Zika-virus.pdf</u>
- Wierda, M., Gouge, D. H. 2017. Tick & Flea Collars, Integrated Pest Management, and Your Safety. University of Arizona Cooperative Extension IPM Short, August 2017. pp2. <u>https://cals.arizona.edu/crops/cotton/files/17Flea\_Collar\_short.pdf</u>

- Nair, S., Gouge D. H., Li, S. 2018. Something's biting me, but I can't see it! University of Arizona Cooperative Extension IPM Short, June 2018. pp2. <u>https://cals.arizona.edu/apmc/docs/No-See-Ums-IPMShort.pdf</u>
- Li, S., Gouge, D. H., Walker, K., Fournier, A. 2018. Longhorned Tick, a New Invasive Tick in the United States. University of Arizona Cooperative Extension IPM Short, August 2018. pp2. <u>http://cals.arizona.edu/apmc/docs/longhorned-tick.pdf</u>
- Nair, S., Umeda, K., McCloskey, B., Gouge D. H., Ellsworth, P. 2018. Weed control choices for turf and landscapes. University of Arizona Cooperative Extension IPM Short, September 2018. pp2. <u>https://cals.arizona.edu/apmc/docs/Glyphosate-IPMShort.pdf</u>
- 21. Li, S., Gouge, D. H., Nair, S., Walker, K., Fournier, A. J. 2018. What you should know about mosquito and tick repellents. University of Arizona Cooperative Extension IPM Short, September 2018. pp2. <u>https://cals.arizona.edu/apmc/docs/Repellents-</u> <u>IPMShort.pdf</u>
- 22. Li, S., Gouge, D. H., Nair, S., Walker, K., Fournier, A. J. Andrade-Sanchez. P. Lo que debe saber sobre los repelentes de mosquitos y garrapatas. Extensión Cooperativa de la Universidad de Arizona, corto de MIP, Septiembre de 2018. pp2. <u>https://cals.arizona.edu/apmc/docs/Repellents-IPMShort-Spanish.pdf</u>

## Extension Newsletters (non-peer reviewed)

An average of 11 newsletters are produced each year on seasonal hot topics. The newsletter content is drafted by subject matter experts, edited by myself and typeset by Shujuan Li. The content is aimed at residents and school management teams. Topics are selected based on stakeholder requests and identified needs. National distribution networks reach over 5000 readers most months <u>http://ag.arizona.edu/apmc/westernschoolIPM.html#newsletter</u>

## For example:

Gouge, D. H., J. Hagler, N. Nair, K. Walker, S. Li, C. Sumner, C. Bibbs, and K. A. Smith. 2016. Human Disease Causing Viruses Vectored by Mosquitoes. <u>https://cals.arizona.edu/apmc/docs/2017MayAZschoolandhomeIPMNewletter.pdf</u> Patent

Gouge, D. H., R. A. Dudney, and K. A. Smith. Composition with a mixture of one or more bacterial species (e.g. *Xenorhabdus*, *Photorhabdus* or *Pseudomonas*) harvested from nematodes, useful as insecticides for controlling insect pests such as termites or fire ants. Xeno Insecticides Inc. Patent Number US2003082147-A1. 2001.

#### Distributed Extension Education (peer-reviewed)

Biology and Control of Vectors and Public Health Pests: Distributed Education Materials for Environmental Health Professionals <u>http://lms.southcentralpartnership.org/vcehp.php</u>

Gouge, D. H. 2016-present. VCEHP 109 Pest Management Considerations for Schools.

Lame, M., White, L., Gouge, D. H. 2016-present. VCEHP 106 Toxicology of Pesticides for Environmental Health Professionals.

Both courses rated 4/5 in the CDC quality training online. *https://www.train.org/cdctrain/search?query=schools&type=course&quality=cdc* 

Gouge, D. H. et al. 2016-present. The Pest Defense for Healthy Schools
<u>http://pestdefenseforhealthyschools.com/</u> (former Stop School Pests:
<u>http://articles.extension.org/pages/73468/self-paced-learning-page-for-urban-ipm)</u>
9 professional development modules (18 learning lessons) for school professionals.

### Media

#### **Television**

Regular segments on vector, venomous and public health pest issues for: Channel 3 Garden Guy Show, Good Morning Arizona, Channel 3 News, Channel 15 ABC News, KGUN 9 News, Channel 12.

## <u>Radio</u>

Regular segments on vector, venomous and public health pest issues for: Austin Hill KFYI 550, Western Agri-Radio Network, Western Agri-Radio Network, KJZZ – Arizona Science and Innovation Desk, Easy Organic Gardener Radio Show, National Public Radio, KTAR News.

## **Documentaries**

Animal Planet, Natural History New Zealand, Discovery Channel, North One TV.

## University or Academic Media

- 1. Mosquito and ant abatement research in schools. Story by Joanne Littlefield, University of Arizona, Report on Research, 2001.
- 2. IPM in Schools. Arizona Land and People, Vol. 48, No. 1, 2003.
- 3. The War on Bugs, UA News February 10, 2009 <u>http://uanews.org/story/war-bugs</u>.
- UA Pest Control Experts to Create Nationwide Guidelines for Schools. UA News 2014 <u>http://uanews.org/story/ua-pest-control-experts-to-create-nationwide-guidelines-for-</u> schools.
- Pigeons Present Public Health Concerns. UA News. Story by L. Everett-Haynes, L. UA News 2015 <u>http://uanews.org/blog/pigeons-present-public-health-</u> <u>concerns?utm\_source=uanow&utm\_medium=email&utm\_campaign=biweekly-uanow.</u>
- UA Cooperative Extension Experts Available to Talk About Ticks. UA News. Story by Faith Schwartz. UA News 2018 <u>https://uanews.arizona.edu/press-release/ua-</u> <u>cooperative-extension-experts-available-talk-about-ticks-0</u>.
- Bed Bug Website and Work Group Share Knowledge, Western IPM Center Newsletter by Steve Elliott. March 2018. <u>http://westernipm.org/index.cfm/ipm-in-thewest/communities/bed-bug-website-and-work-group-share-knowledge-and-resources/</u>
- NIFA Update newsletter on March 21, 2018 promoting the Bed Bug Website and Work Group <u>https://content.govdelivery.com/accounts/USDANIFA/bulletins/1e3c4fb</u>

## Newspaper / Magazine

The Arizona Republic, Arizona Daily Star, Maricopa Communicator, Western Farm Press, Arizona Tribune, Men's Health, Tucson Weekly, Tucson Citizen, USA Today, AZ Central.com, Arizona Daily Star, Phoenix Home and Gardening, Arizona Sonora News, Havasu News, CNN, Maricopa.com, Las Vegas Review-Journal.

#### Invited Blog

Gouge D. H. 2014. School Smart IPM: The Sensible Way to Work the Bugs Out. One Voice: The National Parent Teacher Association Blog, April 27, 2014 <u>http://onevoice.pta.org/?p=4231</u>.

## Exhibits

- Live arthropod interaction exhibits are run in partnership with the Arizona Natural History Museum (Mesa, Arizona), on a regular basis. Events are oriented towards increasing awareness of pest issues while decreasing fear and confusion associated with native species. Annually an average of 5-8 youth oriented events are run and 1 adultsonly evening event (details entered under Informal Outreach).
- September 15, 2013. With Nair, S., LaMorte, R., Bibbs, C., Bibbs, K., Li, S., Fournier, A. Live Arthropod Interaction Table Exposition Table at University of Arizona Insect Festival, Tucson, Arizona >4000 estimated attendance.
- September 20, 2015. With Nair, S., LaMorte, R., Li, S., Nambiar, P. M., Pier, N., Gouge-Smith, A. R. C. Live Arthropod Interaction Table Exposition Table at University of Arizona Insect Festival, Tucson, Arizona >4000 estimated attendance.
- November 21, 2015. With Nair, S., LaMorte, R., Gouge-Smith, A. R. C., Li, S., Nambiar, P. M. Pests in community environments – outreach display featuring live insects and other arthropods and their management measures. MAC Family Farm Day, Maricopa Ag. Center, Maricopa, Arizona >2000 estimated attendance.
- February 27, 2016. With Nair, S., LaMorte, R., Gouge-Smith, A. R. C., Li, S., Pier, N. Pests in community environments – outreach display featuring live insects and other arthropods and their management measures. ALARC Farm Science Day, ARS-Arid Land Agriculture Research Center, Maricopa, Arizona 700 estimated attendance.
- November 19, 2016. With Nair, S, LaMorte, R., Gouge-Smith, A. R. C., Li, S., Pier, N. Desert arthropods - interactive display with live desert arthropods. MAC Family Farm Day, Maricopa Ag. Center, Maricopa, Arizona approximately 1530 estimated attendance.

