COUNCIL PERSPECTIVES

The Essential Role of Educator Development



10 Years of the ACC Emerging Faculty Program

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ABSTRACT

The American College of Cardiology Emerging Faculty program was developed in 2005 to promote a systematic approach to "educate the educators" through training and mentorship. A primary focus of the program is the biennial Teaching Skills Workshop, which has had 130 participants since its inception and is focused on the concepts of effective adult learning, curriculum design, and optimization of presentation skills. A survey of participants (80 respondents of 130 total participants) found that the majority stated that participation in the program had a large impact on their ability to apply instructional design principles (49%) and present in face-to-face settings (47%), and it had a moderately large to large positive impact on their personal careers. Thus, the Emerging Faculty program combines several elements of the College's strategic plan in a single program that provides member value to early career professionals and sustained benefit for the cardiovascular community and patients. (J Am Coll Cardiol 2016;67:2177–82) © 2016 by the American College of Cardiology Foundation.

ducational initiatives are at the center of the mission of the American College of Cardiology (ACC). Founded in 1949 with the purpose of improving education for practicing cardiologists, the College has grown to nearly 50,000 members worldwide. The College's educational endeavors consist of its annual scientific sessions (which draw nearly 20,000 attendees per year), live courses, journals, self-assessment programs, website activities (the ACC website receives more than 300,000 visits

monthly), and other directly or jointly sponsored continuing medical education activities (1). All these efforts rely on a combination of dedicated ACC staff members and physician or advanced-practice health professional volunteers. Specific roles require an extensive portfolio of abilities to ensure successful educational meetings (faculty, panel discussant, small group leader, course chair), a high-value Internet presence (online content creator, editor), and adherence of operations to the mission and



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ABBREVIATIONS AND ACRONYMS

ACC = American College of Cardiology

EF = Emerging Faculty

strategic plan of the College (education committee members and chairs, program planning committees and chairs, task forces, educational activity evaluators, board members and president). Such activities reflect a continually expanding need for a roster of

talented educators with vetted communication skills. Such skills are also fundamental in other facets of professional life in medicine beyond organizational involvement. In parallel with participation in the College, cardiologists, surgeons, and other cardiovascular team members serve as educators as they routinely interact with one another to develop new strategies of care, spend time with patients and their families discussing treatment options and prognosis, and disseminate new information about heart disease to local and international audiences.

For early career academic cardiologists in particular, growth as teachers and communicators is necessary for future success, regardless of whether they are physician scientists or clinician educators (2-4). Residents in internal medicine spend substantial time educating medical students, yet they have inconsistent exposure to curricula detailing educational design and assessment concepts during their training (5). No data exist to describe similar efforts within cardiology

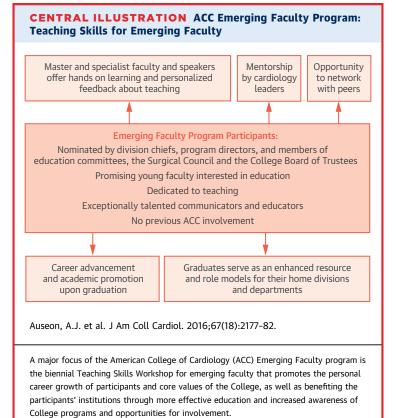
fellowship programs, but it is likely that this phase of training, which is traditionally less structured than residency, places less formal emphasis on providing instruction to advance fellows as clinical educators. The result, not just in cardiology but across all areas of medicine, is that most faculty members experience a patchwork of educational training and experiential learning, even if they are promoted to educational leadership positions (6).

The ACC recognized the need for a systematic approach to "educate the educators" through training and mentorship, and that recognition resulted in the formation of the Emerging Faculty (EF) program, which commemorated its 10-year anniversary in 2015. This paper details the origins and structure of the program, describes its outcomes using demographic and survey data, and raises awareness among academic cardiology leaders in an effort to foster development of the next generation of ACC faculty.

ORIGINS OF THE EMERGING FACULTY PROGRAM

For much of the life of the ACC, cardiologists and cardiology team members were selected to participate in educational activities through a less-structured network of colleagues within the College on the basis of their expertise, experience, and reputation. This approach was successful, and it produced a deserved international reputation for excellence in education and for attracting cardiologists from all over the world to attend College-sponsored meetings. However, limitations remained: the best teachers were frequently asked to do the most work, and there was no clear structure to replace more senior faculty, mentor junior faculty, or highlight up-and-coming leaders on a national or international stage. This meant that talented junior educators outside the network could be overlooked without a clear path to involvement in College activities.

To invest in the sustainability of the ACC's educational mission, a group of recognized teachers within the College constructed a biennial conference, with financial support from the Michael Wolk Heart Foundation, that focused on the development of early career members nominated and selected through an open, competitive process. The Teaching Skills Workshop for EF program was first held in 2005, with 19 participants. A request for applications letter was sent to all chiefs of cardiology divisions throughout the United States. The letter asked these chiefs to nominate their most promising young faculty members who were interested in education. The candidates for the program were fellows or associate fellows of



the ACC, in full-time academic positions, but not yet at the academic rank of professor, who practiced in a setting with teaching responsibilities. Their applications and supporting letters needed to show evidence of exceptional talent and dedication to teaching.

