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PROFESSIONAL PREPARATION:

Ph.D., 2005, University of Michigan, Department of Ecology and Evolutionary Biology, Ann Arbor, MI (B. M. OConnor, major advisor)
B.S., 1997, University of Arizona, Department of Ecology and Evolutionary Biology, Tucson, AZ

APPOINTMENTS:

Program Director, 2016-present, National Science Foundation, Arlington, VA
Associate Professor, 2013-present, Department of Entomology, University of Arkansas
Assistant Professor, 2008-2013, Department of Entomology, University of Arkansas
Postdoctoral Scholar, 2005-2007, Department of Entomology, University of Kentucky

GRANTS:

National Science Foundation. "Uniting modern tools of phylogenomics and morphology to address the evolution of acarology's most charismatic members: velvet mites, chiggers, and water mites." PI (\$775,765), 2016-2019
Arkansas Biosciences Institute. "High-throughput screening of ticks in Northwest Arkansas for tickborne diseases to identify areas of high risk and raise public awareness." PI (\$82,743), 2015-2017
Arkansas Game and Fish Commission. "Surveying endemic and relict insect fauna in Arkansas with an emphasis on biogeographically important regions and unique habitats". PI (\$63,327), 2014-2016
University of Arkansas Provost's Collaborative Grant. PI (\$1,500), 2014
National Science Foundation. REU Supplement. PI (\$6,250), 2014
National Science Foundation. "PEET: Using monographs, cybertaxonomy, and phylogenetics to train a future generation of water mite systematists (Acari: Hydrachnidiae)". PI (\$725,557), 2012-2016
Arkansas Game and Fish Commission. "Inventory of the insect fauna from the western ecoregions of Arkansas, with special emphasis on surveying distributions of known insect endemics". PI (\$64,376), 2012-2014
National Park Service. "Soil and litter mite survey of the George Washington Memorial Parkway (Acari: Mesostigmata and Prostigmata)". PI (\$18,500), 2012-2013
Arkansas Rice Board. "Survey of mites, insects and bacteria associated with Arkansas rice and the potential link between the spread and pathogenicity of bacteria and arthropod activity". Co-PI with R. Sayler, \$75,552 (\$72,552 to Dowling), 2010-2011

Arkansas Rice Board. "Genetic Characterization of the Panicle Rice Mite, *Steneotarsonemus spinki* (Acari: Tarsonemidae)". Co-PI with R. Sayler, \$67,000 (\$50,500 to Dowling), 2008-2009

PUBLICATIONS – PEER REVIEWED (* denotes paper with graduate advisee, ¥ denotes paper with undergraduate advisee):

- Hamilton, F.B.*, Skvarla, M.J.*., Fisher, D.M., **Dowling, A.P.G.** *in press*. Report on a large collection of *Pterostichus punctiventris* (Chaudoir) (Coleoptera: Carabidae) in Arkansas with notes on collection methodology, seasonality, and new state records of other *Pterostichus* (Gastrosticta) Casey.
- Skvarla, M.J., Fisher, D.M., **Dowling, A.P.G.** *in press*. Terrestrial arthropods of Steel Creek, Buffalo National River, Arkansas. II. Heteroptera (Insecta: Hemiptera). *Biodiversity Data Journal*
- Cheri, C. ¥, Fisher, J.R.*., **Dowling, A.P.G.** *in press*. The masked torrent mite, *Torrenticola vultumlarvatum* sp. n. (Parasitengona: Torrenticolidae): a water mite endemic to the Ouachita Mountains in eastern North America. *Acarologia*
- Guerra, A.S., Eckerlin, R.P., **Dowling, A.P.G.**, Durden, L.A., Robbins, R., Dittmar, K., Helgen, K.M., Lone, K., Young, H.S. *in press*. Host-parasite associations in small mammal communities in semiarid savanna ecosystems of East Africa. *Journal of Medical and Veterinary Entomology*
- O'Neill, J.C.*., Fisher, J.R.*., Nelson, W.A.*., Fisher, D.M., Skvarla, M.J.*., **Dowling, A.P.G.** 2016. Systematics of testudacarine torrent mites (Parasitengona: Torrenticolidae) with descriptions of 13 new species from North America. *Zookeys* 582: 13-110
doi:[10.3897/zookeys.582.7684](https://doi.org/10.3897/zookeys.582.7684)
- Skvarla, M.J.*., Evans, G.E., **Dowling, A.P.G.** 2015. Clinical report of *Otobius megnini* (Acari: Parasitiformes: Argasidae) from a domestic cat (*Felis silvestris catus*) and first record from Northwest Arkansas. *Midsouth Entomologist* 8: 64-72
- Skvarla, M.J., Fisher, D.M., Schnepp, K.E., **Dowling, A.P.G.** 2015. Terrestrial arthropods of Steel Creek, Buffalo National River, Arkansas. I. Select beetles (Coleoptera: Buprestidae, Carabidae, Cerambycidae, Curculionoidea excluding Scolytinae). *Biodiversity Data Journal* 3: e6832. doi: [10.3897/BDJ.3.e6832](https://doi.org/10.3897/BDJ.3.e6832)
- Skvarla, M.J.*., Bertone, M.A., Fisher, J.R., **Dowling, A.P.G.** 2015. New information about the cypress weevil, *Eudociminus mannerheimii* (Boheman, 1836) (Coleoptera: Curculionidae: Molytinae): redescription, range expansion, new host records, and a report as a possible causative agent of tree mortality. *Coleopterists Bulletin* 69(4): 751-757
- Skvarla, M.J.*., Tripodi, A.*., Szalanski, A., and **Dowling, A.P.G.** 2015. New records of *Orussus minutus* Middlekauff, 1983 (Hymenoptera: Orussidae) represent a significant western range expansion. *Biodiversity Data Journal* 3: e5793. doi: [10.3897/BDJ.3.e5793](https://doi.org/10.3897/BDJ.3.e5793)
- Fisher, J.R.*., Fisher, D.M., Nelson, W.A.*., O'Neill, J.C.*., Skvarla, M.J., Radwell, A.J., Ochoa, R., Bauchan, G., and **Dowling, A.P.G.** 2015. An integrative description of *Torrenticola trimaculata* sp. nov. (Parasitengona: Torrenticolidae), a three-spotted, riffle-dwelling mite from eastern North America: morphology, phylogenetics, and taxonomic history of the genus. *Acarologia*. 55(1): 71-116
- Dowling, A.P.G.** 2015. The Evolution of parasitism and host associations in mites. In: Morand, S., Krasnov, B.R. & Littlewood, D.T.J. (eds). *Parasite Diversity and Diversification - Evolutionary Ecology Meets Phylogenetics*. Cambridge University Press. pgs. 265-288.

