AAMC Awards Innovations in Research Education

The Association of American Medical Colleges (AAMC) announces three recipients of the 2016 AAMC Innovations in Research Education Award. This is the fifth annual award developed in collaboration with the GREAT Group and GRAND leadership. The GREAT (Graduate Research, Education, and Training) Group is the AAMC’s professional development group for the faculty and administrative leaders of biomedical PhD, MD-PhD, and postdoctoral programs. The GRAND (Group on Research Advancement and Development) leadership is the AAMC’s professional development group for research deans, deans of clinical research, and other research leaders at academic medical centers.

The primary goal of this year’s awards program is to highlight innovations in PhD, MD-PhD, and postdoctoral education and training, or early career development that enhance the institutional research mission. The three awarded projects were selected by a panel of leaders in biomedical research, education, and training from AAMC-member institutions as well as senior AAMC staff. Entries were judged on creativity, impact, and feasibility of replication of innovation. Awards will be presented at the GREAT Group and GRAND Annual Professional Development Meeting in Rosemont, IL on Sept. 30, 2016.

First Prize Winner –

Effective Communication for Physician Scientists
Stony Brook University – Markus Seeliger, PhD

Second Prize Winner –

Business and Management Principles for Scientists
Vanderbilt University School of Medicine – Kathleen L. Gould, PhD

Third Prize Winner –

The Stanford Biosciences Grant Writing Academy – A Scalable Method to Support Grant-Writing for Trainees
Stanford University School of Medicine – Crystal M. Botham, PhD
Awardee Abstracts

Effective Communication for Physician Scientists
Markus Seeliger, PhD, Valeri Lantz-Gefroh, MFA, Evonne Kaplan-Liss, MD, MPH, Elizabeth Bass, MPH, and Michael Frohman – Stony Brook University and Stony Brook University School of Medicine

The Alan Alda Center for Communicating Science at Stony Brook University has developed an innovative training program for scientists and medical students. There is a strong need for students to communicate effectively with different audiences. During the program, students learn to understand the communication needs of their audience (e.g. patients, thesis committees, politicians, etc), develop strategies to satisfy these communication needs (e.g. use of appropriate analogies) and establish mechanisms to obtain feedback on the communication. The program draws on the experience of journalists and actors to engage effectively with their audiences. Students choose from seven courses during their graduate career. Importantly, students across multiple disciplines are able to meet and engage in scientific exchange. Due to the success of a pilot program, the new LEARN curriculum at Stony Brook School of Medicine contains a mandatory communication class developed with the Alan Alda Center. The program is highly suited for establishment at other institutions: the Alda Center hosts workshops for scientists and physicians across the country and coaches the next generation of communication trainers in separate summer schools.

Business and Management Principles for Scientists
Kathleen L. Gould, PhD, Robert Carnahan, PhD, and Kimberly Petrie, PhD – Vanderbilt University School of Medicine

Biomedical PhD trainees typically lack exposure to business principles, limiting their competitiveness and effectiveness in academic and industry careers. To fill this training gap, we developed “Business and Management Principles for Scientists”, a novel semester-long program that combined didactic exposure to business concepts with practical team based projects aimed at solving real business problems encountered by institutional shared resource core facilities. The program was collaboratively organized and taught by faculty from the Career Development Office and Managerial Sciences, two departments in distinct Vanderbilt colleges. The participants included 24 PhD students and postdoctoral fellows, and six core directors. After six weeks of lectures and case studies in Finance, Human Resources, Marketing, Technology, and Operations, trainees formed teams with core directors to develop solutions to business challenges faced by the cores. The program culminated in final team presentations judged by a panel of business experts and core administrators. Pre- and post-test online evaluations indicated a 21% mean improvement in participants’ mastery of business principles, and participants reported overwhelmingly that the program solidified their career interests, and was a valuable use of their time. Further, the program has spurred assessment of business practices and innovations within the core facilities to improve service capacity.
The Stanford Biosciences Grant Writing Academy – A Scalable Method to Support Grant-Writing for Trainees

Crystal M. Botham, Ph.D., Sofie R. Kleppner, PhD, Latishya Steele, PhD, and Shay Brawn, Ph.D. – Stanford University School of Medicine and Stanford University

The Biosciences Grant Writing Academy (GWA) engages graduate students and postdoctoral scholars in a scalable, intensive format that promotes thoughtful submission of grant proposals. High-quality courses, large seminars, small workshops, and individualized review provide insight and support trainees writing fellowship and career development proposals. Grant writing is essential for academic success, but few universities can dedicate resources for individual feedback to large numbers of trainees. Large grant writing programs address application basics but yield little in improving trainees’ writing. The core of the GWA is an annual fall boot camp, which delivers content in weekly small groups to support development of a complete proposal. Additional programs support ongoing writing and proposal development. The GWA guides proposal writing, and provides teaching experience for postdoctoral scholars. The program relies on clear curriculum, structured feedback, and intensive training for grant coaches. Faculty contribute structured review of proposal subsections. The GWA was implemented to increase the number of funded F and K proposals. The impact includes greater community, improved faculty engagement, a cadre of grant coaches with teaching experience, and learning outcomes including improved writing and understanding of grant components, and clear guidelines for soliciting and providing effective feedback, a critical professional skill.