



# NCRC CATALYST VIRTUAL RESEARCH SYMPOSIUM 2021

Looking at the big picture: The application of -omics techniques in health and disease

March 25th & 26th  
9am – 12pm

# Agenda

## Thursday, March 25<sup>th</sup>

### Morning

- Opening Remarks – 9am
- Session 1 – The Microbiome in Plants, Humans, and Foods – 9:05am
  - Dr. Diego Bohorquez – 9:05am
  - Dr. Andrew Neilson – 10:05am
  - Dr. Reed Stubbendieck – 10:30am
- Break – 10:55am
- Flash Talks with live Q&A – 11:05am

### Evening

- Facilitated Networking – 6:00pm
- Trivia – 7:00pm

## Friday, March 26<sup>th</sup>

### Morning

- Welcome – 9am
- Session 2 – Clinical Omics – 9:05am
  - Dr. Folami Ideraabdullah – 9:05am
  - Dr. Simon Gregory – 10:05am
  - Dr. Saroja Voruganti – 10:30am
- Break – 10:55am
- Flash Talks with live Q&A – 11:05am

## Speaker Biographies



### **Dr. Diego Bohorquez, Duke University**

Dr. Bohórquez is a neuroscientist recognized for the discovery of a neural circuit that serves as the basis of gut brain sensory transduction. At Duke University, he leads a research team built with the vision to treat the brain from the gut. His overall mission is to dissect gut-brain circuits underlying behaviors to improve health. Beyond the laboratory, he has founded the Gastronomists - a venue to disseminate knowledge on gut brain matters.

### **Dr. Andrew Neilson, North Carolina State University - PHHI**

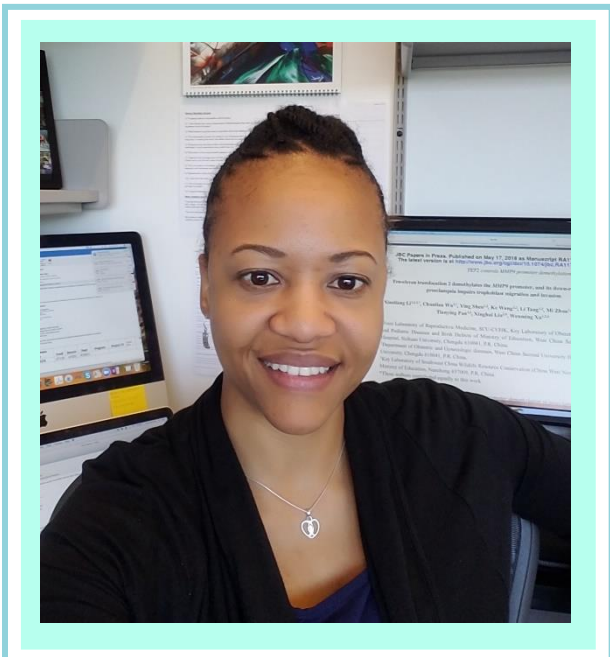
Dr. Neilson received his BS in Food Science from Brigham Young University in 2005 and PhD in Food Science from Purdue in 2009. Following his PhD, completed a postdoc studying diet and colon inflammation and cancer at the University of Michigan Medical School from 2009-2011. From 2011-2018, he was an Assistant and then Associate Professor in the Department of Food Science and Technology at Virginia Tech in Blacksburg, VA. Dr. Neilson joined PHHI in 2019. His research focuses on the interaction of dietary phytochemicals with the microbiome. Specifically, he is interested in production of bioavailable and bioactive microbial metabolites and their activities in the gut and peripheral tissues.



# Speaker Biographies

## **Dr. Reed Stubbendieck, University of Wisconsin-Madison**

Reed Stubbendieck is a postdoctoral researcher in Dr. Cameron Currie's laboratory in the Department of Bacteriology at the University of Wisconsin-Madison. His primary research interests involve understanding how bacteria use specialized metabolites in competitive interspecies interactions. Reed earned his doctoral degree in the laboratory of Dr. Paul Straight at Texas A&M University where he identified the mechanisms of action, resistance, and biosynthesis of antibiotic linearmycins that are produced by *Streptomyces* and cause lysis of *Bacillus subtilis* in a model competitive system. As a postdoctoral research fellow, Reed is studying the human oral and respiratory microbiota to better understand interactions between our microbiome and pathogens that colonize these niches. Reed's work provided some of the first evidence for nutrient competition inside the human nasal cavity.



## **Dr. Folami Ideraabdullah, UNC Chapel Hill**

Dr. Ideraabdullah is an Assistant Professor of Genetics in the School of Medicine and holds a joint appointment in the Department of Nutrition in the Gillings School of Global Public Health. She earned her PhD in comparative mouse genetics at UNC Chapel Hill and completed postdoctoral training in epigenetic regulation of genomic imprinting at the University of Pennsylvania. The Ideraabdullah lab studies mechanisms of environmental modulation of the epigenome during development.

# Speaker Biographies

## **Dr. Simon Gregory, Duke University**

Dr. Gregory is a tenured Professor and Vice Chair of Research in the Department of Neurology at Duke University and Director of the Molecular Genomics Core at the Duke Molecular Physiology Institute (DMPI). As a neurogenomicist, Dr. Gregory applies genetic, genomic, and epigenetic approaches to elucidate the mechanisms underlying multi-factorial diseases. His primary areas of research involve understanding the molecular processes associated with disease development and drug induced remyelination in multiple sclerosis (MS) in human cohorts and animal models. His MS research also involves exploring quality of life for patients, plotting the trajectory of disease, and identifying predictors of progression from newly diagnosed MS patients from immune cell types.



## **Dr. Saroja Voruganti, UNC Chapel Hill - NRI**

Dr. Saroja Voruganti, Associate Professor of Nutrition, is working on building a nationally and internationally recognized research program in nutritional genomics at UNC. A unique field, nutritional genomics seeks to identify genetic susceptibility to diseases, effect of genetic variation on nutrient metabolism and the effect of nutrients on gene expression. She has extensively investigated the interplay between nutritional and genetic factors influencing disease risk in ethnically diverse populations, especially minority populations such as American Indian, Alaska Native, Parsi Zoroastrian and Hispanic populations. Her research is focused on uncovering new connections between genetics, nutrition, and epidemiology that can lead to more accurate determination disease risk and new treatment options for metabolic diseases.