- Fisher, J.R.*, Fisher, D.M., Skvarla, M.J.*, and **Dowling, A.P.G.** 2014. Pre-ballooning in *Ummidia* Thorell, 1875 (Araneae: Ctenizidae) from the Interior Highlands, USA: second account from the region and review of mygalomorph ballooning. *J. Arachnology*. 42(3): 318-321
- Skvarla, M.J.*, Larson, J.L., **Dowling, A.P.G.** 2014. Pitfalls and preservatives: A review. *J. Entomol. Soc. Ontario*. 145: 15-43.
- Skvarla, M.J.* and **Dowling, A.P.G.** 2014. First report of gynandromorphism in *Temnothorax curvispinosus* (Mayr, 1886) (Hymenoptera: Formicidae). *Proc. Entomol. Soc. Washington*. 116(3): 349-353.
- Skvarla, M.J.*, Fisher, J.R.* , and **Dowling, A.P.G.** 2014. Redescription of *Paracaropsis travisi* (Baker, 1949) (Trombidiformes: Cheyletidae), with range expansion, additional host records, and reevaluation of cheyletid chaetotaxy based on the sejugal furrow. *Acarologia* 54(3): 335-345.
- Skvarla, M.J.*, Hartshorn, J.A.* , **Dowling, A.P.G.** 2014. Report on a large collection of *Merope tuber* Newman, 1838 (Mecoptera: Meropeidae) from Arkansas with notes on collection technique, sex ratio, and male clasper size. *Psyche* 2014, Article ID 530757, 6 pages.
- Wiedenmann, R.N., **Dowling, A.P.G.**, and Barnes, J.K. 2014. What is the value of your insect collection? *Amer. Entomologist* 60(2): 101-104
- Skvarla, M.J.* , Fisher, J.R.* , and **Dowling, A.P.G.** 2014. A review of Cunaxidae (Acariformes, Trombidiformes): Histories and diagnoses of subfamilies and genera, keys to world species, and some new locality records. *Zookeys* 418:1-103
- Skvarla, M.J.* , Fisher, J.R.* , and **Dowling, A.P.G.** 2013. On some mites (Acari: Prostigmata) from the Interior Highlands: descriptions of the male, immature stages, and female reproductive systems of *Pseudocheylus americanus* (Ewing, 1909) and some new state records for Arkansas. *Zootaxa*, 3641(4): 401–419.
- Paré, J.A. and **Dowling, A.P.G.** 2012. An overview of acariasis in captive invertebrates. *J. Zoo Wildlife Med.* 43: 703-714
- Beard, J.J., Ochoa, R., Bauchan, G.R., Welbourn, W.C., Pooley, C. and **Dowling, A.P.G.** 2012. External mouthpart morphology in the Tenuipalpidae (Tetranychoidea): *Raoiella* a case study. *Exp. Appl. Acarol.* 57: 227-255
- Dowling, A.P.G.**, Ochoa, R., Beard, J.J., Welbourn, W.C., and Ueckermann, E.A. 2012. Phylogenetic investigation of the genus *Raoiella* (Prostigmata: Tenuipalpidae): Diversity, distribution, and world invasions. *Exp. Appl. Acarol.* 57: 257-269
- Skvarla, M.J.* and **Dowling, A.P.G.** 2012. Some new armascirine cunaxids (Acari: Prostigmata: Cunaxidae) from the Eastern United States. *Zootaxa* 3194: 1-34
- Sharkey, M.J., Carpenter, J.M., Vilhelmsen, L., Heraty, J., Liljeblad, J., **Dowling, A.P.G.**, Schulmeister, S., Murray, D., Deans, A.R., Ronquist, F., Krogmann, L., and Wheeler, W.C. 2012. Phylogenetic relationships among superfamilies of Hymenoptera. *Cladistics* 28: 80-112.
- Radwell, A.J., **Dowling, A.P.G.**, Smith, I.M., and Kaliki^Y, V. 2011. *Kongsbergia robisoni*, n. sp. (Acari: Hydrachnidiae: Aturidae) from the interior highlands of North America based on morphology and molecular genetic analysis. *Int. J. Acarol.* 37: 194-205
- Roy, L., **Dowling, A.P.G.**, Chauve, C.M. and Buronfosse. 2011. Quand alternent hybridations et isolements reproducteurs: éléments de l'histoire évolutive d'un genre d'ectoparasites (Acari: Mesostigmata: *Dermanyssus*). *Société Française de Systématique Biosystema* 28: 93-102

