

### **Tenure Track Faculty Positions**

Closing Date: September 30, 2017 (or until suitable candidate is found)

The [Plants for Human Health Institute](#) (PHHI) is one arm of an integrated research team at the North Carolina Research Campus (NCRC) in Kannapolis, North Carolina which hosts, in addition to NCSU, six other UNC system universities, as well as Duke University.

Currently we are inviting applications for faculty with research expertise in the areas *Nutrigenetics and Nutrigenomics*; and *the Food-Human Microbiome Interface*.

#### **1) Nutrigenetics and Nutrigenomics (Asst/Assoc/Full Professor) Tenure Track (Position 00106399, <https://jobs.ncsu.edu/postings/87392>)**

We are seeking applicants to conduct research in the arena of nutritional genomics. The successful candidate will develop a transdisciplinary research program to investigate how foods influence human genes, and how individual genetic differences condition human response to dietary constituents. Candidates are expected to demonstrate expertise in characterization, metabolic phenotyping and metagenomic technologies to analyze associations between diet and health status. Relevant foci include: diet/gene interactions (dietary components include phytoactive, extranutritional compounds as well as nutrients); diet-regulated conditioning of human chronic disease susceptibility or resistance; dietary interventions used to mitigate disease incidence; and epigenetic impacts on host physiology and health outcome. The selected candidate will interface with a complementary team of faculty to explore hypothesis-driven studies targeting specific nutrient-metabolic and nutrient-disease pathways.

#### **2) The Food-Human Microbiome Interface (Asst/Assoc/Full Professor) Tenure Track (Position 00106400, <https://jobs.ncsu.edu/postings/87398>)**

We are seeking applicants to conduct research in the realm of the gut microbiome and its impact on human nutritional status and responses to foods/diets. The successful candidate will develop a transdisciplinary research program to investigate the influence of intestinal microbiota on human metabolism and health, associations between dietary plant-based nutrients and phytochemicals and the microbiome, and impact of the gut microbiota on energetics, obesity, and associated chronic diseases. Relevant foci include: regulation of microbial communities by dietary intervention, exploration of phytonutrient-macronutrient interaction on microbial growth and diversity, effects of diversity and community structure on health of the human host, and mechanistic studies modeling cell signaling and communication between microbial species and host. Collaboration with ongoing clinical trials is anticipated. Applicants must have experience in qualitative and quantitative analysis of microbiota from clinical samples, including taxonomy, identification, sequencing, and bioinformatics. Expertise in characterization, metabolic phenotyping and metagenomics technologies will be required to interpret associations between intestinal microbes and the dietary metabolites produced, and to investigate nutritional strategies for prevention and attenuation of chronic degenerative diseases via microbial modulation.

Ph.D. required in specified or related field. Appointees may be competitive for David H. Murdock Distinguished Professorships within the Institute. Successful applicants will have appointments in an NCSU department within the College of Agriculture and Life Sciences (CALs). The College of Agriculture and Life Sciences is one of the largest Colleges at NCSU with over 500 faculty distributed among 22 academic departments.

The Plants *for* Human Health Institute (PHHI) at North Carolina State University (NCSU) is seeking two new tenured or tenure-track faculty members to join a unique transdisciplinary research team. The PHHI's research aims to pioneer a dramatic shift in the use of plant food crops, not just as a source of nutrients and calories, but as a source of bioactive plant components that protect and enhance human health. Integrated research in metabolomics, biochemistry, pharmacogenomics, breeding, molecular biology, postharvest attributes, and phytochemistry will be geared towards development of fruit and vegetable produce with pharmacologically-relevant levels of health-protective phytochemical complexes. The ultimate goal is to develop and characterize existing as well as new candidate crops with unique merit for human health and wellness. PHHI faculty seek to link discovery and translational research through a common focus and close collaboration between basic and applied scientists. To facilitate this unprecedented research agenda, PHHI faculty have full access to state-of-the-art facilities, base operating support, and in-house expertise supporting genomic, proteomic, nutrigenomic, and metabolomic research, and are expected to conduct innovative, highly competitive independent research, to participate in interactive team efforts, and to obtain significant external funding to support the research mission. At final capacity, the PHHI will house 15 T/TT faculty members and their research teams, along with relevant industry partners.

To apply, visit <http://jobs.ncsu.edu> or the specific reference links above for each position. Please submit curriculum vitae, summary of current and proposed research programs, and contact details for 5 references. For questions or additional information, please contact Tara L. Vogelien, Director for Business & Research Administration, Plants for Human Health Institute, [tara\\_vogelien@ncsu.edu](mailto:tara_vogelien@ncsu.edu), 704.250.5401.

AA/EOE. In addition NCSU welcomes all candidates regardless of sexual orientation.