- February 18, 2017. With Nair, S., LaMorte, R., Li, S., Gouge-Smith, A. R. C., Pier, N., Ellsworth, P. Pests in community environments – outreach display featuring live insects and other arthropods and their management measures. ALARC Farm Science Day, ARS-Arid Land Agriculture Research Center, Maricopa, Arizona 425 estimated attendance.
- February 24 2018. Pests in community environments outreach display featuring live insects and other arthropods and their management measures. Farm Science Day, ARS-Arid Land Agriculture Research Center, Maricopa, Arizona 700 estimated attendance.
- March 10 2018. Science City- Science of the Natural World. Is it a pest? Between 60,000 and 100, 000 citizens visited Science City.
- November 17, 2018. With Nair, S, Gouge-Smith, A. R. C., Li, S. Head Lice interactive display with live desert arthropods, and head lice screening. MAC Family Farm Day, Maricopa Ag. Center, Maricopa, Arizona approximately 2000 estimated attendance.

#### Video

Gigstad G. and D. H. Gouge. 2011. Introductions to Integrated Pest Management and The City of Phoenix IPM Program. 19.5 minutes
<u>http://ag.arizona.edu/apmc/westernschoolIPM.html#videos</u>.
Gouge, D. H. 2018. Honey Bees. <u>https://cals.arizona.edu/apmc/docs/Wild-honey-</u>
<u>Bees.mp4</u>
Gouge, D. H. 2018. Venomous Arthropods of the Desert Southwest.
<u>https://cals.arizona.edu/apmc/docs/venomous-arthropods.mp4</u>

## Video Technical Review

Collaborative project with Oregon State University and the Northwest Center for Alternatives to Pesticides. I provided storyboard content and critical review of the videos.

 Northwest Center for Alternatives to Pesticides. 2013. IPM for Mice-Trapping. Sustainable Places Information Network. 7.57 minutes <u>https://www.youtube.com/watch?v=d5mr8W\_h\_Jc&list=PLP416dZJLAUwjiUTdvwG8P</u> <u>CIMmVopiWPp&index=3</u>

- Northwest Center for Alternatives to Pesticides. 2013. IPM for Mice-Sanitation. Sustainable Places Information Network. 4.58 minutes <u>https://www.youtube.com/watch?v=ML8wAaUFwyg&list=PLP416dZJLAUwjiUTdvwG8</u> <u>PCIMmVopiWPp&index=2</u>
- 3. Northwest Center for Alternatives to Pesticides. 2013. IPM for Mice-Exclusion. Sustainable Places Information Network. 4.49 minutes <u>https://www.youtube.com/watch?v=ddZlm1Yjb5k&index=1&list=PLP416dZJLAUwjiUT</u> <u>dvwG8PCIMmVopiWPp</u>
- How to Make a Bed Bug Trap. Sustainable Places Information Network, 2013. 3.25 minutes

https://www.youtube.com/watch?v=mdyu80bgEKw&list=PLP416dZJLAUwjiUTdvwG8P CIMmVopiWPp&index=4

 How to Inspect for Bed Bugs. Sustainable Places Information Network, 2013. 5.15 minutes

https://www.youtube.com/watch?v=ZlPnyiI5S5M&list=PLP416dZJLAUwjiUTdvwG8PC IMmVopiWPp&index=5

# **Conferences/Scholarly Presentations (During Associate and Full Rank)**

# Colloquia

- December 9-12, 2007. Organizer and Speaker: Gouge, D. H., A. Fournier, L. C. Graham, T. Green, M. L. Lame. Function. School IPM - Beyond the PMSP. Entomological Society of America National Meeting, San Diego, California. Submitted
- December 12-15, 2010. Organizer and Speaker: Gouge, D. H. School IPM Network Session. 58<sup>th</sup> Entomological Society of America, National Meeting, San Diego, California. Submitted
- January 29-31, 2011. Organizers: Stock, P. and D. H. Gouge. "Discovery of Entomopathogens and Their Integration and Safety in Pest Management Systems". S-1024 Microbial Control Group, Tucson, AZ. Invited

- November 13-16, 2011. Organizers and Speaker: Gouge, D. H., T. Stock, and C. Foss. School IPM Change Agent Practicum - The Wild West Approach". Non-ESA Function. 59<sup>th</sup> Entomological Society of America, National Meeting, Reno, Nevada. Submitted
- March 23-27, 2015. Organizers and Speaker: Gouge, D. H. and J. Hurley. School IPM Update and Open Discussion Forum. 8<sup>th</sup> International IPM Symposium - IPM: Solutions for a Changing World, Salt Lake City, Utah. Submitted

## Seminars

- December 5, 2011. Speaker: Gouge, D. H. Avoid Bed Dread Work the Bugs Out USDA ARS Arid Lands Agricultural Research Center Seminar, Maricopa, Arizona. Invited
- June 16, 2011. Speaker: Gouge, D. H. Bed Dread. Maricopa Ag. Center Seminar, Maricopa, Arizona. 29 participants. Submitted
- October 23, 2013. Speaker: Gouge, D. H. Department Seminar Making Bed Bugs Itch. Pesticide Potpourri – Bed Bugs and Bad Habits. Tucson, Arizona. Invited

## Symposia

- August 3-8, 2008. Organizer and Speaker: Gouge, D. H., M. Wilson, and M. Brownbridge. Cross divisional symposia – Microbial control division and Nematodes. Utilizing Insect Pathogens in Green Pest Management Systems, Warwick, United Kingdom. Submitted
- May 18-21, 2008. Organizers and Speaker: Gouge, D. H., T. Green, and A. V. Latchininsky Assessment and Implementation of IPM in Schools. 2008 National Conference on Urban Entomology, Tulsa, Oklahoma. Submitted
- August 3-8, 2008. Organizer and Speaker: Gouge, D. H., M. Wilson, and M. Brownbridge. Utilizing insect pathogens in green pest management systems. 2008 Annual Meeting of the Society for Invertebrate Pathology, Cross divisional symposia proposal - Microbial Control Division and Nematodes. Warwick, England. Submitted
- November 16-19, 2008. Organizer and Speaker: Gouge, D. H., T. A. Green, L. C. Graham, and K. Murray. SVPHS Section Symposium: School Integrated Pest

Management. Entomological Society of America National Meeting, Reno, Nevada. Submitted

- November 13-16, 2011. Organizers and Speaker: Gouge, D. H. and L. C. Graham. School IPM Network & eXtension Meeting. 59<sup>th</sup> Entomological Society of America, National Meeting, Reno, NV. Reno, Nevada. Submitted
- November 13-16, 2011. Organizer and Speaker: Gouge, D. H., T. A. Green, T. Stock, C. Foss, J. A. Hurley. Identify.. Clarify.. Speak Out.. About IPM Implementation in Schools. 2011 ESA Annual Meeting, Reno, Nevada. Submitted
- March 27–29, 2012. Organizer and Speaker: Gouge, D. H. and J. Gangloff-Kaufmann. Adventures in Community IPM – Systems that work the bed bugs out. 7<sup>th</sup> International IPM Symposium - IPM on the World Stage, Memphis, Tennessee. Submitted
- March 23-27, 2015. Organizer and Moderator: Gouge, D. H., L. Braband, S. Nair. Tools for Successful IPM in Schools and Childcare Centers: Collaborating Resources for National IPM Training Program and Best Management Practices. 8<sup>th</sup> International IPM Symposium - IPM: Solutions for a Changing World, Salt Lake City, Utah. Submitted

## Conferences

## Presentations at Conferences

- December 9-12, 2007. Student Presentation. Yu, H., D. H. Gouge, P. Baker. Parasitism of subterranean termites (Isoptera: Rhinotermitidae) by entomopathogenic nematodes (Rhabditida: Steinernematidae; Heterorhabditidae). Entomological Society of America National Meeting, San Diego, California. Submitted
- February 3-5, 2008. Gouge, D. H. Greening Our Schools. Association of Applied IPM Ecologists – Ecological Pest Management Conference and 42<sup>nd</sup> Annual Meeting, San Luis Obispo, California. Invited
- May 18-21, 2008. Green, T. and D. H. Gouge. National Pest Management Strategic Plan for School IPM. 2008 National Conference on Urban Entomology. Tulsa, Oklahoma. Submitted
- May 18-21, 2008. Graham, L and D. H. Gouge. Regional Working Groups. 2008 National Conference on Urban Entomology. Tulsa, Oklahoma. Submitted

