# **Energy Equity, Environmental Justice & Community Engagement Faculty Fellows Program**

Impact Report on Pilot Program – Part 1, Oct. 2023-May 2024

### **Program Overview**

The Center for Sustainable Communities Research and Education, in close collaboration with the Sustainability cluster of IRIs (Strategic Energy Institute, Brook Byers Institute for Sustainable Systems, Renewable Bioproducts Institute) and the Social Equity & Environmental Engineering Lab, launched the Energy Equity, Environmental

Justice & Community Engagement Faculty Fellows Program in October 2023. The program engaged 22 Georgia Tech faculty and two external fellows with the goal of growing collaborative expertise and building longterm relationships with each other and with community partners around energy equity, community benefits, and environmental justice. During Part 1 of the program, which took place from October 2023 through May 2024, SCoRE offered a variety of learning and networking opportunities, and each fellow decided what they wanted to participate in. All activities were intended to: 1) grow fellows' familiarity with the mission and programs of local sustainability partners, 2) build relationships with those partners based on shared research interests, and 3) support relationship building among the Fellows, especially across disciplines. Each fellow also worked on an individual deliverable that



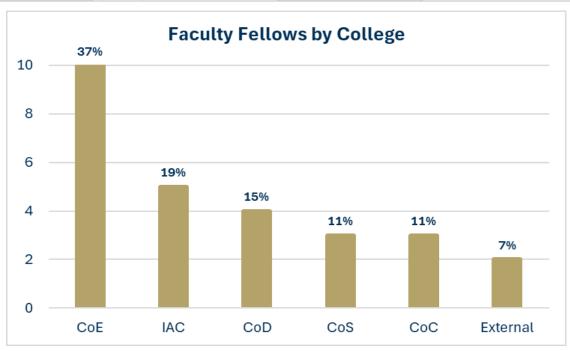
Dr. Erica Holloman-Hill (Ayika Solutions) and Fellow John Lewe (CoE) participate in the GT Sustainability Showcase Faculty Fellows Panel Discussion

advanced their own goals for integrating community-engaged research in their work and worked in a small group advancing a group deliverable intended to strengthen the community-engaged sustainability research ecosystem at Georgia Tech. To extend learning, the decision was made to continue the program through December 2024, making the pilot program essentially one calendar year. Twenty of the Fellows have chosen to continue.

	The Program advances three IRI Strategic Impact Areas:				
<i>A</i> .	Catalyze Interdisciplinary Research Community	<ul> <li>Build and strengthen a network of interdisciplinary, sustainability-focused faculty interested in community-engaged research</li> <li>Cultivate and support new partnerships between researchers and community-based organizations</li> <li>Support proposal development by establishing community partnerships and providing trainings on and reviewing broader impact statements / community benefits plans</li> </ul>			
<i>C</i> .	Educate Key Stakeholders and Prepare the Future Workforce	• Provide <b>professional education training</b> / <b>development</b> on centering justice, equity, and community engagement in research			
E.	Accelerate Technology and Knowledge Transfer	• Support <b>public good innovation</b> by cultivating partnerships with non-profit organizations			

# **Inaugural Class of 24 Faculty Fellows**

Faculty Fellows by Unit  (Bold = affiliated with an IRI co-sponsor - BBISS, RBI, or SEI)						
Fellow	Unit	Fellow	Unit			
Isaiah Bolden	Earth and Atmospheric Sciences	Michael Nitsche	Literature, Media, and Communication			
Fani Boukouvala	Chemical & Biomolecular Engineering	HyunJoo Oh	Industrial Design and Interactive Computing			
Dylan Brewer	Economics	Sofia Perez-Guzman	Civil and Environmental Engineering			
Will Bryan	Southeast Energy Efficiency Alliance (SEEA)	Gregory Randolph	City and Regional Planning			
Yongsheng Chen	Civil and Environmental Engineering	Elora Raymond	City and Regional Planning			
Lily Cheung	Chemical and Biomolecular Engineering	Alexander Robel	Earth and Atmospheric Sciences			
Ashutosh Dhekne	Computer Science	Jessica Roberts	Interactive Computing			
Scott Duncan	Aerospace Engineering (ASDL)	Meisha Shofner	Materials Science and Engineering			
Lauren Garden	Materials Science and Engineering	Patritsia Stathatou	RBI (soon to be ChBE faculty)			
Michelle Huang	Georgia Gwinnett College	Brigitte Stepanov	Modern Languages			
Allen Hyde	History and Sociology	Valerie Thomas	Industrial and Systems Engineering/Public Policy			
Mike Lehman	Literature, Media, and Communication	Emily Weigel	Biological Sciences			
Jung-Ho Lewe	Aerospace Engineering (ASDL)	Danielle Willkens	Architecture			