- Skvarla, M.J.* , Fisher, J.R.* , and **Dowling, A.P.G.** 2011. A new species of *Neoscirula* (Acari: Prostigmata: Cunaxidae) from the Ozark Highlands. *Acarologia* 51(3): 283-293
- Beaulieu, F., **Dowling, A.P.G.**, Klompen, H., De Moraes, G.J., and Walter, D.E. 2011. Superorder Parasitiformes Reuter, 1909. In: Zhang, Z.-Q. (Ed.) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness. *Zootaxa* 3148: 123-128.
- Heraty, J., Ronquist, F., Carpenter, J., Hawks, D., Schulmeister, S., **Dowling, A.P.G.**, Murray, D., Munro, J., Deans, A., Wheeler, W., Schiff, N., and Sharkey, M. 2011. Evolution of the Hymenopteran Megaradiation. *Mol. Phylo. Evol.* 60: 73-88.
- Fisher, J.R.* , Skvarla, M.J.* , Bauchan, G.R., Ochoa, R., and **Dowling, A.P.G.** 2011. *Trachymolgus purpureus* sp. nov., an armored snout mite (Acari: Bdellidae) from the Ozark Highlands: morphology, development, and key to *Trachymolgus* Berlese. *ZooKeys* 125: 1-34.
- Sharanowski, B.J., **Dowling, A.P.G.**, and Sharkey, M.J. 2011. Molecular phylogenetics of Braconidae (Hymenoptera: Ichneumonoidea), based on multiple nuclear genes, and implications for classification. *Syst. Entomol.* 36: 549-572.
- Ochoa, R., Beard, J.J., Bauchan, G.R., Kane, E.C., **Dowling, A.P.G.**, and Erbe, E. 2011. Herbivore exploits chink in armour of host. *American Entomologist* 57: 26-29.
- Dowling, A.P.G.**, Bauchan, G.R., Beard, J.J., and Ochoa, R. 2010. Scanning electron microscopy vouchers and genomic data from an individual specimen: maximizing the utility of delicate and rare specimens. *Acarologia* 50: 479-485.
- Fisher, J.R.* and **Dowling, A.P.G.** 2010. Modern methods and technology for doing classical taxonomy. *Acarologia* 50: 395-409.
- Dowling, A.P.G.** and OConnor, B.M. 2010. Phylogenetic relationships within the suborder Dermanyssina (Acari: Parasitiformes) and a test of dermanyssid monophyly. *Int. J. Acarol.* 36: 299-312.
- Roy, L.* , **Dowling, A.P.G.**, Chauve, C.M. and Buronfosse, T. 2010. Diversity of phylogenetic information according to the locus and the taxonomic level: an example from a parasitic mesostigmatid mite genus. *Int. J. Mol. Sci.* 11: 1704-1734.
- Dowling, A.P.G.** and OConnor, B.M. 2010. Phylogeny of Dermanyssoidae (Acari: Parasitiformes) suggests multiple origins of parasitism. *Acarologia* 50: 113-129.
- Dowling, A.P.G.** 2009. *Ixobioides truncatus* (Johnston) comb. nov. (Acari: Mesostigmata: Ixodorrhynchidae): a synonymy and redescription. *Sys. Appl. Acarol.* 14: 216-224.
- Bitra, K.* Tan, A., **Dowling, A.P.G.**, and Palli, S. R. 2009. Functional characterization of PAS and HES family bHLH transcription factors during the metamorphosis of the red flour beetle, *Tribolium castaneum*. *Gene*. 448: 74-87.
- Roy, L.* , **Dowling, A.P.G.**, Chauve, C.M. Lesna I., Sabelis M.W. and Buronfosse, T. 2009. Molecular phylogenetic assessment of host range in *Dermanyssus* species from France and The Netherlands. *Exp. Appl. Acarology* 48: 115-142.
- Roy, L.* , **Dowling, A.P.G.**, Chauve, C.M., and Buronfosse, T. 2009. Delimiting species boundaries within *Dermanyssus* Dugès 1834 (Acari: Mesostigmata) using a total evidence approach. *Mol. Phylo. Evo.* 50: 446-470.
- McKern, J.A.* , Szalanski, A.L., Johnson, D.T. and **Dowling, A.P.G.** 2008. Molecular phylogeny of Sesiidae (Lepidoptera) Inferred from Mitochondrial DNA sequences. *J. Agri. Urban. Environol.* 25: 165-178.

- Quicke, D. L. J., Sharkey, M. J., Laurenne, N. M., and **Dowling, A. P. G.** 2008. A preliminary molecular phylogeny of the Sigalphinae (Hymenoptera: Braconidae), including *Pselaphanus Szepligeti*, based on 28S rDNA, with descriptions of new Afrotropical and Madagascan *Minanga* and *Malasigalpus* species. *J. Nat. Hist.* 42: 2703-2719.
- Roda, A., **Dowling, A.**, Welbourn, C., Pena, J., Rodrigues, J.C.V., Hoy, M.A., Ochoa, R., Duncan, R.A. and De Chi, W. 2008. Red palm mite situation in the Caribbean and Florida. *Proc. Caribbean Food Crops Soc.* 44: 80-87.
- Dowling, A. P. G.**, Ochoa, R., and J. J. Beard. 2008. Preliminary results on phylogeographic patterns of the invasive Red Palm Mite, *Raoiella indica* (Prostigmata: Tenuipalpidae). *EURAAC Congress Proceedings*, Montpellier, France. p. 147-154.
- Doucet, D., Beliveau, C., **Dowling, A.**, Simard, J., Feng, Q., Krell, P.J., and Cusson, M. 2008. Prophenoloxidases 1 and 2 from the spruce budworm, *Choristoneura fumiferana*: Molecular cloning and assessment of transcriptional regulation by a polydnavirus. *Arc. Insect Biochem. Phys.* 67: 188-201.
- Dowling, A. P. G.**, Bochkov, A., and OConnor, B.M. 2007. Revision of the genus *Andreacarus* (Acari: Laelapidae) with description of seven new species and a new genus for Australian species formerly placed in *Andreacarus*. *J. Med. Entomol.* 44: 405-421.
- Pitz, K. M., **Dowling, A. P. G.**, Sharanowski, B. J., Boring, C. A., Seltmann, K., and Sharkey, M. J. 2007. Phylogenetic relationships among the Braconidae (Hymenoptera: Ichneumonoidea): a reassessment of Shi et al. 2005. *Mol. Phlyo. Evol.* 43: 338-343.
- Cusson, M., Beliveau, C., Sen, S. E., Vandermoten, S., Rutledge, R. G., Stewart, D., Francis, F., Haubrue, E., Rehse, P., Huggins, D. J., **Dowling, A. P. G.**, and Grant, G. H. 2006. Characterization and tissue-specific expression of two lepidopteran farnesyl diphosphate synthase homologs: implications for the biosynthesis of ethyl-substituted juvenile hormones. *Protein* 65: 742-758.
- Dowling, A. P. G.** 2006. Mesostigmatid mites as parasites of small mammals. In: Morand, S., Krasnov, B.R. & Poulin, R. (eds). *Micromammals and macroparasites: From evolutionary ecology to management*. Springer-Verlag, Tokyo.
- Reeves, W.K., **Dowling, A. P. G.**, and Dasch, G. A. 2006. Rickettsial agents from parasitic Dermanyssoida (Acari: Mesostigmata). *Exp. App. Acarology* 38: 181-188.
- Brooks, D. R., **Dowling, A. P. G.**, van Veller, M. G. P., and Hoberg, E. P. 2004. Ending a decade of deception: a valiant failure, a not-so-valiant failure, and a success story. *Cladistics* 20: 32-46.
- Klimov, P. B., Lekveishvili, M., **Dowling, A. P. G.**, and OConnor, B. M. 2004. Multivariate analysis of morphological variation in two cryptic species of *Sancassania* (Acari: Acaridae) from Costa Rica. *Ann. Entomol. Soc. Am.* 97: 322-345.
- Dowling, A. P. G.**, van Veller, M. G. P., Hoberg, E. P., and Brooks, D. R. 2003. *A priori* and *A posteriori* methods in comparative evolutionary studies of host-parasite associations. *Cladistics* 19: 240-253.
- Dowling, A. P. G.** 2002. Testing the accuracy of treemap and brooks parsimony analyses of coevolutionary patterns using artificial associations. *Cladistics* 18:416-435.