- November 16-19, 2008. Gouge, D. H. and J. Le-Melk. Kids Issues and the Importance of IPM. Entomological Society of America National Meeting, Reno, Nevada. Submitted
- November 16-19, 2008. Gouge, D. H. Boarder IPM in Schools and Childcare Facilities. SVPHS Section Symposium: School Integrated Pest Management Entomological Society of America National Meeting, Reno, Nevada. Submitted
- April 3-4, 2009. Gouge, D. H. The State Extension Perspective overview of work/experience with school IPM/child care facilities. 27<sup>th</sup> National Pesticide Forum -Bridge to an Organic Future: Opportunities for health and the environment, Carrboro, North Carolina. Invited
- December 12-15, 2010. Merchant, M., Oi, F., Braband, L., Gouge, D. H. IPM in Schools. 58<sup>th</sup> Entomological Society of America, National Meeting, San Diego, California. Submitted
- January 7, 2011. Gouge, D. H. The Ultimate Parasite-When Are You Going to be a Bed Bug's Best Buddy? Medical Entomology Today, Tucson, Arizona. Invited
- February 18, 2011. Gouge, D. H. Bed Bugs and Property Management. Southwest Regional National Association of Residential Property Managers Conference, Phoenix, Arizona. Invited
- March 27-29, 2012. Gouge, D. H. Pesticide Potpourri. 7<sup>th</sup> International IPM Symposium, Memphis, Tennessee. Submitted
- July 17-21, 2012. Gouge, D. H. School is no place for blood sucking bed bugs or allergenic cockroaches. 59<sup>th</sup> Arizona Association of School Business Officials Annual Conference and Exposition, Tucson, Arizona. Submitted
- April 7-9, 2014. Gouge, D. H. Edutainment-Education with a smile. 98<sup>th</sup> ESA-Pacific Branch Meeting, Tucson, Arizona. Invited
- November 16-19 2014. Gouge, D. H. Simple solutions: Big results. 62<sup>nd</sup> ESA National Meeting, Portland, Oregon. Invited
- March 23-27, 2015. Bolton, H., L. Braband, M. Duke, C. Foss, L. Graham, D. H. Gouge, T. Green, J. Hurley, D. Kopec, S. Li, K., S. Nair, M. Page, S. T. Ratcliffe, G. Smith, M. Snyder, T. Stock, K. U., D. Young. Stop School Pests - Whole Sale Education Efforts to Kickstart a School IPM Program. 8<sup>th</sup> International IPM Symposium, Salt Lake City, Utah. Submitted

- 16. September 25-29, 2016. Gouge, D. H., S. Li, S. Nair, M. Wierda, K. Drake, T. Stock, A. Fournier. Extreme Pesticide Use in Response to *Cimex lectularius* and *Blattella germanica* Infestations. XXV International Congress of Entomology, Orlando, Florida. Submitted
- September 25-29, 2016. Li, S., D. H. Gouge, A. Fournier, T. Stock, A. Romero, D. Young, S. Nair, C. Foss, R. Kerzee, D. Stone, M. Dunn, D. Spurgeon, R. LaMorte. Life Quality Impacts of Bed Bug (*Cimex lectularius* L.) Infestations. XXV International Congress of Entomology, Orlando, Florida. Submitted
- 18.September 25-29, 2016. Nair, S., D. H. Gouge, A. Fournier, K. Umeda, D. Kopec, U. Schuch, S. Li, P. Warren, M. Wierda. School IPM Inside and Out. XXV International Congress of Entomology, Orlando, Florida. Submitted
- 19.March 19–22, 2018. Gouge, D. H., S. Li, S. Nair, N. Pier. Integrated Pest Management— A Simple Solution to Wicked Problem Pests in Elderly and Disabled Public Housing. 9<sup>th</sup> International IPM Symposium, Baltimore, Maryland. Invited

## Presentations for On-line Conferences

- April 13, 2016. Gouge, D. H., S. Li, S. Nair, K. Drake. Bed Bugs in Elderly and Disabled Low-income Housing – Getting Real! Enhancing Environmental Health Knowledge (EEK): Vectors and Public Health Pests Virtual Conference, <u>http://www.neha.org/newsevents/community-calendar/eek-vectors-and-public-health-pests-virtual-conference</u>. 60 views. Submitted
- April 13, 2016. Li, S., D. H. Gouge, A. J. Fournier, T. Stock, A. Romero, D. Young, S. Nair, C. Foss, R. Kerzee, D. Stone, M. Dunn. Bed Bug (*Cimex lectularius* L.) Infestations Impact Quality of Life. Enhancing Environmental Health Knowledge (EEK): Vectors and Public Health Pests Virtual Conference, <u>http://www.neha.org/news-events/community-calendar/eek-vectors-and-public-health-pests-virtual-conference</u>. 44 views. Submitted
- April 13, 2016. Li, S., D. H. Gouge, S. Nair., A. J. Fournier, K. Walker, J. Hurley. Mosquitoes and Mosquito-borne Pathogens. Enhancing Environmental Health Knowledge (EEK): Vectors and Public Health Pests Virtual Conference, <u>http://www.neha.org/news-events/community-calendar/eek-vectors-and-public-healthpests-virtual-conference</u>. 49 views. Submitted

- April 14, 2016. Nair, S., D. H. Gouge, A. Fournier, K. Umeda, D. Kopec, U. Schuch, S. Li, P. Warren, M. Wierda. School IPM Inside and Out. Enhancing Environmental Health Knowledge (EEK): Vectors and Public Health Pests Virtual Conference, <u>http://www.neha.org/news-events/community-calendar/eek-vectors-and-public-health-pests-virtual-conference</u>. 14 views. Submitted
- May 15-16, 2018. Nair, S., S. Li and Dawn H. Gouge. Communicating about bed bugs to diverse audiences using diverse tools. National Environmental Health Association (NEHA) Enhancing Environmental Health Knowledge: Vectors and Public Health Pests Virtual Conference, 143 participants, 113 NEHA CEs.
- May 15-16, 2018. Li, S., Gouge, D.H., Nair, S. and Fournier, A. Implementation of Integrated Pest Management in Elderly/Disabled Public Housing Facilities. Poster presentation. National Environmental Health Association (NEHA) Enhancing Environmental Health Knowledge: Vectors and Public Health Pests Virtual Conference, 80 participants, 56 NEHA CEs.

## Posters at Conferences

- December 9-12, 2007. Green, T., D. H. Gouge, A. Fournier, M. L. Lame, G. Pettis, S. Glick, R. Melnicoe, and L. Herbst. A pest management strategic plan for integrated pest management in schools in the United States. Entomological Society of America National Meeting, San Diego, California. Submitted
- November 11-14, 2012. Stevens, B. K., D. H. Gouge, K. Umeda, U. Schuch, D. Kopec, A. Fournier, and P. Baker. Indoor/Outdoor School IPM in Arizona. 60<sup>th</sup> Entomological Society of America, National Meeting, Knoxville, Tennessee. Submitted
- November 16-19, 2014. Gouge, D. H. Stop School Pests: A national IPM standard training program. 62<sup>nd</sup> ESA National Meeting, Portland, Oregon. Submitted
- March 23-27, 2015. Gouge, D. H., S. Li, A. Fournier, T. Stock, A. Romero, D. Young, S. Nair, C. Foss, R. Kerzee, D. Stone, and M. Dunn. Quality of Life Impacts of Bed Bug (*Cimex lectularius* L.) Infestations. 8<sup>th</sup> International IPM Symposium, Salt Lake City, Utah. Submitted
- April 2-5, 2017. Umeda, K., S. Nair, D. H. Gouge, Fournier, A.J., U. K. Schuch, S. Li, P. Warren, D. Kopec, M. Wierda. School IPM Inside and Out: Advances and

Accomplishments of the Arizona Program. 101st Annual Meeting of the Pacific Branch of the Entomological Society of America, Portland, Oregon. Submitted

- March 19-22, 2018. Nair, S., T. Green, D. H. Gouge, K. Umeda, A. Fournier, S. Li, U. Schuch, D. Kopec. Recognizing Excellence in School Integrated Pest Management, Baltimore, Maryland. Submitted
- 7. March 19-22, 2018. Green, T., D. H. Gouge, M. Zastrow. School Pests online integrated pest management training courses for school employees, Baltimore, Maryland. Submitted

## **Conferences Organization**

- March 27-29, 2012. Steering Committee Member and Program Committee Co-Chair 7<sup>th</sup> International IPM Symposium, Memphis, Tennessee. The Symposium attracted more than 630 research, education, government, industry and environmental and health professionals from 36 countries for three days of presentations, networking and organizational meetings on key pest management issues.
- March 23-27, 2015. Steering Committee Member and Program Committee Co-Chair 8<sup>th</sup> International IPM Symposium, Salt Lake City, Utah. The Symposium attracted more than 446 research, education, government, industry and environmental and health professionals from 27 countries for three days of presentations, networking and organizational meetings on key pest management issues.
- March 18-23, 2018. Steering Committee Member and Poster Committee 9th International IPM Symposium, Baltimore, Maryland.
- March 14-20, 2021. Steering Committee Member 10th International IPM Symposium, Denver, Colorado.

