

**A. KELLY LANE**  
**CURRICULUM VITAE**

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**EDUCATION**

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University of Georgia	Genetics	Ph.D., Expected May 2018
Washington and Lee University	Biology, Classics	B.Sc. & B.A. 2013

**PUBLICATIONS**

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**Submitted Publications**

**5. Lane, A.K.**, Augustin, M.A., Ayyampalayam, S., Plant, A., Gleissberg, S., dePamphilis, C.W., Wong, G.K., Kutchan, T.M, Leebens-Mack, J.H. Phylogenomic Analysis of the Ranunculales with Resolution of the Papaveraceae. Out for review at Botanical Journal of the Linnean Society.

**4. Lane, A.K.**, Harding, L., Five minute teach: Incremental writing instruction to enhance student writing in the sciences. Submitted to Journal of College Science Teaching

**Peer-Reviewed Publications**

**3. Vienneaue-Hathaway, J.**, Brassfield, E., **Lane, A.K.**, Collin, M., Correa-Garwal, S., Clarke, T. H., Scwager, E., Gard, J. E., Hayashi, C. Y., Ayoub, N.A. 2017. Duplication and concerted evolution of MiSp-encoding genes underlie the material properties of minor ampullate silks of cobweb weaving spiders. BMC Evol. Bio. 17:78

**2. Lane, A.K.**, Niederhuth, C.E., Ji, L., Schmitz, R.J. 2014. pENCODE: A Plant Encyclopedia of DNA Elements. Annu. Rev. Genet. 48:49-70

**1. Lane, A.K.**, Hayashi, C., Whitworth, G., Ayoub, N. 2013. Complex gene expression in the dragline silk producing glands of the Western black widow (*Latrodectus hesperus*). BMC Genomics. 14:846

**Creative Products**

Armstrong, N., Brickman, M., Gormally, C., **Lane, A.K.**, Miller, K., *BIOL 1103L: Concepts of Biology*. 6th ed., Blue Door Publishing, 2017.

**TEACHING EXPERIENCES**

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**Classroom Teaching**

WIPP 7001: Writing Intensive Pedagogy for Biology TAs	2016-2017
Instructor of Record, 2 semesters, 3 total sections	
Taught graduate students in writing pedagogy to prepare them for teaching the writing intensive introductory biology lab courses. I designed and taught all classes with assistance from the director of the Writing Intensive Program Dr. Lindsey Harding.	

GENE 3200: Introduction to Genetics, Teaching Assistant Summer 2016  
 Teaching Assistant, 1 semester, 1 total section  
 Taught one section of recitation, which involves leading students through practice problems, as well as proctored and graded exams.

Genomics Guest Lecturer at Hampden Sydney College 2016  
 1 course period  
 I assisted in an undergraduate genomics class for a single lecture

BIO 1103L: Introductory Biology Lab for Non-Majors 2015-2016  
 Teaching Assistant, 2 semesters, 6 total sections  
 In this course I was responsible for three sections of lab each semester. This involved running the classes on my own as well as all grading, student meetings, and feedback.

**Workshop Development and Execution**  
 Workshop at Hampden Sydney College 2016  
 I designed and conducted a workshop for undergraduates on gene expression networks.

**Programming Materials and Course Design**  
 Module for 1103Le 2017  
 Provided feedback and assisted in developing a module for a new online version of Introductory to Biology Lab for non-majors under the mentorship of Dr. Kris Miller, head of the Division of Biological Sciences at UGA.

Online 5 Minute Teach, Writing Database 2017  
 Developed an online database through the Writing Intensive Program at UGA to host materials for 5 minute teaches on writing in the sciences. This database is available for use by anyone. The materials hosted are 5 minute lessons designed by Graduate Lab Assistants for use in their writing intensive classes. The database is still being used and populated by additional TAs for the Writing Intensive Program.

Rewrite of 1103L manual 2016  
 I assisted in editing and developing new materials for the lab manual, which is the only required text, for Introductory Biology Lab for non-majors under the guidance of Dr. Kris Miller, head of the Division of Biological Sciences at UGA.

Yearly program and TA evaluation for the Writing Intensive Program 2016-2017  
 Part of my teaching assistantship was to collect and summarize teaching and course evaluations each semester for all GTAs that are part of the Writing Intensive Program at the University of Georgia. This represents over 25 courses. I compiled summary data for each course and each GTA as well as created summary reports for various campus offices.

### **Pedagogical Training**

I have taken courses in general pedagogy for teaching assistants, writing intensive pedagogy and a class in course design, each for three credits. I additionally regularly attend biology education research group meetings. I have attended workshops on topics including the scholarship of teaching and learning, writing effective multiple choice questions, and more.

