Opening a New Door into Biotechnology Careers: Development of a Core Technology Scholars Program.

Jane Srivastava (jane.srivastava@gladstone.ucsf.edu), Gladstone Institutes, Jane Srivastava, J. David Gladstone Institutes, Kathy Schaefer, HHMI Janelia Research Campus, John Tigges, Beth Israel Deaconess Medical Center, Rachael Sheridan, Van Andel Institute, Eric Wieder, Sylvester Comprehensive Cancer Center, Steve Polter, Flow Cytometry Resource Director, Pamela Moody, Cold Spring Harbor Laboratory Cancer Center, Mehrnoosh Abshari, NIH/NIDCR, Sara Bowen, Barrow Neurological Institute, Celine Lages, University of Cincinnati College of Medicine, Christiane Hassel, Indiana University, Kevin Ferro, Stowers Institute for Medical Research, Steven Chen, Columbia University, Claudia Bispo, AbbVie

In 2021, the ABRF Flow Cytometry Research Group disseminated a survey amongst nationwide flow cytometry cores that in part questioned the availability of positions within each core. More than a third of cores responded that they were actively searching for staff, with positions available from junior technicians up to experienced senior technologists. This dearth of employees has been attributed not only to the lack of adequate compensation, but also to the absence of defined career pathways and acknowledgement by institutions of the relevance of technical positions. The ABRF, in conjunction with InnovateBio seeks to redress these concerns, and have submitted a multi-year, multi-million dollar grant to the NSF in October of 2022 in order to do so.

As part of this grant, the pilot program will be based around designing a modular 75-hour flow cytometry course for the community colleges. The ABRF Flow Cytometry Research Group will aim to design the pilot program encompassing the practical and theoretical fundamentals of flow cytometry that can be applied to positions of employment in either an industrial or academic core setting. The course will also incorporate learning about the particulars of working in a core such as budgetary skills, career development and interpersonal dynamics, which is currently not addressed by any other. The FCRG are currently frame-working Module 1: An Introduction to Flow Cytometry, with program goals and student learning outcomes driving the curriculum development towards a more inclusive and interactive course. Although many flow cytometry courses exist from different sources, this course will be able to delve comprehensively into the fundamentals of flow cytometry with a focus on hands on training and technical expertise provided at the community colleges, thereby enabling matriculating students to easily integrate into a position within a flow cytometry core.