PUBLICATIONS – IN REVIEW:

Skvarla, M.J., Smith, D., Fisher, D.M., and **Dowling, A.P.G.** *in review*. Terrestrial arthropods of Steel Creek, Buffalo National River, Arkansas. III. Sawflies (Insecta: Hymenoptera: "Symphyta"). *Biodiversity Data Journal*.

PUBLICATIONS – NON-REFEREED & TECHNICAL REPORTS

- Dowling, A.P.G.**, Sayler, R.J. 2012. The presence of *Burkholderia* and arthropods in Arkansas rice fields. 2011 B.R. Wells Rice Research Studies.
- Dowling, A.P.G.**, Sayler, R.J., and Cartwright, R.D. 2011. Survey of Mites and Bacteria Associated with Arkansas Rice and the Potential Link between the Spread and Pathogenicity of Bacteria and Mite Activity. 2010 B.R. Wells Rice Research Studies.
- Dowling, A.P.G.**, Sayler, R.J., and Cartwright, R.D. 2010. Genetic Characterization of the Panicle Rice Mite, *Steneotarsonemus spinki* (Acari: Tarsonemidae). 2009 B.R. Wells Rice Research Studies.
- Sayler, R.J., **Dowling, A.**, and Cartwright, R.D. 2009. Molecular Detection and Genetic Characterization of the Panicle Rice Mite, *Steneotarsonemus spinki*. 2008 B.R. Wells Rice Research Studies.
- Fisher, J.R.* and **Dowling, A.P.G.** Arachnids. The Encyclopedia of Arkansas History & Culture. Online resource: <http://www.encyclopediaofarkansas.net>

PRESENTATIONS – PUBLISHED ABSTRACTS, CONTRIBUTED PAPERS, OR POSTERS: (* denotes graduate student, ¥ denotes paper with undergraduate advisee; first author is presenter unless otherwise specified)

- Hamilton, F.* and **Dowling, A.P.G.** Turning over a new leaf: the temporal variation of Carabidae (Coleoptera) and Gnaphosidae (Araneae) in leaf litter. Entomological Society of America Annual Meeting, Minneapolis, MN, 2015
- Nelson, W.*, Fisher, R., O'Neill, J., Fisher, D., Radwell, A.J., Smith, I., and **Dowling, A.P.G.** Exploring understudied fauna using systematics and presence-absence data; what can we learn from North American Monatractides (Hydrachnidiae, Torrenticolidae)? Entomological Society of America Annual Meeting, Minneapolis, MN, 2015
- Skvarla, M.* and **Dowling, A.P.G.** Catching them all: A case study in sampling arthropod diversity. Entomological Society of America Annual Meeting, Minneapolis, MN, 2015
- Stephenson, P.*, Krementz, D., and **Dowling, A.P.G.** Emergent wetland pollinators: An unknown story. Entomological Society of America Annual Meeting, Minneapolis, MN, 2015
- Skvarla, M.J.* , **Dowling, A.P.G.** Sampling diverse taxa: A case-study with ground beetles and weevils (Coleoptera: Carabidae, Curculionidae). Joint Meeting of the Kansas Entomological Society and Arkansas Entomological Society, Fayetteville, AR, 2015
- Skvarla, M.J.* , **Dowling, A.P.G.** Sampling diverse taxa: A case-study with ground beetles and weevils (Coleoptera: Carabidae, Curculionidae). Joint Meeting of the Kansas Entomological Society and Arkansas Entomological Society, Fayetteville, AR, 2015
- Hennen, D.A.* and **Dowling, A.P.G.** An updated synopsis of the millipedes of Ohio and Arkansas. Joint Meeting of the Kansas Entomological Society and Arkansas Entomological Society, Fayetteville, AR, 2015
- Hamilton, F. and **Dowling, A.P.G.** What lies beneath: the seasonal variation of Carabidae

