

Assistant/Associate/Full Professor Positions in Microbiomes and Complex Microbial Communities

As part of the Chancellor's Faculty Excellence Program, **NC State University** and the **Microbiomes and Complex Microbial Communities Cluster** seeks applications and nominations for four faculty positions at the **Assistant, Associate, or Full Professor** rank. We seek innovative and transformative academic leaders whose scholarship will further NC State's position as one of the premier universities of its kind in the nation. Appointments will begin in August 2016. Inclusiveness and diversity are academic imperatives and thus, university goals. The University is particularly interested in candidates with experience in working with students from diverse backgrounds and who have a demonstrated commitment to improving access to higher education for students from underrepresented groups.

About the Cluster

Life on Earth is sustained by countless microbial communities occupying habitats ranging from the ocean floor to the digestive tracts of insects. The microbiomes of multicellular organisms have been directly linked to development and health, whereas free-living communities are the basis for important applied microbial processes such as wastewater treatment, fermentation, bioremediation and biofuel production. NC State already has many institutional capabilities needed to effectively study microbiomes and other complex microbial communities, and many NC State faculty currently address the roles of microorganisms in a variety of environmental settings. However, the university lacks a core group of faculty who can fully integrate use of these existing tools and resources and who focus on characterizing, modeling, and engineering microbiomes and complex microbial communities. The aim of the **Microbiomes and Complex Microbial Communities** cluster is to fill this existing gap.

The cluster will focus on developing the next generation of tools and capabilities to probe the molecular mechanisms underlying microbial community interactions; to manage, analyze, interpret and model the enormous amounts of data generated by microbiome studies; and to begin simulating and assembling synthetic communities. The cluster will particularly focus on microbial communities associated with crop plants, farm animals, insects and the environment, thereby building upon NC State's existing strengths in agriculture, animal science, and biotechnology. The cluster seeks to establish NC State as an internationally recognized, multidisciplinary center of excellence in the analysis and engineering of plant, animal, and insect microbiomes as well as the complex microbial communities in soil and water environments.

About the Positions

The cluster seeks to hire a diverse and preeminent group of **four** faculty members at either the **Assistant, Associate or Full Professor** rank. Appropriate areas of research interest for these positions are broad but include (1) microbial ecology, (2) "omics" technologies, (3) big data analysis/computational modeling and (4), microbiome engineering. Experience or interest in non-human microbiomes is highly desired.

Successful candidates will possess a minimum of a Ph.D. in a relevant field and should have a strong capacity to teach at both the undergraduate and graduate levels, including mentoring of doctoral students and postdoctoral fellows. Priority will be given to candidates that have demonstrated abilities to form interdisciplinary collaborations that reach across academic units. Inclusiveness and diversity are academic imperatives and thus, university goals. Applications and materials are accepted through our online system at <https://jobs.ncsu.edu>.

Confidential inquiries and nominations should be directed to:

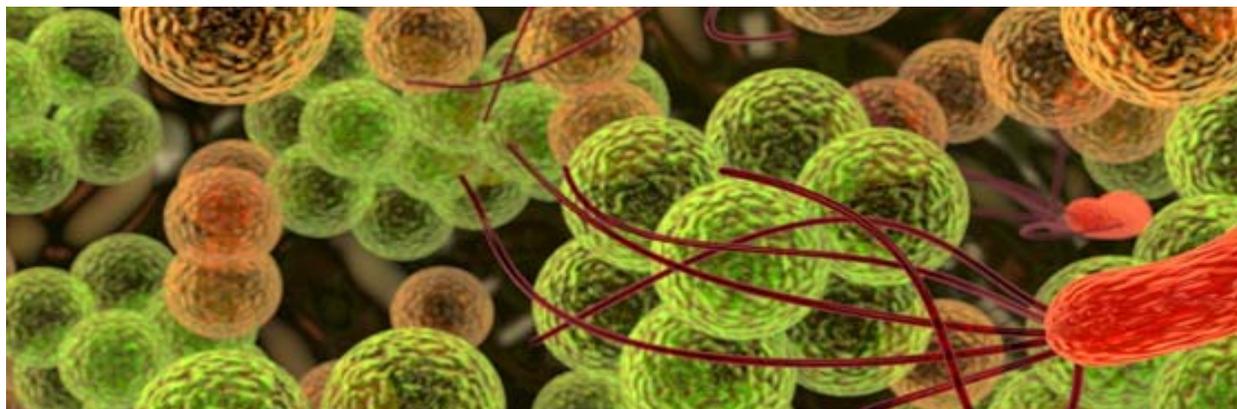
Dr. Michael Hyman (mrhyman@ncsu.edu) or
Dr. Chase Beisel (cbeisel@ncsu.edu).

Cluster Search Committee

Charles Apperson (Insect microbiomes)
Chase Beisel (Microbial community engineering) (**Cluster co-lead**)
James Brown (Microbial diversity)
Ignazio Carbone (Fungal diversity)
Robert Kelly (Functional genomics of hyperthermophiles)
Rodolphe Barrangou (CRISPR-Cas systems)
Alexandria Graves (Microbial source tracking)
Michael Goshe (Proteomics)
Michael Hyman (Applied microbial physiology) (**Cluster co-lead**)
Marce Lorenzen (Insect/symbiont interactions)
Dahlia Nielsen (Bioinformatics)
Siddhartha Thakur (Animal pathogens)
Deyu Xie (Plant metabolomics)

Microbiome-related research and facilities at NCSU:

