

Beyond Nicotine: A FREE Professional Development Series
for Grades 9-16 Life Science Teachers
**Introducing students to the health effects of vaping on the respiratory
system and to the multidisciplinary field of toxicology**
February 4th, 11th, 18th, 25th
4:15-5:45PM EST via Zoom

Workshop schedule

- Feb 4th** **Vaping and adolescents: How did we get here?** [Watch Recording](#)
Elise Hickman, PhD candidate, University of North Carolina at Chapel Hill
Scott McIntosh, PhD, University of Rochester Medical Center
Bob Immormino, PhD, University of North Carolina at Chapel Hill
Ilona Jaspers, PhD, University of North Carolina at Chapel Hill
Dana Haine, MS, University of North Carolina at Chapel Hill (Moderator)
[View present Seation slides](#)
- Feb 11th** **Cell, rodents, and humans: Experimental models for studying flavored e-cigarettes**
[Watch Recording](#)
[Featured Activity: Evaluating the effects of flavored e-cigarettes on the
respiratory immune system](#)
Elise Hickman, PhD candidate
Greg Smith, PhD, University of North Carolina at Chapel Hill
Dana Haine, MS
[View presentation slides](#)
View tour of [Inhalation Exposure Lab](#) (YouTube)
- Feb 18th** **Flavored e-cigarettes & cell bioenergetics** [Watch Recording](#)
[Featured Activity: Evaluating the bioenergetic effects of flavored e-cigarettes](#)
Phil Clapp, PhD, University of North Carolina at Chapel Hill
Dana Haine, MS
Elise Hickman, PhD candidate
- Feb 25th** **E-cigarettes & lung health**
[Featured Activity: Using biomarkers to investigate the impact of e-cigarettes on
airway inflammation and asthma | A Digital Interactive Notebook](#)
Alejandro Comellas, MD, University of Iowa [Watch Recording](#)
Meghan Rebuli, PhD, UNC-Chapel Hill [Watch Recording](#)
Dana Haine, MS
Elise Hickman, PhD candidate

This professional development series is sponsored by UNC-Chapel Hill's Center for Environmental Health and Susceptibility (NIEHS P30 ES010126) and the UNC Institute for the Environment.

Presenter Bios

Phillip Clapp, PhD, is an Assistant Professor of Pediatrics at the University of North Carolina at Chapel Hill in the Center for Environmental Medicine, Asthma, and Lung Biology. He received his BS and PhD from UNC Chapel Hill and did his postdoctoral training at UNC Chapel Hill. His research is focused on respiratory toxicology, particularly the health effects of e-cigarette aerosols and vaped CBD.

Alejandro Comellas, MD is a Clinical Professor of Internal Medicine - Pulmonary, Critical Care and Occupational Medicine and a practicing pulmonologist at the University of Iowa Hospitals and Clinics. Comellas specializes in critical care and pulmonology and has clinical interests in patients with asthma and COPD. His research interests include lung injury and ambient air pollution.

Dana Brown Haine, MS is the K-12 Science Education Manager for the Center for Public Engagement with Science in the UNC Institute for the Environment. She also contributes to the outreach efforts of the UNC Center for Environmental Health and Susceptibility in UNC's Gillings School of Global Public Health. With a background in the biological sciences, Haine enjoys sharing environmental health related scientific findings emerging from Center scientists with K-12 audiences and members of the general public. In 2018, Haine received *NC's Outstanding Informal Educator Award in Science, Mathematics, and Technology Education* from the North Carolina Science, Mathematics, and Technology Education Center.

Elise Hickman is a PhD candidate in the Jaspers lab as part of the Curriculum in Toxicology & Environmental Medicine at UNC Chapel Hill. Her research is focused on the effects of e-cigarettes on respiratory immune responses.

Bob Immormino, PhD is a research assistant in the Moran lab at UNC Chapel Hill in the Center for Environmental Medicine and Lung Biology. Research in the Moran Lab has the overarching goal of better understanding how environmental exposures impact the development of allergic diseases including asthma and food allergy. Our strengths are in mouse models of airway disease, but we also work collaboratively in translational human *in vitro* models.

Ilona Jaspers, PhD, is a Professor at the University of North Carolina at Chapel Hill (UNC-CH) in the Department of Pediatrics with joint appointments in the Departments of Microbiology and Immunology as well as Environmental Sciences and Engineering. She is also the Director for the Center for Environmental Medicine, Asthma, and Lung Biology, overseeing several collaborative, interdisciplinary, and translational projects examining how exposure to inhaled contaminants affect human health. Dr. Jaspers has a long-standing interest in the adverse health effects induced by pollutant exposures. Research in her laboratory focuses on the mechanisms by which exposure to air pollutants such as ozone, woodsmoke, cigarette smoke, and e-cigarettes modifies host defense responses, using translational human *in vitro* and *in vivo* models.

Scott McIntosh, PhD, is an Associate Professor in the Department of Public Health Sciences at the University of Rochester Medical Center. Dr. McIntosh received his Ph.D. in Counseling Psychology from the University of Miami in 1993. Dr. McIntosh is currently a Co-Investigator with the Center for Research on Flavored Tobacco (CRoFT) in Western New York — one of nine Tobacco Centers of Regulatory Science grants awarded in 2018 by the FDA and NIH to support research to inform the regulation of tobacco products. The goal of CRoFT's four projects is to use novel approaches for assessing the impact of tobacco product flavors on consumer behavior, exposures, and health. His research interests include the use of qualitative methods and survey research, primarily with "technology-assisted behavior change" and technology-assisted training and education (clinicians and researchers).

Meghan Rebuli, PhD, is an Assistant Professor of Pediatrics at the University of North Carolina at Chapel Hill. She received her BS and PhD from North Carolina State University and did her postdoctoral training at UNC-CH. Her research focus is respiratory toxicology and she investigates how inhaled pollutants affect airway health.

Greg Smith, PhD, is a postdoctoral fellow in toxicology and environmental medicine in the lab of Dr. Samir Kelada at UNC-Chapel Hill. His research combines developing custom inhalation exposure systems and the use of new mouse models to investigate genetic/genomic mechanisms of susceptibility to the health effects of air pollutants.