- (Coleoptera) and Gnaphosidae (Araneae) in leaf litter. Joint Meeting of the Kansas Entomological Society and Arkansas Entomological Society, Fayetteville, AR, 2015
- Stephenson, P.*, **Dowling, A.P.G.**, and Krementz, D., Emergent wetland pollinators: An unknown story. Joint Meeting of the Kansas Entomological Society and Arkansas Entomological Society, Fayetteville, AR, 2015
- Fisher, J.R.* and **Dowling, A.P.G.** One species or 100? Tackling large under-studied groups like riffle-dwelling water mites (Torrenticolidae: Torrenticola). Entomological Society of America Annual Meeting, Portland, OR, 2014
- Hamilton, F.* and **Dowling, A.P.G.** Arthropods at the Four Seasons Hotel: the correlation between seasonality and diversity of arthropod communities in leaf litter. Entomological Society of America Annual Meeting, Portland, OR, 2014 (poster)
- Hennen, D.* and **Dowling, A.P.G.** Obeying the zeitgebers: Circadian rhythms of forest leaf litter arthropod communities. Entomological Society of America Annual Meeting, Portland, OR, 2014
- Skvarla, M.J.*, Fisher, J.R.* , and **Dowling, A.P.G.**. Look before you toss: The importance of by-catch, broadly training students, and other lessons from a project in mass sampling. Entomological Society of America Annual Meeting, Portland, OR, 2014
- Skvarla, M.J.* and **Dowling, A.P.G.** Earwigflies (*Merope tuber*) in Arkansas. Joint Annual Meetings of the Kansas Academy of Science and the Kansas Entomological Society, Emporia, KA, 2014
- O'Neill, J.C.* and **Dowling, A.P.G.** Exploring the murky water: The systematics of *Testudacarus* (Acari: Torrenticolidae). Entomological Society of America Annual Meeting, Portland, OR, 2014
- Skvarla, M.J.* , Fisher, J.R.* , Hartshorn, J., and **Dowling, A.P.G.** Leaf litter, the poor man's tropics: dealing with the microarthropod diversity in temperate forests. Entomological Society of America Annual Meeting, Portland, OR, 2014
- Dowling, A.P.G.** and Fisher, J.R.* Molecules, morphology, and cybertaxonomy: bringing the whole toolbox to descriptive mite projects. International Congress of Acarology, Kyoto, Japan, 2014 (invited presentation)
- Ochoa, R., Beard, J. and **Dowling, A.P.G.** Revision of the genus *Raoiella* (Acari: Tenuipalpidae) of the world. International Congress of Acarology, Kyoto, Japan, 2014 (invited presentation)
- Skvarla, M.J.* and **Dowling, A.P.G.** Collecting leaf litter arthropods in the Ozark Highlands using pitfalls and Berlese extraction. Entomological Society of America Annual Meeting, Austin, TX, 2013.
- Orellana, L.* , G. Lorenz, **Dowling, A.P.G.**, Thrash, B.C., Clarkson, D.L., Everett, M., and Flynn, S.L. Effects of Twospotted Spider Mite, *Tetranychus urticae*, Infestations on Cotton Development. Entomological Society of America Annual Meeting. Austin, TX, 2013
- Orellana, L.* , Lorenz, G., **Dowling, A.P.G.**, Taillon, N.M., Plummer, A., Chaney, M., Thrash, B.C., Clarkson, D.L., Everett, M., and Flynn, S.L. 2013. Impact of Spider Mites (*Tetranychus urticae*) Pre-Flowering Infestations on Cotton Growth and Yield. Arkansas Crop Protection Conference. Fayetteville, AR.
- Skvarla, M.J.* and **Dowling, A.P.G.** Earwigflies (*Merope tuber*) in Northwest Arkansas. Arkansas Entomological Society Annual Meeting, Magnolia, AR, 2013.
- Hennen, D.* and **Dowling, A.P.G.** Arkansas's enigmatic (but not unknown) millipedes.

- Arkansas Entomological Society Annual Meeting, Magnolia, AR, 2013.
- Orellana, L.* , Lorenz, G., and **Dowling, A.P.G.** Impact of Two-Spotted Spider Mites (*Tetranychus urticae*) Infestations on Developing Cotton. Arkansas Entomological Society. Magnolia, AR, 2013
- Nelson, W.A.* , Fisher, J.R.* , O'Neill, J.C.* , Radwell, A.J., Smith, I. M., **Dowling, A.P.G.** Opening overlooked taxa to cross-disciplinary research: a case study with water mites (Acari: Hydrachnidae) (poster presentation). Society for Freshwater Science annual meeting. Jacksonville, FL, 2013
- Skvarla, M.J.* and **Dowling, A.P.G.** Dowling lab projects. Center for Multicultural and Diversity Education, University of Arkansas, Fayetteville, AR, 2013
- Orellana, L.* , **Dowling, A.P.G.**, and Lorenz, G. Effects of Early Infestations of Two-Spotted Spider Mites (*Tetranychus urticae*) on Cotton Growth and Yield. Beltwide Cotton Conference. San Antonio, TX, 2013
- Skvarla, M.J.* and **Dowling, A.P.G.** A preliminary cunaxid (Bdelloidea: Cunaxidae) phylogeny. Acarological Society of America (in conjunction with Entomological Society of America) Annual Meeting, Reno, NV, 2011
- Fisher, J. R.* and **Dowling, A. P. G.** Systematics of the Erythraeina (Acari: Parasitengona): a story of parasitism, long legs, and polka dots. Entomological Society of America Annual Meeting, Reno, NV, 2011
- Andrews, C.A.* and **Dowling, A.P.G.** An inclusive approach to agricultural food webs. Entomological Society of America Annual Meeting, Reno, NV, 2011
- O'Neill, J. ¥ and **Dowling, A.P.G.** A survey: ants of the Interior Highlands of the Ozarks. Arkansas Entomological Society Meeting, Little Rock, AR, 2011
- Andrews, C.A.* and **Dowling, A.P.G.** What drives prey choice in generalist predators? A case study in soybeans. Arkansas Entomological Society Meeting, Little Rock, AR, 2011
- Dowling, A.P.G.** Mite diversity in the Ozark Highlands. Arkansas Entomological Society Meeting, Little Rock, AR, 2011
- Ochoa, R., Beard, J. J., **Dowling, A.P.G.** (presenter), Bauchan, G. and Welbourn, W.C. Mite biodiversity under the LT-SEM. Southeastern Branch Meeting, Entomological Society of America, San Juan, Puerto Rico, 2011
- Hummel, N., Ochoa, R. and **Dowling, A.P.G.** Update on mites associated with rice. Southeastern Branch Meeting, Entomological Society of America, San Juan, Puerto Rico, 2011
- Fisher, J. R.* and **Dowling, A. P. G.** *Trachymolgus* Berlese (Acari: Bdellidae), the unusual purple tank, with notes on biogeography and taxonomic attractiveness. Southeastern Branch Meeting, Entomological Society of America, San Juan, Puerto Rico, 2011
- Fisher, J.R.* and **Dowling, A.P.G.** Velvet mites of the Ozarks and Cybertaxonomy. Acarological Society of America (in conjunction with Entomological Society of America) Annual Meeting, San Diego, CA, 2010
- Skvarla, M.J.* and **Dowling, A.P.G.** Some interesting biogeography in the Interior Highlands. Acarological Society of America (in conjunction with Entomological Society of America) Annual Meeting, San Diego, CA, 2010
- Dowling, A.P.G.** (primary researcher and author of presentation), Ochoa, R. (presenter), and Beard, J.J. An update on the phylogenetics of the genus *Raoiella* (Acari: Tenuipalpidae). **Invited Presentation.** Acarological Society of America (in conjunction with Entomological Society of America) Annual Meeting, San Diego, CA, 2010