Bioinformatics Research Center: <http://brc.ncsu.edu>
Biotechnology program: <http://biotech.ncsu.edu>
Biomanufacturing Training and Education Center: <http://www.btec.ncsu.edu>
Center for Integrated Fungal Research: <http://cifr.ncsu.edu>
Genome Sciences Laboratory core facility: <http://research.ncsu.edu/gsl/>
Mass Spectrometry facility: <http://www.ncsu.edu/chemistry/msf/>



The Chancellor's Faculty Excellence Program

The Chancellor's Faculty Excellence Program, launched in 2011, is recruiting some of the best and brightest minds to join NC State's community of world-leading faculty at the forefront of this initiative. Guided by a strong strategic plan and an aggressive vision, new thematic clusters are adding over 75 new faculty members in 20 select fields to enhance the breadth and depth of NC State's solution-driven research and innovation. The current 20 clusters have been selected on several important criteria:

- Ability to achieve national eminence in proposed topic
- Alignment with university strategic priorities
- Demonstration of real interdisciplinarity
- Potential to build on an existing university strength (or strength of the existing assets)
- Opportunity for faculty to engage in both research and teaching of proposed topic
- Ability to attract funding
- Commitment to share resources and physical infrastructure
- Inclusion of multiple colleges
- Demonstration of a balanced hiring plan with clear leadership
- Potential to attract diverse faculty

The Chancellor's Faculty Excellence Program is managed through the Office of the Provost. Using a faculty initiated proposal process, twelve clusters were announced in February 2012 and eight in April 2015.

- Bioinformatics
- Carbon Electronics
- Data-driven Science
- Digital Transformation of Education
- Emerging Plant Disease and Global Food Security
- Environmental Health Science
- Forensic Sciences
- Genetic Engineering and Society
- Geospatial Analytics
- Global Environmental Change and Human Well-Being
- Global Water, Sanitation and Hygiene
- Innovation + Design
- Leadership in Public Science
- Microbiomes and Complex Microbial Communities
- Modeling the Living Embryo
- Personalized Medicine Sustainable
- Sustainable Energy Systems and Policy
- Synthetic and Systems Biology
- Translational Regenerative Medicine
- Visual Narrative

To date, forty-one (41) new faculty have been hired via the Chancellor's Faculty Excellence Program. In addition to bringing outstanding new faculty to campus and moving NC State toward national eminence, the Chancellor's Faculty Excellence Program has seeded and nurtured an expanding culture of interdisciplinarity on campus. We invite you to explore more information about the Chancellor's Faculty Excellence Program and this cluster at <http://ncsu.edu/workthatmatters>.

About NC State University

NC State was founded with a purpose: to create economic, societal and intellectual prosperity for the people of North Carolina and the country. We began as a land-grant institution teaching the agricultural and mechanical arts. Today, we're a pre-eminent research enterprise that excels in science, technology, engineering, math, design, the humanities and social sciences, textiles and veterinary medicine.



NC State students, faculty and staff take problems in hand and work with industry, government and nonprofit partners to solve them. Our 34,000-plus high-performing students apply what they learn in the real world by conducting research, working in internships and co-ops, and performing acts of world-changing service. That experiential education ensures they leave here ready to lead the workforce, confident in the knowledge that NC State consistently rates as one of the best values in higher education.

Each year, NC State adds \$6.5 billion to the statewide economy, equivalent to creating more than 90,000 new jobs. That represents significant return on investment for the citizens of North Carolina in the form of research advances, innovative technologies, successful companies, skilled graduates and new jobs waiting for them.

Our 9,000 faculty and staff are world leaders in their fields, bridging the divides between academic disciplines and training high-caliber students to meet tomorrow's challenges. Together, they forge powerful partnerships with government, industry, nonprofits and academia to remake our world for the better.

NC State is leading efforts to curb nuclear proliferation, develop a smart electric grid, create self-powered health monitors, help farmers confront climate change and build a new American manufacturing sector. Our award-winning Centennial Campus is home to more than 70 public and private partners — as well as the innovative Hunt Library, which Time magazine has dubbed “the library of the future.”

Raleigh and the Community

It all happens in one of the fastest-growing urban centers in America. A top spot for young professionals and families, Raleigh is nationally recognized as a city on the rise:

- No. 1 among the best places for business and careers (Forbes, 2014)
- No. 1 among U.S. cities attracting the most families (Forbes, 2014)
- No. 2 among America's 15 best cities for young professionals (Forbes, 2014)
- No. 3 among the best midsize U.S. metro areas for college students (American Institute for Economic Research, 2014)
- Recently selected as a Google Fiber expansion city

With Durham and Chapel Hill, Raleigh anchors the Research Triangle, a national hotspot for high-tech enterprise. The top companies in the region — including IBM, Cisco Systems, SAS Institute, Biogen Idec and GlaxoSmithKline — are among the country's best employers. They also lead the way in hiring new NC State graduates.

More than 125 years after its creation, NC State continues to make its founding purpose a reality. Every day, our career-ready graduates and world-leading faculty make the fruits of learning and discovery available to people across the state, throughout the nation and around the world.



For More Information:

NC State University at <https://www.ncsu.edu/>

NC State: Think and Do at <https://www.ncsu.edu/think-and-do>

NC State's Strategic Plan at <http://info.ncsu.edu/strategic-planning/overview/pathway-to-the-future/>

NC State's Commitment to Diversity at <http://oied.ncsu.edu/diversity/chancellors-statement-on-diversity/>

NC State University is an equal opportunity and affirmative action employer. All qualified applicants will receive consideration for employment without regard to race, color, national origin, religion, sex, gender identity, age, sexual orientation, genetic information, status as an individual with a disability, or status as a protected veteran. Individuals with disabilities requiring disability-related accommodations in the application and interview process, please call 919.515.3148. We welcome the opportunity to work with candidates to identify suitable employment opportunities for spouses or partners.