

## **First Annual Retreat of the UNC TCORS**

September 8th, 2016, 7:45AM – 5:30PM

Rizzo Conference Center at Meadowmont (Magnolia C)

### **Abstract list**

**Project 1: The effects of new and emerging tobacco products (NETPs) on lung hydration and inflammation.**

- 1. LITTLE CIGARS EXERT MORE SEVERE EFFECTS ON AIRWAY EPITHELIA THAN CIGARETTES.** Arunava Ghosh, Steven L. Reeber, Corey M. Jania, Andrew J. Garrison, Shernita L. Lee, Stephen L. Tilley, Claire M. Doerschuk, Amy H. Herring, Gary L. Glish, Robert Tarran.
- 2. BANANA PUDDING FLAVORED E-LIQUID ALTERS CELL PROLIFERATION AND  $Ca^{2+}$  SIGNALING IN LUNG EPITHELIA.** Temperance R. Rowell & Robert Tarran.
- 3. CIGARETTE SMOKE DISRUPTS THE FUNCTIONS OF SPLUNC1 IN REGULATING AIRWAY SURFACE LIQUID VOLUME AND ANTI-MICROBIAL ACTIVITY.** P. Moore, B. Reidel, A. Ghosh, M. Kesimer and R. Tarran.
- 4. EVALUATING TOXICITY AND ELECTROPHYSIOLOGICAL EFFECTS OF E-LIQUIDS.** Eric S. Davis, Sarah E. Sizer, Maria F. Sassano, Shernita L. Lee and Robert Tarran.
- 5. SUSTAINED INCREASES IN CYTOSOLIC CALCIUM INDUCE CFTR INTERNALISATION.** Waseema Patel, Abigail Marklew, Michael A Gray, Rob Tarran.
- 6. ELECTRONIC CIGARETTES INDUCE INFLAMMATION AND ACTIVATE THE UNFOLDED PROTEIN RESPONSE IN HUMAN AIRWAY MACROPHAGES.** Bob A. Lubamba, Mary E. B. Martino, Raymond Coakley, Neil Alexis, Robert Tarran, and Carla M. P. Ribeiro.
- 7. CIGARETTE SMOKE REDUCES AIRWAY EPITHELIAL ATP RELEASE.** Catharina van Heusden, Lisa Jones, Wanda O’Neal, and Eduardo R. Lazarowski.

**Project 2: The effects of tobacco exposure on the airway mucus/mucin integrity and proteome: determining the tobacco mucomarkers.**

- 8. PROTEOMIC PROFILING OF SPUTUM FROM NEW AND EMERGING TOBACCO PRODUCTS USERS REVEALS BIOMARKERS OF EFFECT.** Boris Reidel, Giorgia Radicioni, Amina Ford, Prashamsha Haridass, Neil Alexis, Ilona Jaspers and Mehmet Kesimer.

9. **EFFECT OF LITTLE CIGAR EXPOSURE ON THE AIRWAY EPITHELIAL MUCUS BARRIER AND EXOSOMAL MIRNA PROFILE.** Sabri Abdelwahab, Arunava Ghosh, Boris Reidel, Prashamsha Haridass, Richa Gupta, Hong Dang, Piotr Mieczkowski, Robert Tarran and Mehmet Kesimer.
10. **THE NEW AND EMERGING TOBACCO PRODUCTS IMPACT THE IMMUNE RESPONSE IN THE NASAL EPITHELIA.** Giorgia Radicioni, Amina Ford, Prashamsha Haridass, Neil Alexis, Ilona Jaspers and Mehmet Kesimer.

**Project 3: Mouse models of human smoking-related diseases: what is the best mimic of human disease?**

11. **CHANGES IN LUNG GENE EXPRESSION INDUCED BY CIGARETTE SMOKE IN HEALTHY MICE AND MICE WITH CHRONICALLY INFLAMED AIRWAYS.** Michelle L. Engle, Jessica R. Martin, Corey M. Jania, Hong Dang, Claire M. Doerschuk.
12. **EFFECTS OF CIGARETTE AND LITTLE CIGAR SMOKE EXPOSURE IN MICE.** Jessica R. Martin, John C. Gomez, Corey M. Jania, Lewis T. Randall, Stephen L. Tilley, Claire M. Doerschuk.
13. **EFFECT OF CHRONIC TOBACCO SMOKE EXPOSURE ON INNATE IMMUNE CELL POPULATIONS IN THE LUNG.** John C. Gomez, Jessica R. Martin, Olivia K. Giddings, Jason R. Mock, Corey M. Jania, Stephen L. Tilley, Claire M. Doerschuk.

**Project 4: Translational studies to identify epithelial biomarkers of smoke exposure**

14. **EFFECTS OF BERRY FLAVORED E-CIGARETTE LIQUIDS ON AIRWAY EPITHELIAL CELLS.** Yael N. Escobar, K. White, Phillip W. Clapp, Ilona Jaspers.
15. **NOVEL APPLICATIONS FOR NON-INVASIVE SAMPLING METHOD OF THE NASAL MUCOSA.** Meghan E. Rebuli, Adam M. Speen, Phillip W. Clapp, Ilona Jaspers.
16. **FLAVORED ELECTRONIC CIGARETTE LIQUIDS IMPAIR RESPIRATORY INNATE IMMUNE CELL FUNCTION.** Phillip W. Clapp, Erica A. Pawlak, Justin T. Lackey, James E. Keating, Steven L. Reeber, Gary L. Glish, and Ilona Jaspers.
17. **INFECTION WITH LIVE-ATTENUATED INFLUENZA VIRUS (LAIV) CAUSES ALTERED IMMUNE RESPONSES IN THE NASAL MUCOSA OF E-CIGARETTE USERS.** Meghan E. Rebuli, Ellen Glista-Baker, Erica Pawlak, Adam M. Speen, Phillip W. Clapp, Luisa Brighton, Terry Noah, Ilona Jaspers.
18. **ETHINYL ESTRADIOL MEDIATED SEX DIFFERENCES IN THE HUMAN AIRWAY EPITHELIUM OF SMOKERS AND NON-SMOKERS.** Meghan E. Rebuli and Ilona Jaspers.

### **Core C: Tissue culture and smoke exposure**

**19. BENCHMARK STUDIES OF COMBUSTIBLE TOBACCO PRODUCTS FOR COMPARISON TO EMERGING TOBACCO PRODUCTS.** Teresa M. Mascenik, John T. Minges, Mariam M. Lam, Scott H. Randell.

**20. THE UNC TCORS CELL CULTURE AND SMOKE EXPOSURE CORE: PRODUCTIVITY AND CAPABILITIES.** Mariam M. Lam, John T. Minges, Teresa M. Mascenik, and Scott H. Randell.

### **Core D: Analytic core**

**21. COLLECTION AND ANALYSIS OF E-CIGARETTE AEROSOL GENERATED AT A RANGE OF COIL TEMPERATURES.** Nicholas J. Wallbillich and Gary L. Glish.

**22. DIRECT ANALYSIS OF NICOTINE AND NICOTINE METABOLITES BY PAPER-SPRAY MASS SPECTROMETRY.** James E. Keating, Gary L. Glish.

### **Flavors supplement**

**23. THE REWARDING AND ANALGESIC PROPERTIES OF FLAVORED ELECTRONIC CIGARETTES.** Samantha Nau and Susan Girdler.