

PhD Opportunity in Insect Pheromone Biochemistry/Chemical Ecology

Department of Biological Sciences, Virginia Tech, United States

Application Deadline: April 1, 2018 or earlier

Start date: Fall 2018

Website: <https://www.biol.vt.edu/faculty/tholl/index.html>

Qualifications

- Previous research experience in biochemistry, molecular biology and/or chemical ecology is desired
- Ability to work independently and collaboratively within a team
- Strong written and oral communication skills

Description

The laboratory of Dr. Dorothea Tholl, Department of Biological Sciences, Virginia Tech, is seeking applications for a **Ph.D. project in Biochemistry and Chemical Ecology of Insect Pheromones**. To date, still very little is known about how insects biosynthesize pheromones, especially those in the class of terpenes or isoprenoids. The Tholl lab recently discovered that insects are capable of producing terpene pheromones de novo instead of sequestering them from their host plants. This Ph.D. study will investigate the biosynthesis and chemical ecology of terpene aggregation/sex pheromones in stink bugs. The project will further explore the evolution of terpene pheromone and chemical defense biosynthesis in a variety of other insects in collaboration with scientists from the US and Europe. Outcomes of this work may be applied toward developing alternative pest control strategies. Applicants should have a good understanding of biochemistry and chemical ecology; research experience in these areas is desired.

Application Materials

Interested applicants should send a letter of interest with their personal statement, resume, and contact information for two to three references by e-mail to Dr. Tholl (tholl@vt.edu). In your letter, include a description of your research interests and why you are interested in joining the research group as well as a summary of your prior research experience, your academic background (e.g., relevant coursework) and GPA, GRE, and TOEFL scores. For more information about the Tholl Lab, visit <https://www.biol.vt.edu/faculty/tholl/index.html>.

Submit applications and further questions to:

Contact Person: Dr. Dorothea Tholl

Mailing Address: 409 Latham Hall, 220 Agquad Lane, Virginia Tech, Blacksburg, VA 24061, USA

Telephone: +1-540-231-4567

E-mail: Tholl@vt.edu