# Presentations (Extension Program Events and Presentations – During Associate and Full Rank)

{Continuing Education Units=CEUs} OPM = AZ Office of Pest Management (2016 became AZ Division of Pest Management), NEHA = National Environmental Health Association, NASN = National Association of School Nurses. Speaker: Gouge, D. H. only, unless others are listed.

- September 20, 2007. Scorpions. Phoenix Home Owners Association. Phoenix, Arizona. Invited
- January 24-25, 2008. A Child's Environmental Health Program. Board of Regents, Tucson, Arizona. Invited
- March 26, 2008. Integrated Pest Management (IPM) Programs for Schools. Vector-Borne and Zoonotic Disease Conference and Workshop, Mesa, Arizona. Invited
- April 30, 2008. Bed Bug Update 2008. Pest Management Professionals Training. Univar, Tucson, Arizona. 192 participants/ 192 CEUs. Invited
- June 24, 2008. Green Pest Management A Strategic Plan for Schools. National Environmental Health Association, Tucson, Arizona. Invited
- February 26, 2009. Food Safety and Integrated Pest Management. Maricopa County Food Safety Workshop, Mesa, Arizona. Invited
- March 7, 2009. War on Bugs. College of Agriculture and Life Science Board of Directors. Maricopa, Arizona. Invited
- May 6, 2009. Batty about Bats Bat IPM Guidance. Vector Borne and Zoonotic Disease Conference and Workshop. Mesa, Arizona. Invited
- September 1, 2009. School IPM. Association of Structural Pest Control Regulatory Officials 53<sup>rd</sup> Annual Meeting. Denver, Colorado. Invited
- November 23, 2009. Pesticide Health Effects. Maricopa County Master Gardeners Inservice, Phoenix, Arizona. Speaker and Event Coordinator
- September 8, 2009. Don't Let the Bed Bugs Bite. Maricopa County Master Gardeners, Phoenix, Arizona. Speaker and Event Coordinator
- September 21-22, 2009. Vector-borne Diseases of Public Health Importance, Structural Pest Management, Health Effects of Pesticides, Tick Management, Inspection Practicum. Biology and Control of Vectors and Public Health Pests: The Importance of Integrated Pest Management. Okoboji, Iowa. Invited
- September 29-30, 2009. IPM Sensitive Environments and Green Pest Management. Arizona Going Green Continuing Education Conference and Expo, Mesa, Arizona. Invited
- November 23, 2009. Pesticide Health Effects. Maricopa County Master Gardeners Inservice, Phoenix, Arizona. Speaker and Event Coordinator

- February 8, 2010. Pests and Pest Ecology. Target Specialty Products Continuing Education Conference and Expo. Mesa, Arizona. Invited
- 16. February 13, 2010. How and Why to Implement an IPM Program, Bed Bugs and Blood Feeding Bugs in the Classroom. Northern New England Masters Conference. Exeter, New Hampshire. Invited
- May 13, 2010. With D. Hickok. StopPests in San Francisco Public Housing, Sunnydale, California. Speaker and Event Coordinator
- June 10, 2010. With A. Taisey and C. Foss. StopPests in Guam Housing and Urban Renewal Authority Public Housing, Toto Gardens, Guam. Speaker and Event Coordinator
- 19. June 17, 2010. With A. Taisey and C. Foss. StopPests in Hawaii Public Housing, Kuhio Homes and Kuhio Park Terrace, Hawaii. Speaker and Event Coordinator
- 20. June 28, 2010. Don't Let the Bed Bugs Bite 101, Don't Let the Bed Bugs Bite Advanced. Association of Infection Control Practitioners. Prescott, Arizona. Speaker and Event Coordinator
- June, 2010. With S. Glick. Why the School Custodian in my Hero. Clark County School District Custodian In-service. Las Vegas, Nevada. Invited
- 22. July 20-21, 2010. Arthropod Pest Management in Schools, Ectoparasite IPM (ticks & head lice), Management of Rodents and Bats, The Ultimate Parasite, School Inspection Practicum. National Tribal School IPM Training Program. Phoenix, Arizona. Speaker and Event Coordinator
- 23. August 26, 2010. Bed Bugs Advanced Class Management Protocols, Pesticide Efficacy, Risk-reduction. City of Phoenix Housing Managers and Neighborhood Services Community Workers Workshop. Phoenix, Arizona. Speaker and Event Coordinator
- September 29-30, 2010. IPM Sensitive Environments and Green Pest Management.
   Arizona Saguaro Continuing Education Conference and Expo, Carefree, Arizona. Invited
- November 12, 2010. Bed bugs, Mosquitoes and West Nile Virus. Community Pest Issues Workshop. Phoenix, Arizona. Speaker and Event Coordinator
- 26. November 16-17, 2010. Going Green with Pest Control in your Kitchen. Maricopa County Food Safety from the Field to the Table, Mesa, Arizona. Invited

- 27. November 18-19, 2010. Bed Bugs. Arizona Department of Health Services Office of Environmental Health, Food Safety and Environmental Services Program. Arizona Registered Sanitarian Conference, Phoenix, Arizona. Invited
- February 22, 2011. The Science of Bed Bugs Part I and Part II. National Association of Residential Property Managers, Affordable Housing Management Association – Pacific Southwest Conference. Phoenix, Arizona. 121 participants. Invited
- 29. February 23, 2011. Phoenix Housing Authority Bed Bug Planning. City of Phoenix Strategic Planning Meeting, Phoenix, Arizona. 18 participants. Speaker and Event Coordinator
- February 25, 2011. Bed Bugs. American Industrial Hygiene Association Training. Phoenix, Arizona. 47 participants. Invited
- March 1, 2011. IPM in Sensitive Accounts. Target Specialty Products Conference and Expo. Phoenix, Arizona. 49 participants. Invited
- 32. March 15, 2011. School IPM Practicum. New Mexico School IPM Coalition and Site Audit Workshop. Albuquerque, New Mexico. 23 participants. Speaker and Event Co-Coordinator
- March 18, 2011. City of Phoenix Community IPM Training In-service Day, Phoenix, Arizona. 57 participants/456 CEUs. Speaker and Event Co-Coordinator
- March 25, 2011. City of Phoenix Community IPM Training In-service Day, Phoenix, Arizona. 43 participants/344 CEUs. Speaker and Event Co-Coordinator
- 35. April 19, 2011. With A. Code and T. Stock. StopPests in Phoenix Public Housing, Pine Towers, Arizona. Speaker and Event Coordinator
- 36. May 5, 2011. With A. Code and T. Stock. StopPests in Housing Authority of Portland, Hollywood East, Oregon. Speaker and Event Coordinator
- April 6-7, 2011. Yakama School IPM Workshop, School Inspection and Tribal Council Presentation. Yakama, Washington. 33 participants. Speaker and Event Co-Coordinator
- April 18-19, 2011. Phoenix Housing Authority, Multifamily Housing Training and Site Inspection. Phoenix, Arizona. 44 participants/16 CEUs. Speaker and Event Coordinator
- April 20, 2011. Bed Bugs Bite. City of Phoenix Housing Department Community Partners Meeting, Phoenix, Arizona. 43 participants. Invited

