

Open Rank Cluster Faculty Positions in Sustainable Energy Systems and Policy

As part of the **Chancellor's Faculty Excellence Program**, NC State University seeks two additional faculty members to provide key leadership in **sustainable energy systems and policy** (SESP). We seek innovative and transformative academic leaders whose scholarship will advance NC State's position as one of the premier universities of its kind. These hires will build on nationally prominent, campus-wide strengths in energy technology development, economics, policy analysis, and energy-related extension and outreach.

About the Cluster

The vision for the SESP cluster is to transform NC State into a preeminent and high visibility hub for interdisciplinary research that informs key energy decisions at the state, federal, and international levels. NC State recognizes that growing global energy demands must be met while simultaneously addressing the impacts of energy development. The overarching SESP goal is to pursue rigorous, problem-driven energy research that considers the relevant technical, economic, environmental, political, and social dimensions in order to deliver practical solutions.

About the Positions

Two new faculty with expertise in energy economics and policy have already joined the SESP cluster (see <https://facultyclusters.ncsu.edu/clusters/sustainable-energy-systems-and-policy/>). Desired SESP capabilities for the two remaining positions include, but are not limited to, developing and applying mathematical models of energy systems; modeling economy, technology, and policy interactions in evolving smart grids and electricity markets under uncertainty; evaluating the environmental impacts of energy technology using life cycle assessment, and performing systems-level analysis that considers interactions between energy and other infrastructure systems. We welcome applications from all disciplines, but applicants must demonstrate a strong connection to the SESP vision and goal. The home department will be matched to the domain and expertise of the faculty candidate.

Minimum requirements include a Ph.D. from an accredited institution in a field relevant to the SESP theme. Positions are open to any rank at the time of appointment. Applicants at the senior level should have demonstrated excellence in research and a sustained record of collaborative work. All candidates, regardless of rank, should have a strong capacity to teach at both the undergraduate and graduate levels, including the capacity to mentor doctoral students and postdoctoral fellows. 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.

For consideration, a curriculum vitae, cover letter, and contact information for three references are required. Candidates may optionally include three letters of reference. Materials for consideration will be accepted electronically via <http://jobs.ncsu.edu/postings/75661>. Additional materials may be required upon request. While a comprehensive review of applications will begin immediately, this is a long-term posting and will remain open until all positions are filled.

Confidential inquiries and nominations should be directed to:

Dr. Joe DeCarolis (jdecarolis@ncsu.edu)

Dr. Laura Taylor (lotaylor@ncsu.edu)

Cluster Search Committee

Mesut Baran (Electrical and Computer Engineering)

Joe DeCarolis (Civil, Construction, and Environmental Engineering), **cluster co-lead**

Joel Ducoste (Civil, Construction, and Environmental Engineering)

Harrison Fell (Agricultural and Resource Economics)

Chris Frey (Civil, Construction, and Environmental Engineering)

Christopher Galik (Public Administration)

Iqbal Husain (Electrical and Computer Engineering)

Branda Nowell (Public and International Affairs)

Laura Taylor (Agricultural and Resource Economics), **cluster co-lead**

Related research and facilities at NC State:

[NC Clean Technology Center](#)

[Center for Environmental and Resource Economics Policy](#)

[Future Renewable Electric Energy Delivery and Management Systems Center](#)

[Industrial Assessment Center](#)

[PowerAmerica Institute](#)



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
- Precision Medicine
- Sustainable Energy Systems and Policy
- Synthetic and Systems Biology
- Translational Regenerative Medicine
- Visual Narrative

To date, fifty-five (55) 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://facultyclusters.ncsu.edu>.

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 <https://strategicplan.ncsu.edu/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.