### **Mentoring**

- Aug. 2016 -  
May 2017           Mentor for two undergraduate researchers in Biology Education research mentored in qualitative research, writing and experimental design
- May –  
July 2016           Mentor for a REU summer undergraduate student in Biology Education research mentored in qualitative research and poster presentation
- Sept. 2014, 15     Plant Center Mentor. Mentored an undergraduate prepared each undergraduate to give a poster presentation at the UGA Plant Center Retreat
- Oct 2013 – 14     Supervising and training four undergraduate students in basic laboratory techniques e.g. PCR, plant care

## **PRESENTATIONS**

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### **Invited Presentations**

- Nov. 2017           *Leveraging Comparative Transcriptomics to Reveal Evolution and Regulation of Morphine Biosynthesis in Opium Poppy (Papaver somniferum) - working title*  
Departmental Seminar, Washington and Lee University, Lexington, VA
- Sept. 2016           *Evolution of the Ranunculales and Implications for Morphine Biosynthesis*  
Departmental Seminar, Hampden Sydney College, Farmville, VA

### **Presentations**

- Jul. 2017           *Building a model of how life science doctoral training can influence professional identity as a college teacher*  
SABER, Minneapolis, MN
- Aug. 2016           *Weighted Gene Correlation Network Analysis of Morphine Biosynthesis in Opium Poppy (Papaver somniferum)*  
Botany, Savannah, GA
- Jun. 2016           *Phylogenomics of the Ranunculales with Resolution of the Papaveraceae*  
Evolution, Austin, TX
- Jun. 2016           *Professional Identity Among Teaching Interested Graduate Students*  
UnPAK grant meeting, Austin, TX
- July 2012           *Massively parallel signature sequencing reveals novel genes associated with silk production in the Western black widow, Latrodectus hesperus*  
American Arachnological Society conference, Green Bay, WI

## **Posters**

- Mar. 2015      *Phylogenomic Analysis of the Basal Eudicots, Ranunculales*  
Southeastern Ecology and Evolution Conference, Athens, GA
- July 2010      *Building a transcriptome for the Western black widow, Latrodectus*  
*hesperus (Araneae, Theridiidae)*, American Arachnological Society conference,  
Greenville, NC

## **AWARDS**

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- 2017      Kirby and Jan Alton Graduate Fellowship, one year of funding given to a senior graduate student in the Genetics Department based on research accomplishments.
- 2017      Mary E. Case Award for Excellence in Teaching given by the Genetics Department
- 2017      Three Minute Thesis Genetics Department, Second Place
- 2017      Nominated by the Biology Division for the Excellence in Teaching Award at UGA, approximately 1% of GTAs are nominated each year.
- 2017      Received the Outstanding Teaching Award at UGA
- 2016      Three Minute Thesis UGA Finalist, Top 10 out of ~70 campus-wide
- 2016      Department of Genetics Travel Award, Graduate student judged award for travel funding. Used to attend Evolution 2016.
- 2015      NSF GRFP Honorable Mention
- 2013-2015      Graduate School Assistantship (GSA). (\$42,000) two year stipend from the graduate school, nomination is submitted by the academic department upon admission and sent to the graduate school for consideration
- 2013      Excellence in Graduate Recruitment Fund (EGRF) (\$3,000). given to an applicant to the Genetics Dept. at UGA to assist attracting top recruits into the program
- 2013      Washington and Lee University Biology Department Research Award. Annual award given to the senior student who has best demonstrated a serious commitment to scientific discovery through participation in research
- 2009-2013      Johnson Scholar. (\$200,000) full cost of attendance, four-year merit scholarship

## OUTREACH AND SERVICE

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2016 & 2017	Served on the review panel for the Genetics Graduate Student Association Travel Award for presenting dissertation research
2017	Served on the hiring committee for two introductory biology, lecturer positions
Jun. 2016 - May 2017	First Graduate Student Chair for Scientists Engaged in Education Research In the inaugural year of the SEER Center at UGA I was selected as chair for the graduate student committee, which involved managing membership, designing organization structure, goals, and events.
May 2016- Apr. 2017	Pi Beta Phi Athens Area Alumnae Club President organized club activities, managed membership, ran social media, managed the executive team, assured club was following procedures, and etc.
Jan. 2015, 16, 17	Paper reader/judge for Georgia Junior Science and Humanities Symposium judged paper submissions for the symposium
Mar. 2014, 15, 16, 17	Georgia Science and Engineering Fair State Finals Judge judged the Junior High Plant Sciences category, category leader in 16,17
Jan. 2017	Judge for the Clarke County School District Science & Engineering Fair High School level
Jan. 2017	Judge for the Oconee County District Science Fair
July 2015 - Dec. 2016	Managing Editor for The Classic Journal for the Writing Intensive Program review, edit, and select undergraduate student writing for publication in a UGA sponsored, online journal <a href="http://theclassicjournal.uga.edu">http://theclassicjournal.uga.edu</a> publicize and develop materials
May 2016	UGA Plant Center Joe Key Symposium Volunteer organized and solicited donations for silent auction
Aug. 2015 - May 2016	Genetics Graduate Student Association Secretary Took meeting minutes, sent reminder emails, organized voting for next board
Jun. 2015 - May 2017	Pi Beta Phi Athens Area Alumnae Club Executive Board Member 17-18 Secretary 15-16 Alumnae Club Recruitment Information Chair
Nov. 2014	Volunteer for Bioenergy Day at UGA assisted in running activities for seventh graders to learn about bioenergy