- Dowling, A.P.G.** (author of talk and primary researcher), Ochoa, R. (presenter), Welbourn, W.C., and Beard, J.J. *Raoiella indica* (Acari: Tenuipalpidae): a rapidly expanding generalist among specialist congeners. **Invited Presentation**. International Congress of Acarology, Recife, Brazil, 2010
- Ochoa, R., Beard, J.J., Bauchan, G.R., Ueckermann, E.A., Welbourn, W.C., and **Dowling, A.P.G.** *Raoiella*: more than meets the eye. **Invited Presentation**. International Congress of Acarology, Recife, Brazil, 2010.
- Paré, J.A., **Dowling, A.P.G.**, and Newton, A.L. Mites on captive invertebrates, to treat or not to treat? American Association of Zoo Veterinarians, Annual Meeting, South Padre Island, TX, 2010 (poster)
- Bacon, P.A.* Longing, S.D., **Dowling, A.P.G.**, and Huxel, G.R. Population structure and dispersal capacity of *Heterosternuta sulphuria* (Coleoptera: Dytiscidae: Hydroporinae) in Ozark streams North American Benthological Society annual meeting, Santa Fe, NM, 2010 (poster)
- Yates, D.L., Taulman, J.F., **Dowling, A.P.G.**, Durden, L.A., and Newton, A.F. Invertebrates associated with nests of southern flying squirrels - a preliminary report Missouri Academy of Science Meeting, Springfield, MO, 2010 (poster)
- Dowling, A.P.G.** Systematics of dermanyssoid mites (Acari: Dermyssina) and the evolution of parasitism. **Invited Presentation**. Southeastern Branch Meeting, Entomological Society of America, Atlanta, GA, 2010
- Dowling, A.P.G.**, Ochoa, R., and Beard, J.J. Origin and invasion routes of the red palm mite, *Raoiella indica*, and related species. Acarological Society of America, Annual Meeting, Indianapolis, IN, 2009
- Fisher, J.R.* and **Dowling, A.P.G.** Digital illustration: novel techniques for species descriptions. Acarological Society of America, Annual Meeting, Indianapolis, IN, 2009
- Bitra, K., Tan, A., **Dowling, A.P.G.**, and Palli, S.R. “Functional characterization of the bHLH family transcription factors from the red flour beetle, *Tribolium castaneum*” Entomological Society of America, annual meeting, Reno, NV, 2008
- Fisher, J.R., Sharkey, M.J., and **Dowling, A.P.G.** A generic revision of ichneutine wasps (Hymenoptera: Braconidae). Entomological Society of America, annual meeting, Reno, NV, 2008
- Dowling, A.P.G.**, Ochoa, R., Welbourn, W.C., and Beard, J.J. Preliminary results on phylogeographic patterns of the invasive Red Palm Mite, *Raoiella indica* (Prostigmata: Tenuipalpidae). European Association of Acarologists Congress, Montpellier, France, 2008.
- Dowling, A.P.G.** Systematics and historical ecology of mites: an examination of pests and parasites. Department of Biology, University of Arkansas, 2008
- Dowling, A.P.G.** Systematics of macronyssid mites and the evolution of avian endoparasitism. Acarological Society of America, Annual Meeting, San Diego, CA, 2007
- Dowling, A.P.G.** Evolution of parasitism in dermanyssoid mites. Center for Ecology and Evolution annual summer symposium, University of Kentucky, Lexington, KY, 2007
- Dowling, A.P.G.** The effects of secondary structure alignment and alternative analytical methods on elucidating dermanyssoid phylogeny. Acarological Society of America, Annual Meeting, Indianapolis, IN, 2006.

- Dowling, A.P.G.** Systematics, genomics, and the evolution of parasitism within Dermanyssoidae (Mesostigmata) Feature Invited Symposium Speaker, International Congress of Acarology, Amsterdam, The Netherlands, 2006
- Dowling, A.P.G.** and Sharkey, M.J. Phylogeny of Braconidae (Hymenoptera: Ichneumonoidea) and difficulties associated with analyzing large and diverse datasets, Invited Seminar, Department of Entomology, University of Kentucky, Lexington, KY, 2006
- Dowling, A.P.G.** and Sharkey, M.J. Molecular systematics of Braconidae (Hymenoptera: Ichneumonoidea), International Conference of Hymenopterists, Sun City, South Africa, 2006.
- Dowling, A.P.G.** Molecular systematics and the evolution of parasitism in dermanyssoid mites, Acarological Society of America, Annual Meeting, Fort Lauderdale, FL, 2005.
- Dowling, A.P.G.** Phylogenetics and historical ecology of dermanyssoid mites, Acarological Society of America, Annual Meeting, Salt Lake City, Utah, 2004.
- Dowling, A.P.G.** Phylogenetics of the superfamily Dermanyssoidae. Entomological Society of America, Acarological Society of America, Annual Meeting, Invited symposium speaker, Ft. Lauderdale, Florida, 2002.
- Dowling, A.P.G.** Preliminary phylogeny of dermanyssoid mites. XI International Congress of Acarology, Merida, Mexico, 2002. (poster)
- Dowling, A.P.G.** Phylogenetics of Malagasy fur mites in the family Atopomelidae (Acari: Astigmata). Entomological Society of America, Acarological Society of America, Annual Meeting, Atlanta, Georgia, 1999.