- April 27, 2011. Bed Bug and Cockroach Training Day. Yuma County Master Gardeners.
   Yuma, Arizona. 36 participants. Speaker and Event Co-Coordinator
- 41. May 4-5, 2011. Multifamily Housing IPM Training Workshop, Portland Housing Authority. Portland, Oregon. 46 participants. Speaker and Event Co-Coordinator
- May 17-19, 2011. Montana School IPM Coalition Training and Site Audit. Bozeman, Montana. 42 participants. Speaker and Event Co-Coordinator
- 43. May 25, 2011. Bed Bugs and MRSA Training. Maricopa County Community IPM Training Day. Phoenix, Arizona. 53 participants. Speaker and Event Coordinator
- July 27, 2011. Bed Bugs. 2<sup>nd</sup> Annual Infectious Disease Training. Tempe, Arizona. 59 participants/42 CEUs. Invited
- 45. September 7, 2011. Kyrene School District Need Assessment Exercise. Phoenix, Arizona. Speaker and Event Coordinator
- 46. September 17, 2011. Resident Training and Workshop on Pests and IPM. Phoenix Housing Authority. Phoenix, Arizona. 54 participants. Speaker and Event Coordinator
- 47. September 21, 2011. Bed bugs and IPM. Phoenix Union High School District Nursing Staff In-service Training. Phoenix, Arizona. 33 participants. Speaker and Event Co-Coordinator
- September 22, 2011. Bed Bugs. City of Phoenix Case Worker IPM Workshop. Phoenix, Arizona. 59 participants. Speaker and Event Coordinator
- September 23, 2011. Phoenix Union High School District External Campus Audit (Metro Tech High school). Phoenix, Arizona. 14 participants. Speaker and Event Coordinator
- September 24, 2011. Public Housing Authority Residents Training Bed Bugs and IPM. Phoenix, Arizona. 49 participants. Speaker and Event Coordinator
- October 1, 2011. Public Housing Authority Residents Training Bed Bugs and IPM. Phoenix, Arizona. 52 participants. Speaker and Event Coordinator
- October 3, 2011. Bed bugs. Pest Management Professionals Task Force Meeting. Scottsdale, Arizona. Speaker and Event Coordinator
- October 28-29, 2011. Creepy Crawly Night at the Museum STEM Event. Scottsdale, Arizona. 37 participants. Invited
- November 1-3, 2011. Bed Bugs, Pests/Vectors in Housing and Food Environments, Rodent Biology and Management, Health Effects of Pesticides, Mosquito Biology and

Management. Biology and Control of Vectors and Public Health Pests: The Importance of Integrated Pest Management. Sacramento, California. 57 participants/684 CEUs. Invited

- 55. November 7, 2011. Phoenix Union High School District External Audit and Priority Setting Workshop, Phoenix, Arizona. Speaker and Event Coordinator
- 56. January 25, 2012. What's The Impact of the Environment on Our Health? Valley Forward Quarterly Luncheon, Phoenix, Arizona. Invited
- February 8, 2012. Maricopa Unified School District Bed Bug and Head Lice In-service, Maricopa, Arizona. 21 participants. Invited
- February 13-15, 2012. Control of Rocky Mountain Spotted Fever and Other Tick-Borne Diseases, Chandler, Arizona. 102 participants. Invited
- February 17, 2012. Phoenix Union High School Facility Manager In-service, Phoenix, Arizona. 9 participants. Speaker and Event Coordinator
- February 21, 2012. Phoenix Union High School Landscape and Grounds In-service, Phoenix, Arizona. 40 participants/21 CEUs. Speaker and Event Coordinator
- February 27, 2012. School IPM Workshop for Gilbert Unified School District, Gilbert, Arizona. 40 participants. Speaker and Event Co-Coordinator
- March 19, 2012. School IPM Workshop for Gilbert Unified School District, Gilbert, Arizona. 8 participants. Speaker and Event Co-Coordinator
- March 22, 2012. School IPM Workshop for Catalina Foothills School District, Tucson, Arizona. 9 participants. Speaker and Event Co-Coordinator
- 64. April 11, 2012. Integrated Pest Management for City of Phoenix Parks and Rec Staff.Phoenix, Arizona. 72 participants/444 CEUs. Speaker and Event Co-Coordinator
- April 16, 2012. Maricopa County Environmental Services In-service. Bed Bug IPM, Phoenix, Arizona. 27 participants/27 CEUs. Invited
- April 17, 2012. Maricopa County Environmental Services In-service. Bed Bug IPM, Phoenix, Arizona. 33 participants/33 CEUs. Invited
- May 1, 2012. Practicum and Site Audit School IPM Catalina Foothills School District, Tucson, Arizona. Speaker and Event Coordinator
- 68. May 7, 2012. With E. Willott. Primavera Shelter Site Audit and Pest Management Planning Practicum, Tucson, Arizona. Speaker and Event Coordinator

- May 10, 2012. Phoenix Dream Center Site Audit and Pest Management Planning Practicum, Phoenix, Arizona. Speaker and Event Coordinator
- 70. May 11, 2012. Gilbert Unified School District Site Audit, Gilbert, Arizona. Speaker and Event Coordinator
- May 16, 2012. Phoenix Union Elementary School District and Littleton School Site Audit, Phoenix, Arizona. Speaker and Event Coordinator
- May 21, 2012. Paradise Valley Golf Course Site Inspection for Bark Scorpions. Paradise Valley, Arizona. Invited
- May 24, 2012. Casa Grande Fire Station 503 Inspection and Bed Bug Practicum. Casa Grande, Arizona. Invited
- 74. June 11-14, 2012. IPM Basics for Environmental Health Professionals, Bed Bug Biology and Control, Bed Bug Practicum, Tick Biology and Control, Pest and Vectors in Food and Housing Environments, The Health Effects of Pesticides. Biology and Control of Vectors and Public Health Pests: The Importance of Integrated Pest Management. Health effects of pesticides; Biology and control of vectors and public health pests: Importance of IPM Workshop. Kansas City, Missouri. 42 participants/505 CEUs. Invited
- 75. July 25, 2012. Mesa Public School District Operations In-service. Mesa, Arizona. Approximately 700 participants/55 CEUs. Invited
- 76. July 26, 2012. Bed Bugs Office Space and Aircraft. Confidential Passenger Aircraft Company Briefing. Invited
- February 1, 2013. Bed Bugs and IPM. Phoenix Union High School In-service. Phoenix, Arizona. 30 participants. Speaker and Event Co-Coordinator
- February 19, 2013. Arthropod IPM Introduction and practicum. Class at Tempe High School -part of CAC course, Tempe, AZ. 33 participants. Invited
- March 5, 2013. Bed Bugs Bite. Chandler-Gilbert Science Café, Chandler, AZ. 8 participants. Invited
- March 8, 2013. Wine Oh Dino, Beer N' Bones. Museum Outreach Event: Arizona Museum of Natural History, Mesa, Arizona. 47 participants. Invited
- March 15, 2013. Ak-Chin School IPM Site Audit and IPM Practicum. Ak-Chin Indian Community. Speaker and Event Coordinator

- 82. April 3-5, 2013. Bed Bug Biology and Control, Bed Bug Practicum, Tick Biology and Control, Pest and Vectors in Food and Housing Environments, The Health Effects of Pesticides, Special Pest Management Considerations for Schools. Biology and Control of Vectors and Public Health Pests: The Importance of Integrated Pest Management. Health effects of pesticides; Biology and control of vectors and public health pests: Importance of IPM Workshop, Columbia, South Carolina. 59 participants/1083 CEUs. Invited
- April 10, 2013. Bed Bugs and Integrated Pest Management (IPM), 3 classes for School District Staff. Phoenix, Arizona. 89 participants. Speaker and Event Coordinator
- 84. April 30, 2013. Cockroaches and other key kitchen pests, Blood-feeding Bugs go to School –Bed Bugs, Head Lice, Management of Rodents and Bats in Schools. Reducing Risks from Pests and Pest Management Practices in Public Schools – a Statewide Initiative: IPM in a Child's World, Prescott, Arizona. 15 participants/40 CEUs. Speaker and Event Coordinator
- 85. May 21-23, 2013. Basics for Environmental Health Professionals, Special Pest Management Considerations for Schools, Bed Bug Practicum, The Health Effects of Pesticides. Biology and Control of Vectors and Public Health Pests: The Importance of Integrated Pest Management. Health effects of pesticides; Biology and control of vectors and public health pests: Importance of IPM Workshop, Columbia, South Carolina. 71 participants/1344 CEUs. Invited
- 86. July 8-11, 2013. With Li, S., and Nair, S. Going Buggy: 4 day junior summer camp for youths. Arizona Museum of Natural History, Mesa, Arizona. 26 participants. Speaker and Event Coordinator
- August 28, 2013. With Roppe, J. Solar Ranch Inspection and IPM Audit. Copper Crossing, Iberdrola Renewables, Florence, Arizona. Invited
- September 15, 2013. Keep your wits, lose the nits! 3rd Arizona Insect Festival Seminar. Invited
- September 18, 2013. IPM practices, bed bugs, and bed bugs hand on activity and demonstration. Inter-Tribal Council of Arizona, Tribal Pesticide Inspector Training. 33 participants. Invited
- 90. September 26, 2013. Keeping Bugs Out-Sleep Tight and Don't Let the Bed Bugs bite. Arizona Senior Academy Seminar, Tucson, AZ. 49 participants. Invited

