

UCSF BICC

By Holly Nishimura and Arianne Teherani

The members of Center for Faculty Educators (CFE) are responsible for the BEME International Collaborating Centre (BICC) within the University of California, San Francisco School of Medicine. CFE combines the resources of both Research and Development in Medical Education unit and the Academy of Medical Educators (AME) to support educational research and skills development for all UCSF faculty members. CFE is committed to promoting teaching and learning in medical education based on evidence and strives to develop educators and advance educational research using a scholarly approach. The Centre is the home for multiple training programs including a Teaching Scholars program, the masters in Education with the University of California, Berkeley, and the doctorate in Health Professions Education in collaboration with the Utrecht University Medical Center, Netherlands.

CFE Research and Development in Medical Education unit is headed by five education research faculty:

Christy Boscardin's research interests include issues of reliability and validity of performance assessments, applications of latent variable modeling to complex data, continuing medical education, health disparity and access to quality health care. **David Irby's** research has focused on clinical teaching (identifying and evaluating the characteristics, knowledge, reasoning, and actions of distinguished clinical teachers in medicine), faculty development, and curriculum change. **Bridget O'Brien's** current research focuses on workplace learning in the context of longitudinal relationships, interprofessional team-based care, and systems improvement. **Patricia O'Sullivan** is the BICC co-lead and Director of Research and Development in Medical Education in the Center for Faculty Educators. Her research focus is primarily in clinical education and the use of portfolios for assessment. **Arianne Teherani** is BICC Lead. She has published in the areas of professionalism, education for climate change and health, and clinical teaching and assessment.

In its two years as a BICC, UCSF continued its commitment to creating a culture of best evidence medical education. The BICC leads serve on the BEME Education and Training Committee as well as the BEME Research Committee. Highlights of our efforts include offering 88 faculty development sessions to UCSF full-time and volunteer faculty in the last academic year. Faculty development leaders maintain an evidence-based repository of articles, including PEARLs on educational principles developed by CFE and affiliated faculty, for informing

workshop curricula and materials. Workshop topics included Clinical Teaching by Arianne Teherani, Teaching and Assessing Competencies by Patricia O’Sullivan and Christy Boscardin, and Workplace Learning by Bridget O’Brien. These topics are offered every academic year in order to expand the knowledge of best evidence medical education within UCSF and in the surrounding community.

At the UCSF CFE BICC we have developed multiple approaches for incorporating evidence into our practice. We have created a series of resources called Pearls on Educational Principles (PEARLS). The aims of the PEARLS are to apprise faculty as to how educational principles inform the curriculum and provide an educational rationale for activities and assessments in the curriculum. The Pearls on Educational Principles program consists of brief one-page brochures that include a description of an educational theory, applications of the theory, and space to develop new applications for teaching in the curriculum. These brochures are used as part of faculty development or as a refresher on an educational theory. We advocate the creation of “Practice Points” as summary guides similar to those used in journals which are disseminated summarizing key evidence that informs teaching, learning, and curriculum development or are akin to the one page educational materials provided to patients on specific conditions or diseases. Example topics have included

- Which clinical teaching models improve learning?
- What features of continuity are important in creating a longitudinal integrated clerkship?
- Under what conditions does peer assisted learning contribute to academic support for clinical learners?

Our faculty development unit asks all faculty developers to provide evidence in the context of their workshops. This exposes faculty participants to the latest evidence base in medical education and ensures that faculty participants realize that education must be grounded in evidence.

In addition to its service to the UCSF community, the UCSF BICC contributes to the greater medical education community through participation in the BEME Review Editorial Committee and dissemination of evidence-informed teaching in the health professions. Our team is producing a BEME Review entitled Cognitive Load Theory in the workplace and implications for health professions education led by CFE affiliated faculty and doctoral student, Justin Sewell. In addition, Bridget O’Brien and her team are leading two additional reviews: one on situated learning in health professions research (funded by the Society of Directors of Research in Medical Education) and shared mental models to support clinical teamwork. In 2015, CFE Education Research Faculty presented Best Practices in Faculty Development to an international audience of medical educators at



the Association of Medical Education in Europe (AMEE) Annual Meeting. The CFE and its affiliated faculty and learners published over 150 peer-reviewed articles in the last academic year.