Key outcomes of the 4th AfroBiotech Conference

The 4th AfroBiotech conference included 6 full engaging sessions full of leaders in biotechnology discussing current innovations and continued efforts. More than 80 attendees were present for our 3 keynote talks, 11 invited speaker presentations, an engaging panel discussion, 17 submitted talks and rapid-fire presentations, 2 networking receptions, and a poster session with 27 posters and 6 awarded prizes. In addition, attendees were invited to participate in a Networking Challenge throughout the conference which also offered prizes. Our full technical program, as well as speaker bios and abstracts can be found here.

AfroBiotech delivered on its promise to explore innovative applications of biotechnology by African American scientists who have been historically marginalized. Attendees learned about how everyone, particularly underserved communities, can benefit from this emerging research in regenerative and cell systems engineering, health and medical applications, nucleic acid and genome design, and synthetic and computational biology.

AfroBiotech's first day was "For Us, By Us (**FUBU**) **Sunday**," a community-focused session which included a panel titled "Bringing Our Legacy to the Table" which welcomed a discussion on programs, initiatives, grant applications, lessons learned, and continued work in bringing black scientists to the table of biotechnology. These discussion points were continued in talks by new and upcoming voices, and during the networking challenge reception.

Our first keynote speaker, Dr. Clayton Yates of Johns Hopkins University, shared the Transatlantic Prostate Cancer Consortium's research on prostate cancer, sharing the journey of discovering how ancestry affects this specific gene expression. These discoveries, and related research efforts, are changing how prostate and breast cancers are researched and treated across the diaspora.

Edward Botchwey of Georgia Tech kicked off the second day with a keynote presentation on reprogramming pro-fibrotic macrophage metabolism with immunomodulatory biomaterials, to promote tissue regeneration and optimize the repair niche. These approaches will inform development of platforms to reprogram pro-fibrotic macrophages and promote tissue regeneration, from cleft lips and palates to beyond.

The bulk of our program was filled to the brim with presentations on cutting-edge research at varying development stages. One stand-out speaker, Michelle Gaines, talked about complex differences in hair, a complex integrative biocomposite material, and correlation with quantitative parameters.

Tuesday's keynote talk by Sarah Richardson (Microbyre) turned the conversation to a more industrial perspective, emphasizing the importance of balancing innovative technologies with ability to scale-up and commercialize. She described common pitfalls, lessons learned, and paths forward for the biotech sector.

We also had presentations by the National Science Foundation (NSF), National Cancer Institute (NCI), and BioMADE- these talks sparked lively conversations on securing funding and pushing for grant application approval. All of these speakers invited attendees to talk to them about their research to get personal advice, specific feedback, and motivated advocacy.

During our closing remarks, results were announced for the networking challenge and poster session, where congratulations and prizes were given to Nicole Harris, Abigail Dzordzorme, and Elizabeth Nelson in the grad student category, and to Simone Douglas-Green, Joseph Ogbede, and Sydney Floryanzia in the postdoc and PhD category.

AfroBiotech will be back in 2025, chaired again by Karmella Haynes of Emory University. We hope to see you there! If you have any testimonials or interest in being a part of the conference in the future, please reach out to programming@aiche.org or karmella.ann.haynes@emory.edu.

You can find an album of photos taken during the conference here: https://flic.kr/s/aHBqjB1V6D