AWARDS AND HONORS:

- Gamma Sigma Delta Teaching Award of Excellence, 2014
- Outstanding Undergraduate Mentor Award, 2014

PROFESSIONAL AFFILIATIONS AND SERVICE (EXTRAMURAL):

MEMBERSHIPS:

- Acarological Society of America
- Entomological Society of America
- Society for the study of Evolution

SERVICE:

- National Science Foundation Biodiversity Discovery and Analysis Panelist, 2011
- National Science Foundation Systematic Biology Panelist, 2010
- President, Acarological Society of America, 2008-2009
- Executive Committee Board Member, Acarological Society of America, 2005-2007
- Webmaster, Acarological Society of America, 2007-2010
- Expert advisor to NAPPO *Tetranychus* Technical Advisory Group, 2008-present
- Co-organizer of Acarological Society of America Symposium Ectoparasitic Mites, ASA Annual Meeting, San Diego, CA, 2007

- Organizer of Acarological Society of America Symposium Advances in Acarology, ASA Annual Meeting, Reno, NV, 2008
- Co-organizer of Entomological Society of America Section A Symposium Assembling the Tree of Life for Insects and Their Relatives: Emerging Results in the Pursuit of Large-scale Phylogenies, ESA Annual Meeting, Indianapolis, IN, 2006.

EDITORIAL:

- Associate Editor, Journal of Parasitology, 2008-2011
- Subject Editor, Bulletin of Entomological Research, 2008-2011
- Editorial Board, *Acarologia*, 2010-present
- Editorial Board, *Journal of Medical Entomology*, 2012-2015
- Subject Editor, *Annals of the Entomological Society of America*, 2014-present

GRANT PROPOSAL REVIEWS:

NSF Systematic Biology and Biodiversity Inventories cluster, 2009-2012

SCIENTIFIC PAPER REVIEWS:

Acarologia, Agricultural and Forest Entomology, Annals of the Entomological Society of America, Annals of the Missouri Botanical Gardens, Biological Journal of the Linnean Society, Bulletin of Entomological Research, Cladistics, Comparative Parasitology, Conservation Genetics, Diversity & Distributions, Evolution: Education & Outreach, Experimental and Applied Acarology, Handbuch der Zoologie/Handbook of Zoology, International Journal of Acarology, Invertebrate Systematics, Journal of Agricultural & Urban Entomology, Journal of Biogeography, Journal of Crop Protection, Journal of Medical Entomology, Journal of Morphology, Journal of Parasitology, Molecular Phylogenetics and Evolution, Parasitology, PLoS One, Systematic and Applied Acarology, Systematic Entomology, Zookeys, Zootaxa

TEACHING:

Courses taught at the University of Arkansas:

- ENTO 3011: Introduction to Insect Identification Lab, Fall 2011-2014 (1 credit hour)
- ENTO 3013: Introduction to Entomology, Fall 2008-2014 (3 credit hours)
- ENTO 4024: Insect Taxonomy and Diversity, Fall 2013 (4 credit hours)
- ENTO 6071: Graduate Seminar, Biogeography, Spring 2010 (1 credit hour)
- ENTO 6071: Grant Writing, Spring 2011 (2 credit hours)

Instruction at other institutions:

- Summer Acarology Program, Soil Mesostigmata, The Ohio State University, June 2014 (7-day intensive workshop)
- Summer Acarology Program, Mites on Insects, Dermanyssina section, The Ohio State University, July 2011 (2-day intensive workshop)
- Summer Acarology Program, Medical Veterinary Acarology, Mesostigmata section, The Ohio State University, July 2010, 2012, 2014 (2-day intensive workshop)
- ENT 684: Phylogenetic Systematics, University of Kentucky, Fall 2006 (3 credit hours)

- ENT 770: Coevolutionary Studies Seminar, University of Kentucky, Fall 2007 (1 credit hour)

Teaching assistantships at the University of Michigan:

- EEB 341: Parasitology, Winter 2002
- BIO 288: Animal Diversity, Fall 2000
- EEB 301: Writing for Biologists, Winter 2000
- EEB 451: Mammalogy, Fall 1999
- BIO 162: Introductory Biology, Fall 1998, Winter 1999, Spring 1999

ADVISING:

Ph.D. Students:

1. Whitney Nelson, Entomology (Chair of committee)
2. Stephen Robertson, Entomology (Chair of committee)
3. Krista Pike, Entomology (Chair of committee)
4. Meredith Swartwout, Biology (Committee member)
5. Karen Willard, Biology (Committee member)
6. Ray Fisher, Entomology (Chair of committee; completed 2016)
7. Michael Skvarla, Entomology (Chair of committee, completed 2015)
8. Jessica Hartshorn, Entomology (Committee member, completed 2016)
9. Jiamei Li, Entomology (Committee member, completed 2016)
10. Katie Winsett, Cell and Molecular Biology (Committee member; completed 2010)
11. Cesar Solorzano, Entomology (Committee member; completed 2009)
12. Zach Young, Biology (Committee member, left the program 2014)
13. Mustafa Fakhri, Biology (Committee member, left the program 2013)
14. Chad Andrews, Entomology (Chair of committee, left the program 2011)

Master's Students:

1. Alexis Hilario-Perez, Entomology (Chair of committee)
2. Colton Zirkle, Entomology (Chair of committee)
3. Travis Edwards, Entomology (Chair of committee)
4. Phillip Stephenson, Biology (Co-Chair of committee)
5. Jake Bondart, Entomology (Committee member)
6. Caitlan Race, Entomology (Committee member)
7. Colton Kessenich, Biology (Committee member)
8. Joseph O'Neill, Entomology (Chair of committee, completed 2015)
9. Derek Hennen, Entomology (Chair of committee, completed 2015)
10. Fredericka Hamilton, Entomology (Chair of committee, completed 2015)
11. Luis Orellana, Entomology (Chair of committee, completed 2014)
12. Michael Skvarla, Entomology (Chair of committee, completed 2011)
13. Ryan Rastock, Entomology (Committee member, completed 2015)
14. Natasha Wright, Entomology (Committee member, completed 2013)
15. Will Ritchie, Horticulture (Committee member, completed 2012)

16. Ace Lynn-Miller, Entomology (Committee member, completed 2012)
17. Justin Whitaker, Entomology (Committee member, left the program 2011)
18. Libby East-Jones, Biology (Committee member, left the program 2011)