Program Activities				
Community Partner Site Visits	<ul> <li>ECO-Action</li> <li>Community Health Aligning for Revitalization, Resilience, and Sustainability (CHARRS)</li> <li>Lifecycle Building Center (ReBuildATL Coalition)</li> <li>Henderson School Alumni Association and Trust (HSAAT in Jackson, GA)</li> </ul>			
Partner-Hosted Workshops	<ul> <li>"Atlanta 101" workshop led by Center for Civic Innovation on local government and policy-making</li> <li>EPA workshop on leveraging EPA programs/funding for community partnerships</li> </ul>			
Meetings and Symposium	<ul> <li>RCE Greater Atlanta Quarterly Meeting at Morehouse School of Medicine</li> <li>Advancing Direct Air Capture for Community Benefit and Decarbonization Symposium with SEI</li> </ul>			
Fellows-Partners Networking	<ul> <li>Holiday Gathering at BBISS</li> <li>Closing Program Gathering at Kendeda Building</li> </ul>			

Key Deliverables to Date				
Proposals	<ul> <li>DOE: CORE-CM (critical minerals) (\$7.5M)</li> <li>EPA Community Change Grant (\$20M)</li> <li>Sustainability Next: Resilience Workshop (ATL/SC), Internetin-a-Box (Jackson, GA)</li> <li>PIN</li> <li>100 &amp; Change (GT internal)</li> </ul>			
Publications & Tools (in process)	<ul> <li>Joint reflective essay ("commentary") on preparing for community-engaged research</li> <li>Community-engaged Research Principles</li> <li>Digital CER networking and tracking platform</li> </ul>			
Presentations	GT Sustainability Showcase     Atlanta Studies Symposium (held at Emory)			



### **Fellows Program Feedback**

# Overall Program Rating: 4.2/5.0

# 1. Key Theme: Learning to Listen

Bolden - "The opportunity to listen is what is valuable. When you talk to any faculty member, you start with goals in mind, and you work backward. But I don't think that's the approach community members are used to, or that they need. So being able to listen to their needs, understand their infrastructure [instead of] trying to insert ourselves into something that's already going on or build something from scratch."

# 2. Key Theme: Reframing Research Questions

Oh - "[I] recently applied for a PIN community research grant – it was a type of grant I wouldn't have considered before, but being in this program, I felt more comfortable about community engagement. I . . . submitted with CEISMC and Griffin/Spalding school district, and city of Griffin, and the way we partnered was influenced by Dr. Yomi's talk, starting with the community. With my other NSF project, we came up with 80-90% of the scenario, problem, and solution, and then started looking for partnership. This time, I had  $\sim$ 50% picture of the solutions . . . but other 50% we filled it in after learning about what issues they are facing."

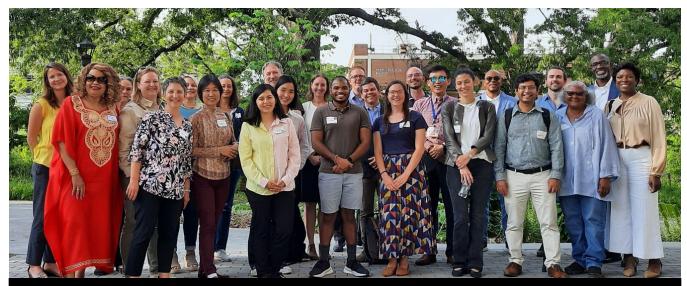
Thomas - "I can change the framing of my research and really change its outcome - 'community aware' and 'community forward' framing of the problem, rather than technology-forward framing. Even if completely without community participation, framing is still very important. In the example of DAC, I submitted a paper on the cost of direct air capture used for making biofuel. That's a technology forward framing with zero community . . . the technology option is [always] chosen first - a whole lot of options are thrown out because they aren't attractive to the research agendas. So instead, I look at a broader array of technologies and policies [and ask different questions, such as]: who gets the subsidies? How does this look in terms of equity?"

# 3. Key Theme: Training Students

Boukouvala - "What I find easy to incorporate is talking to my graduate students about what I'm learning. So I'm going to make it part of my lab/group meeting to talk with my grad students about how the research we do will impact communities. Because it should be part of our research in general."

#### 4. Key Theme: Changing Systems

Willkens - "It can be easy within an institutional setting to say, 'oh I'm not allowed to do that!' [But this program] figured out a way to [engage local businesses through its community catering program] and that was really nice to see. Imagine if there was a community caterer at every single one of GT's events – imagine how much more money would go back into the community."



End-of-Semester Fellows-Partners Gathering at The Kendeda Building