- October 28, 2013. With D. Kopec, S. Nair, U. Schuch. Catalina School District Site and IPM Audit, Tucson, Arizona. Speaker and Event Co-Coordinator
- November 1, 2013. With S. Nair, L. Li. Mesa Public School District Site and IPM Audit, Mesa, Arizona. Speaker
- 93. November 13, 2013. Bees and Wasps, Management of Rodents and Bats in Schools. IPM in a Child's World: Reducing Risks from Pests and Pest Management Practices in Public Schools – a Statewide Initiative. Flagstaff, Arizona. 27 participants/20 CEUs. Speaker and Event Co-Coordinator
- 94. December 11, 2013. With D. Kopec, S. Nair, U. Schuch. Gilbert Public and Phoenix Union School District Site Inspections and IPM Audits. Gilbert and Phoenix, Arizona. Speaker and Event Co-Coordinator
- 95. January 1, 2014. With S. Li. Human scabies. Maricopa Unified School District Administrative Office, Maricopa, Arizona. 11 participants. Invited
- 96. March 4, 2014. Introduction to IPM and resource description; Don't let the bed bugs bite; Pesticide safety; Scabies management (4 presentations). Seminar on School IPM-(State Signature Program Initiative Project-IPM in a Child's World- Reducing Risks from Pests and Pest Management Practices in Public Schools). Maricopa Cooperative Extension Office, Phoenix, Arizona. 21 participants/91 CEUs. Speaker and Event Coordinator
- 97. April 2, 2014. UA-EPA School IPM Grant "Big Check" presentation and recognition event, Metro Tech High School, Phoenix, Arizona. 50 participants. Speaker and Event Coordinator
- April 14, 2014. Wine Oh Dino, Beer N' Bones. Interactions with Arthropods. Arizona Museum of Natural History, Mesa, Arizona. 78 participants. Invited
- 99. April 23, 2014. Don't let the bed bugs bite; Scabies management (2 presentations). Seminar on School IPM-(State Signature Program Initiative Project-IPM in a Child's World- Reducing Risks from Pests & Pest Management Practices in Public Schools). Yuma Cooperative Extension Office, Yuma, Arizona. 29 participants/91 CEUs. Speaker and Event Coordinator
- April 25, 2014. With S. Nair and S. Li. Pests in Community Environments Live Demonstration. Ak-Chin Earth Day Celebrations, Ak-Chin Recreation Center, Maricopa, AZ. 500 participants. Invited

- 101. May 15, 2014. Bed bugs Love at First Bite. State Vector & Zoonotic Diseases Conference, Arizona Dept. of Health Services. Flagstaff, Arizona. 75 participants/42 CEUs. Speaker and Event Co-Coordinator
- 102. May 21, 2014. When bugs were bigger. Arizona College Prep, Chandler, AZ. 61 youth participants (7, 8, & 9th grade). Invited
- 103. June 24, 2014. Pest Inspection Practicum, Health Effects of Pesticides. Biology and Control of Vectors and Public Health Pests: The Importance of Integrated Pest Management. Health effects of pesticides; Biology and control of vectors and public health pests: Importance of IPM Workshop. Tucson, Arizona. 21 participants/24 CEUs. Invited
- 104. July 15, 2014. Pest management in practice; Bed bug IPM; Tick management (3 presentations). Integrated Pest Management Workshop for Schools and Institutions, organized by Gila River Indian Community Dept. of Environmental Quality, Wild Horse Pass Hotel and Casino Conference Center, Chandler AZ. 45 participants. Invited
- July 22, 2014. Safe or silly: Appropriate action and reaction. Mesa Public Schools Maintenance Staff Annual Refresher Event. Mesa, AZ. 500 participants/8 CEUs. Invited
- August 5-8, 2014. Special Pest Management Considerations for Schools,
   Mosquito Biology and Control, Pest Inspection Practicum, Health Effects of Pesticides.
   Biology and Control of Vectors and Public Health Pests: The Importance of Integrated
   Pest Management. Atlanta, GA. 72 participants/352 CEUs. Invited
- September 10, 2014. Lessons Learned School IPM. Video conference event for EPA regional school IPM coordinators. 11 participants. Invited
- 108. September 16-18, 2014. Bed Bug Biology and Control, Special Pest Management Considerations for Schools, Pest Inspection and IPM Practicum, Health Effects of Pesticides. Biology and Control of Vectors and Public Health Pests: The Importance of Integrated Pest Management. Richardson, Texas. 51 participants/512 CEUs. Invited
- September 23-25, 2014. Stop-School-Pests: National Standardized School IPM Training and Certification/Certificate Program All-hands Program Strategy Event, Dallas, Texas. 21 participants. Speaker and Event Co-Coordinator

- October 4, 2014. With S. Nair. Pests in community environments live demo.
   Central Arizona Cooperative Extension Centennial Celebration Celebrating the Past, Envisioning the Future. Phoenix Zoo, Phoenix, Arizona. 500 participants. Submitted
- 111. October 17, 2014. Scary and Scaly Museum Overnight Event. Arizona Museum of Natural History, Mesa, AZ. 23 youth and 19 adult participants. Invited
- 112. November 5-7, 2014. Bed Bug Biology and Control, Special Pest Management Considerations for Schools, Pest Inspection and IPM Practicum, Health Effects of Pesticides. Biology and Control of Vectors and Public Health Pests: The Importance of Integrated Pest Management. Colorado Environmental Health Association Glendale, Colorado. 51 participants/528 CEUs. Invited
- 113. February 4, 2015. Bed Bug Management Strategies. Arizona County Directors of Environmental Health Services Association Annual Conference. Laughlin, Nevada. 56 participants/56 NEHA CEUs. Invited
- 114. February 14, 2015. I Love Science Day. With N. Pier, S. Nair, S. Li. ArizonaMuseum of Natural History, Mesa, AZ. 767 youth and adult participants. Invited
- February 25, 2015. Stop School Pests for School Nurses. Apache Junction Unified Schools In-service. Apache Junction, Arizona. 9 participants. Invited
- March 3, 2015. Stop School Pests, School IPM leaning objectives exercise.Phoenix, AZ. 32 participants/126 AZ OPM CEUs. Speaker and Event Co-Coordinator
- April 24, 2015. Beer N' Bones. Interactions with Arthropods. Arizona Museum of Natural History, Mesa, Arizona. 285 participants. Invited
- July 17, 2015. Roaring Reptiles Museum Overnight Event. Arizona Museum of Natural History, Mesa, AZ. 21 youth and 15 adult participants. Invited
- 119. July 23-24, 2015. IPM Basics for Environmental Health Professionals, Mosquito Biology and Control, Rodent Biology and Control, Pest Inspection Practicum. School IPM for Tribes. Phoenix, AZ. 20 participants. Intertribal Council of Arizona Workshop and Practicum. Speaker and Event Co-Coordinator
- August 7, 2015. Mosquito Madness. Southwest Horticulture Annual Day of Education (SHADE) Conference, Tucson, AZ. 30 participants/4 CEUs. Invited
- 121. September 22, 2015. Itchy bug update: Training for school nurses, ESS facilitators, maintenance and administrative staff. Phoenix Union High School District

Support Facility, Phoenix AZ. 26 participants. Invited

- 122. October 2, 2015. Night with the Stars. With R. La Morte. Interactions with Arthropods. Arizona Museum of Natural History, Mesa, Arizona. 241 participants. Invited
- October 15, 2015. Itchy Bugs and Adult Day Health Centers. Phoenix AZ. 12 participants. Invited
- 124. October 26, 2015. Mosquitoes; Bed bugs and other itchy bugs. State Signature Program Initiative School IPM Seminar. Pima Cooperative Extension Office, Tucson, AZ. 19 participants/38 AZ OPM CEUs. Speaker and Event Co-Coordinator
- 125. October 29, 2015. Mosquitoes; Bed bugs and other itchy bugs. State Signature Program Initiative School IPM Seminar. Maricopa Cooperative Extension Office, Phoenix, AZ. 52 participants/ 104 AZ OPM CEUs. Speaker and Event Co-Coordinator
- 126. November 4, 2015. Bed Dread Human Health Impacts of Bed Bugs. Arizona Department of Health Services Conference for Registered Sanitarians, Phoenix, AZ. 51 participants/50 NEHA CEUs. Invited
- 127. November 10, 2015. Mosquitoes; Bed bugs and other itchy bugs. State Signature Program Initiative School IPM Seminar. Pinal Cooperative Extension Office, Casa Grande, AZ. 15 participants/30 AZ OPM CEUs. Speaker and Event Co-Coordinator
- December 10, 2015. Bite's, Stings and Crazy Things. Arizona Pest Professionals
   Southern Chapter. Tucson, AZ. 10 participants/8 AZ OPM CEUs. Invited
- February 11, 2016. Bite's, Stings and Crazy Things. Arizona Pest Professionals Northern Chapter. Phoenix, AZ. 29 participants/26 AZ OPM CEUs. Invited
- February 13, 2016. I Love Science Day. Arizona Museum of Natural History, Mesa, AZ. 271 youth and adult participants. Invited
- 131. February 25, 2016. General IPM Philosophy; Non-target toxicological concerns; Modes of Action. Pesticide Safety Education Workshop. Sierra Vista, AZ. 55 participants/30 AZ OPM CEUs & 9 AZ ADA CEUs. Speaker
- 132. March 2, 2016. Mosquitoes, biting midges, ticks; Rodents. State Signature Program Initiative School IPM. Mohave Cooperative Extension Office, Kingman, AZ. 32 participants/36 AZ OPM CEUs. Speaker