Undergraduate Honor's theses:

1. Jennifer Courtway, Biology (Committee member, completed 2016)
2. Jared Stone, Biology (Committee member, completed 2016)
3. Sarah Gammill, Biology (Committee member, completed 2016)
4. Rebecca Pearce, Biology (Committee member, completed 2014)
5. Brooke Beckwith, Biology (Committee member, completed 2014)
6. Navi Dhatt, Biology (Co-chair of committee, completed 2012)
7. Kevin Regis, Biology (Committee member, completed 2012)
8. Joseph O'Neill, Horticulture (Chair of committee, completed 2011)
9. Vamsi Kaliki, Biology (Co-chair of committee, completed 2010)
10. Helen Chang, Biology (Committee member, completed 2010)

Biology Senior Writing requirement:

1. Sara Kruczak
2. Allie Pipkin
3. Stephanie Sharum
4. Lauren Martin
5. Morgan Delaney
6. Travis McAninch
7. Megan Walbe

GRADUATE STUDENT AWARDS, FELLOWSHIPS AND SCHOLARSHIPS:

Stephen Robertson, University of Arkansas Doctoral Academy Fellowship, 2015-2019
(\$10,000/yr)

Fredericka Hamilton, 3rd place student MS poster competition, Joint Meeting of the Kansas Entomological Society and Arkansas Entomological Society, Fayetteville, AR, 2015

Fredericka Hamilton, 2nd place student presentation, Entomological Society of America MS student poster presentation, Annual Meeting, Portland, OR, 2014

Michael Skvarla, Dwight Isely Award, Outstanding PhD Student, Department of Entomology, 2015

Michael Skvarla, 1st place student presentation, Joint Meeting of the Kansas Entomological Society and Arkansas Entomological Society, Fayetteville, AR, 2015

Michael Skvarla, Lloyd and Ruby Warren Scholarship, Department of Entomology, 2015

Michael Skvarla, Lloyd and Ruby Warren Scholarship, Department of Entomology, 2014

Michael Skvarla, Lloyd and Ruby Warren Scholarship, Department of Entomology, 2013

Michael Skvarla, 3rd place student presentation, Arkansas Entomological Society PhD student competition, Annual Meeting, Magnolia, 2013

Michael Skvarla, 1st place student presentation, Acarological Society of America, Annual Meeting, Reno, 2011
Michael Skvarla, University of Arkansas Doctoral Academy Fellowship, 2011-2015 (\$10,000/yr)
Ray Fisher, University of Arkansas Doctoral Academy Fellowship, 2010-2014 (\$10,000/yr)
Whitney Nelson, University of Arkansas Distinguished Doctoral Fellowship, 2012-2016 (\$20,000/yr)
Derek Hennen, 3rd place student presentation, Annual Meeting of the Kansas Entomological Society, 2014
Derek Hennen, Department of Entomology Lincoln Scholarship, 2013-2015 (\$5,000/yr)
Joseph O'Neill, National Science Foundation Graduate Research Fellowship Honorable Mention, 2014
Joseph O'Neill, Arkansas Federation of Garden Club Scholarships, 2014 (\$1,000)
Joseph O'Neill, Arkansas Federation of Garden Club Scholarships, 2013
Joseph O'Neill, National Federation of Garden Club Scholarships, 2013 (\$4,000)

SERVICE AT THE UNIVERSITY OF ARKANSAS:

University:

2015-2016 Member, University Academic Standards Committee
2016 Member, All University Conduct Board

College:

2012-2016 Member, College of Agriculture Faculty Council
2010-2016 Member, College of Agriculture Curriculum Committee (Chair 2014)
2014-2016 Gamma Sigma Delta Arkansas Chapter, Treasurer
2015-2016 John Tyson Agricultural Research Center Building Committee
2015-present Editorial Board, Discovery: The Student Journal of Dale Bumpers College of Agricultural, Food and Life Sciences

Department:

2010-2011 Member, Awards Committee
2010-2013 Chair, Curriculum Committee
2009-2013 Chair, Admissions Committee
2008-2013 Member, Curriculum Committee
2008-2016 Member, Admissions Committee

SCIENTIFIC OUTREACH - (Published or broadcast interviews; Reports; Lectures):

1. Interview with KUAF's Jacqueline Froelich about ticks and tickborne diseases in Arkansas. Story on KUAR <http://ualrpublicradio.org/post/arkansas-ticks-make-us-sick-always-and-all-ways-remains-question#stream/0>
Story on KUAF <http://kuaf.com/post/ozarks-large-thursday-july-14-2016#stream/0>
2. Eureka Springs Independent "Tick Talk – Send in ticks for research" interview with Becky Gillette, July 6, 2016 <http://eureka.news/tick-talk-send-in-ticks-for-research/>
3. St. Louis Public Radio "It's chigger season again in Missouri! What are chiggers, anyway?" interview with Véronique LaCapra, June 7, 2015
4. Arkansas Times "Ask the Times: Where have all the fireflies gone?" interview with Leslie Peacock, August 28, 2014
5. Crystal Bridges Spotlight Talk: "Thomas Eakins: Intersecting Art with Science" co-presented with Jason Dean, October 15, 2012
6. Interviewed for newspaper article on bed bugs.
7. Lecture on the diversity of beneficial insects to the Flower, Garden and Nature Society of NW Arkansas, Sept. 17, 2011
8. Interview with KUAF's Kyle Kellums for an episode of "Ozarks at Large"
<http://www.kuaf.org/content/ozarks-large-honors-college-series-joseph-oneil>
9. Fayetteville Man Spends Days in Hospital After Tick Bite. By Robert Boyd, KFSM Channel 5 News, June 22, 2010 <http://www.5newsonline.com/news/kfsm-news-nwa-ticks-jim-rice-fayetteville-bitten,0,6854222.story>
10. Ben at Work: Entomologist. Produced by Ben Goodwin, KNWA Fox Evening News, 2009
11. Panicle mite potential new threat to Arkansas rice. By Fred Miller, Agricultural Communication Services, Feb 28, 2008 (picked up by dozens of online farm and rice journals)