- March 10, 2016. Working with Bed Bugs. Phoenix Housing Maintenance StaffIPM Education Morning. Phoenix, AZ. 48 participants. Invited
- March 29, 2016. Subsidized Housing IPM. Northwestern Annual Education Conference. Tucson, AZ. 83 participants/166 AZ OPM CEUs. Invited
- 135. March 31, 2016. Medically Significant Venomous Insects and Arachnids (2 presentations). Arizona Public Service (APS) Occupational Health and Safety Education Phoenix In-service. 52 participants. Invited
- April 15, 2016. Bed Bug Adventure Game. Resident Outreach Event. City of Phoenix Housing. Phoenix, AZ. 19 + 1 youth participant. Speaker and Event Coordinator
- April 22, 2016. Beer N' Bones. With N. Pier. Interactions with Arthropods.Arizona Museum of Natural History, Mesa, Arizona. 812 participants. Invited
- 138. May 5, 2016. Mosquitoes, biting midges, ticks; Rodents. State Signature Program Initiative School IPM. Cochise Cooperative Extension Office, Sierra Vista, AZ. 27 participants/18 AZ OPM CEUs. Speaker
- May 10, 2016. Stop School Pests and iSchool Pest Manager School IPM Tools.
   EPA Webinar. <u>https://www.epa.gov/managing-pests-schools/previous-webinars-about-</u> <u>integrated-pest-management-schools</u>. 550 unique views from 47 states, 1 territory, (Puerto Rico) and 3 foreign countries (Mexico, Canada and Spain). Staff from 367 schools / districts/ childcare centers serving 3,950,006 students. Invited
- 140. May 12, 2016. Science Café –Bed Bugs National Pest Management Month.Phoenix AZ. 22 participants. Invited
- May 13, 2016. Injury or Death from Arboviruses Vectored by Mosquitoes. Eagle International Associates Lawyer Conference. Phoenix, AZ. 63 participants. Invited
- May 17, 2016. #1 Pests in Schools. EPA Webinar.
   <u>https://www.epa.gov/managing-pests-schools/previous-webinars-about-integrated-pest-management-schools</u>. 568 unique views from 45 states, 1 territory (Puerto Rico) and 2 foreign countries (Mexico and Canada). Staff from 412 schools / districts/ childcare centers serving 3,228,175 students. Invited
- 143. May 25, 2016. Stop School Pests and National School IPM 2020 Team. EPA School Integrated Pest Management (IPM) Roundtable. Washington, DC. 23 organizations with a pediatric health focus, 41 participants. Invited

- 144. July 12, 2016. Mosquitoes and Arbovirus Risk Ever More Interesting by the Day. Pima School Nursing Staff Health Conference. Tucson, AZ. 44 participants/44 National Association of School Nurses CEUs. Invited
- 145. August 19, 2016. Medically Significant Venomous Insects and Arachnids. Arizona Public Service (APS) Occupational Health and Safety Education, Cottonwood In-service. 38 participants. Invited
- 146. August 31-September 1, 2016. Medically Significant Venomous Pests, Pest Inspection Practicum. School IPM for Tribes. Phoenix, AZ. 37 participants/11 AZ OPM CEUs. Intertribal Council of Arizona Workshop and Practicum. Speaker
- 147. January 14, 2017. Biting Bugs Workshop for Teachers. Maricopa, AZ. 17 participants. Project Puente Workshop and Practicum in collaboration with Central Arizona College. Instructor
- February 11, 2017. I Love Science Day. Arizona Museum of Natural History, Mesa, AZ. 415 youth and adult participants. Invited
- March 16, 2017. Bites, Stings, & Crazy Things in Arizona. 2017 Vector Control Workshop, Phoenix, AZ. 185 participants. Invited
- March 22, 2017. Biology and Behavior of the Perfect Ectoparasite. Target Specialty Products. Gilbert, AZ. 62 participants/64 CEUs. Instructor
- March 29, 2017. Working Around Wild Honey Bees and Other Stinging Pests.
   Tempe, AZ. 51 participants/14 CEUs. Invited
- 152. April 19, 2017. Health Impacts of Bed Bugs & German Cockroaches Resident Survey Results and Research Findings; Bed Bug and German Cockroach Pest Management Programs – Experiences in Housing; Pesticide Risk – Discouraging Hazardous Chemical Use. Stop Pests in Housing Workshop, Maricopa, AZ. 56 participants/48 CEUs. Instructor and Event Coordinator
- April 28, 2017. Beer N' Bones. With R. La Morte. Interactions with Arthropods.
   Arizona Museum of Natural History, Mesa, AZ. 1100 participants. Invited
- 154. May 16, 2017. Health Impacts of Bed Bugs & German Cockroaches Resident Survey Results and Research Findings; Bed Bug and German Cockroach Pest Management Programs – Experiences in Housing. Stop Pests in Housing Workshop,

Phoenix, AZ. 66 participants/16 CEUs. Instructor and Event Coordinator

- August 28, 2017. Wild Bees. SHADE Conference, Phoenix, AZ. 56 participants/69 CEUs. Instructor
- 156. November 16, 2017. Reducing Risks Associated with Pests and Pest Management and IPM in Utah. NEHA/EPA Webinar. 28 participants. Instructor
- February 7, 2018. Bed Bugs and In-home Care Workers. Pima Council on Aging, Tucson, AZ 45 participants. Instructor
- 158. February 9, 2018. Honey Bees & Venomous Arthropods of the Desert Southwest. Metro Institute, Phoenix, AZ. 12 participants/24 CEUs. Instructor Recordings of which were used in subsequent classes every week for the rest of the year generating 261 CEUs associated with Venomous Arthropods of the Desert Southwest <u>https://cals.arizona.edu/apmc/docs/venomous-arthropods.mp4</u>, and 401 CEUs associated with Honey Bees <u>https://cals.arizona.edu/apmc/docs/Wild-honey-Bees.mp4</u>.
- February 21, 2018. Bed Bugs in Schools and Childcare Centers. Bed Bug Workgroup Workshop, Las Vegas, NV. 200 participants. Instructor
- 160. March 23, 2018. Li, S., Gouge, D.H., Nair, S. and Fournier, A. Implementation of Integrated Pest Management in Elderly/Disabled Public Housing Facilities. CALS Poster Forum (presented by Shujuan Li). Agricultural and Life Science Research, University of Arizona. Tucson, AZ. 65 participants.
- April 3, 2018. Introduction to Bed Bugs. City of Glendale In-service, Glendale,AZ. 42 participants. Instructor
- April 17, 2018. Stop School Pests Inside and Out Workshop. Phoenix, AZ. 65 participants/49 CEs. Instructor
- April 24, 2018. German Cockroach and Bed Bug IPM in Low Income Elderly and Disabled Housing. HUD Housing Directors Briefing Webinar. 5 participants. Instructor
- August 4, 2018. Mosquito Challenge. Ag Media Summit. Maricopa, AZ. 27 participants. Instructor
- 165. September 12, 2018. Bed Bug Brunch and Learn Medical Environments.Hospital In-service. St. Joseph's Hospital, Tucson AZ. 32 participants. Instructor
- September 25, 2018. Mosquitoes and Neighborhood Management. Sienna HOA meeting. Chandler, AZ. 11 participants.

- 167. September 27, 2018. Mosquitoes and Neighborhood Management. Fox Crossing HOA meeting. 21 participants.
- October 1, 2018. Who's for Dinner? CALS Alumni event. Casa Grande, AZ. 25 participants.
- October 31, 2018. How to Host the Perfect Ectoparasite. AgNR In-Service. Maricopa, AZ. 35 participants.
- November 14, 2018. Community IPM and Public Health Pest Leads. German
   Cockroach and Bed Bug IPM in Low Income Elderly and Disabled Housing. HUD
   webinar. >750 participants attended online, ~1,500 registered to view the recording.
- 171. December 4-5, 2018. Community IPM and Public Health Pest Leads. Southwest Rodent Academy. 47 participants, 8 vendors, and 17 collaborators. 517 CEUs.

## Awarded Grants and Contracts (During Associate and Full Rank)

## Federal

- Gouge, D. H., A. Fournier, J. L. Snyder, P. Baker, C. Foss, T. Stock, W. Lanier. January, 2007-December, 2007. Western Region School IPM. Implementation and Assessment Work Group. \$10,000. Western Region IPM Center, USDA, NIFA. 60%, PI
- Gouge, D. H., and W. Jacox. April, 2007-March, 2010. Implementation of an IPM Program in Border Schools and Child Care Facilities. \$80,000. Environmental Protection Agency, Region IX. 95%, PI
- Gouge, D. H., A. Fournier, A. Latchininsky, A. Gebra-Amlak, C. Foss, T. Stock, W. Lanier. December, 2007-November, 2009. Western Region School IPM. Implementation and Assessment Work Group. \$20,000. Western Region IPM Center, USDA, NIFA. 70%, PI
- Green, T., D. H. Gouge, T. Stock, J. Hurley, C. Foss, L. Graham, K. Murray. October, 2008-September, 2011. Integrated Pest Management in All U.S. Schools by 2015.
   \$250,000. EPA-PRIA. 40%, Co-PI
- Ellsworth, P. C. and A. Fournier. [Gouge, Community IPM Team Leader]. 2009. The Arizona Pest Management Center: Implementing IPM in Diverse Environments in

Arizona. \$181,000. USDA-NIFA Extension Integrated Pest Management Coordination and Support Program. 9%

- Gouge, D. H. July, 2010-June, 2011. Advanced IPM Service Providers for Green Communities. \$4,200. NIFA, Pesticide Safety Education Program. 100%, PI
- Ellsworth, P., A. Fournier, P. Baker, D. H. Gouge, A. Mostafa, S. Bealmear, U. Schuch, and W. McCloskey. 2010-2013. The Arizona Pest Management Center: Enhancing Capacity for IPM Practice in Diverse Environments. \$525,000. USDA-NIFA, Extension IPM Coordination Grant. 20%, Co-PI
- Stock, T., D. H. Gouge, C. Foss, T. Grasswitz. January, 2011-December, 2011. Western Region School IPM Implementation and Assessment Work Group. \$10,000. Western Region IPM Center, USDA, NIFA. 50%, Co-PI
- Gouge, D. H., T. Stock, A. Code. January, 2011-December, 2011. Western Region School IPM Implementation and Assessment Work Group. \$20,000. Western Region IPM Center, USDA, NIFA. 60%, PI
- Gouge, D. H. and G. W. Gigstad. January, 2011-December, 2011. Video production "An Introduction to IPM", and "The City of Phoenix IPM Program" \$2,500. Western Region IPM Center, USDA, NIFA. 30%, PI
- Green, T., T. Stock, D. H. Gouge, J. Hurley, C. Foss, L. Graham, K. Murray. October, 2010-September, 2012. Healthy School Communities through IPM and Expanded Partnerships: Reducing Pest and Pesticide Risks, Improving Asthma Outcomes and Furthering Environmental Justice. \$250,000. EPA-PRIA. 30%, Co-PI
- Gouge, D. H., B. K. Stevens, A. Fournier. August, 2012-July, 2013. Pesticide Project for Tribes: Training on Integrated Pest Management (IPM) For Schools Developing and Implementing IPM-In-Schools Plans for Tribes. \$24,925. US-EPA – IX contract. 95%, PI
- Ellsworth, P. and A. Fournier. [Gouge, Community IPM Team Leader]. 2013. The Arizona Pest Management Center: Developing, Disseminating & Delivering High-Impact IPM Programs. \$250,000. USDA-NIFA, Extension IPM Coordination Grant. 16%
- Gouge, D. H., T. Green, A. Fournier, S. Li, S. Nair, D. Kopec, P. Baker, K. Umeda, C. Foss, T. Stock, S. T. Ratcliffe. February, 2014-August, 2016. Building sustainable school IPM inside and out: Developing and implementing standardized training materials and IPM proficiency exams for certification, \$250,000. US-EPA. 60%, PI

- Nair, S., D. H. Gouge, S. Li, A. Fournier, K. Umeda, D. Kopec, U. Schuch, P. Baker, L. Brown, M. Rust, A. O'Callaghan, M. L. Robinson, N. Duggal. March, 2014-February, 2015. Handbook of Pests in Community Environments in the Desert Southwestern United States, \$30,000-Western IPM Center. USDA-NIFA-Western IPM Center. 20%, Co-PI
- Gouge, D. H., S. Li, A. Fournier. September, 2014-August, 2017. National assessment of bed bug impacts and demonstration of IPM in high-risk elder/disabled housing facility, \$124,999-NIFA Applied Research and Development Program (ARDP). 90%, PI
- Ellsworth, P. and A. Fournier. [Gouge, Community IPM Team Leader]. 2014-2017. The Arizona Pest Management Center: Developing, Disseminating & Delivering High-Impact IPM Programs. \$858,000. USDA-NIFA, Crop Protection / Pest Management, Extension Implementation Program. 18%
- Gouge, D. H. 2017. StopPests in Housing. \$17,500. Housing and Urban Development. 90%
- Sutherland, A., D-H. Chow, C. Foss, D. H. Gouge, S. Li, S. Nair, A. Romero, H. Spafford. 2017-2018. Work Group: Developing effective bed bug outreach programs for diverse clientele in the West. \$30,000. Western Region IPM Center, USDA, NIFA. 10%
- Walker, K., M. Riehle, K. Ernst, D. H. Gouge. 2017-2021. Impact of ULV adulticiding on the vectorial capacity of the Zika vector, *Aedes aegypti*. \$1,250,000. Centers for Disease Control and Prevention. 25%
- Walker, K., M. Riehle, M. Hunter, K. Ernst, D. Gouge. 2017-2018. Genetic variation and endosymbiont diversity of *Rhipicephalus sanguineus* populations across Arizona. Center for Insect Science Seed Grant, \$8,000.
- 22. Walker, K., M. Riehle, M. Hunter, K. Ernst, D. Gouge. 2018-2019. Genetic variation and endosymbiont diversity of *Rhipicephalus sanguineus* populations across Arizona. Pacific Southwest Regional Center of Excellence in Vector-borne Diseases Training Grant Program, \$25,000.
- 23. Ernst, K. K. Walker, D. Gouge, K. Prudic. 2018-2019. Engaging community health workers for vector control and surveillance. Pacific Southwest Regional Center of Excellence in Vector-borne Diseases Training Grant Program, \$25,000.

## State Intramural

- Gouge, D. H. and J. L. Snyder. July, 2006-June, 2007. Arizona Urban IPM Working Group. \$1,500. University of Arizona – Extension Working Group Grant. 100%, PI
- Gouge, D. H., and A. Fournier. July, 2006-June, 2007. Pest Management Strategic Plan for School IPM. \$10,000. Cooperative State Research, Education, and Extension Service, Hatch Funds. 90%, PI
- Gouge, D. H., A. Fournier, P. Baker, D. Kopec, U. Schuch, K. Umeda, T. DeGomez, S. Bealmear, J. Schalau. January, 2013-June, 2014. Reducing Risks from Pests and Pest Management Practices in Public Schools a Statewide Initiative, \$6,671-State Signature Program Initiative. 50%, PI
- Nair, S., D. H. Gouge, S. Li, A. Fournier, D. Kopec, U. Schuch, K. Umeda, R. Gibson, P. Warren, E. Alden. January, 2015-June, 2016. Enabling Schools to Practice and Implement Integrated Pest Management-Expansion of IPM in a Child's World, \$14,093-State Signature Program Initiative. 50%, Co-PI
- Walker, K., M. Riehle, M. Hunter, K. Ernst, D. Gouge. 2017-2018. Genetic variation and endosymbiont diversity of *Rhipicephalus sanguineus* populations across Arizona. Center for Insect Science Seed Grant, \$8,000.

## Industry

Bibbs, C. S. and D. H. Gouge. 2012. Pesticide Project for Tribes: Bark Scorpion Research. \$10,000 (gift). Rare Disease Therapeutics, Inc. 50%, Co-PI

Gouge, D. H. 2016. Bed Bug Remediation. \$2,000 (gift). Decon 7 Systems.