Since the inception of the EF program, the objectives of the meeting have been focused on the concepts of effective adult learning, curriculum design, and optimization of presentation skills. Program faculty and speakers each year include the following: the course directors (E.K. and R.N.); the presiding College president; master physician educators (P.O'G. and D.H.); education and speaking specialists from within the College (M.J. and J.G.) and from private industry (Mike Monahan; see acknowledgments section); and a member of the previous EF workshop class. Workshop faculty members are chosen for their specific expertise in the learning domains described in the meeting's objectives. Attendees are evaluated by their peers and by master educators after a series of presentations, and they receive reference materials for future reflection. Graduates of the program note their interests and expertise, and College member leaders use a comprehensive EF roster during subsequent committee roster selection processes, with the intent of expanding opportunities for workshop graduates to become involved in formal ACC activities. The first published description of the program in 2007, a "President's Page" in the Journal, included brief testimonials from early participants about its impact on their careers (7). Since then, there have been 4 additional classes, with the most recent group, from September 2014, marking the sixth workshop.

Altogether, 130 EF program participants have completed the workshop, leading to involvement in a total of nearly 600 activities or appointments within the College (8). Sole financial support for the program continues to come from the Michael Wolk Heart Foundation. Demographic characteristics of participants to date are shown in Table 1, and the numbers of applications and selected participants are shown in Table 2. The range of attendee expertise and care roles represented has been broad, encompassing pediatric cardiology, cardiothoracic surgery, nursing, and allied health care professionals. A review of leadership positions within the ACC shows that EF members have been appointed to the following: Task Force member and chair positions; vice chair of the Annual Scientific Sessions Program Committee; chairs of the Heart Failure and Transplant Section Leadership Council, Integrated Learning Committee, Lifelong Learning Oversight Committee, Young Investigators Awards Committees; and Board of Trustees (9).

TABLE 1 Characteristics of 130 Participants in Faculty Program	1 the ACC Emerging
Current ACC Members	126 (96.9)
Sex	
Male	91 (70)
Female	39 (30)
U.S. medical center location	127 (97.7)
Midwest	34 (26.7)
Northeast	36 (28.3)
Southeast	20 (15.7)
Southwest	18 (14.2)
West	19 (15)
Physician	126 (96.9)
Cardiologist	122 (93.8)
Surgeon	4 (3.1)
Nonphysician	4 (3.1)
NP	2 (1.5)
PA	1 (0.8)
PharmD	1 (0.8)
Expertise	
General	27 (22.1)
Adult congenital/pediatric	13 (10.7)
EP	12 (9.8)
Heart failure	9 (7.4)
Imaging	24 (19.7)
Interventional	29 (23.8)
Prevention	5 (4.1)
Vascular	3 (2.5)
Fellowship PD*	
Cardiology	17 (13.1)
EP	1 (0.01)
Heart failure	2 (0.01)
Interventional	6 (0.05)
Pediatric cardiology	1 (0.01)
IM residency PD*	1 (0.01)

Values are n (%). *Programs accredited by the Accreditation Council for Graduate Medical Education.

ACC = American College of Cardiology; EP = electrophysiology; NP = nurse practitioner; PA = physician assistant; PD = program director; IM = internal medicine.

For the College, the EF program has shown itself to be a true success story, creating a growing network of trained educators who are rapidly gaining experience through various ACC activities. For program graduates, participation also leads to reciprocal

TABLE 2 Number of Applications and Selected Participants From the Teaching Skills for Emerging Faculty Workshop, 2005 to 2014

Workshop Year	Total Applications	Accepted
2005	Unknown	19
2006	28	19 (68)
2008	38	25 (66)
2010	41	20 (49)
2012	45	25 (56)
2014	66	23 (35)

Values are n or n (%)

completed training? <4								
completed training? <4	Demographics							
27 (33.75%) 24 (30%) 14 (17.5%) 7 (8.75%) 8 (10%) Which year of the EF Workshop did you attend? 2005 12 (15%) 2006 9 (11.25%) 2008 14 (17.5%) 2010 14 (17.5%) 2012 15 (18.75%) 2014 16 (20%) What was your faculty rank when you attended the EF Workshop (full or part time)?	At the time of EF Teaching Skills Workshop attendance, how many years had passed since you completed training?							
Which year of the EF Workshop did you attend? 2005 12 (15%) 2006 9 (11.25%) 2008 14 (17.5%) 2010 14 (17.5%) 2012 15 (18.75%) 2014 16 (20%) What was your faculty rank when you attended the EF Workshop (full or part time)?	ore							
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Lastines Clinical Assistant Assistant Duefassis								
Lecturer Clinical Assistant Associate Professor instructor professor professor	r							
0 10 (12.5%) 58 (72.5%) 11 (13.75%) 1 (1.25%)	.)							
What is your current faculty rank (full or part time)?								
Lecturer Clinical Assistant Associate Professor professor professor	r							
0 1 (1.25%) 17 (21.25%) 47 (58.75%) 15 (18.75	5%)							
Please rank the following 1 (majority) to 5 (none) according to the proportion of time that you we involved in the formal education of various learners: Medical students?								
	0/)							
Residents?	70)							
1 2 3 4 5								
9 (11.25%) 42 (52.5%) 24 (30%) 3 (3.75%) 2 (2.5%) Fellows?	1							
1 2 3 4 5								
61 (76.25%) 10 (12.5%) 3 (3.75%) 4 (5%) 2 (2.5%)	,							
Other physician or nonphysician health care professionals?								
1 2 3 4 5								
7 (8.75%) 16 (20%) 28 (35%) 27 (33.75%) 2 (2.5%) Members of the public?	1							
1 2 3 4 5								
0 3 (3.75%) 2 (2.5%) 11 (13.75%) 64 (80%)	6)							
Do you hold a formal educational leadership position at your institution?	0)							
Yes 57 (71.25%)								
No 23 (28.75%)								
Have you received any awards as recognition of your teaching?								
Yes 59 (73.75%)								
No 21 (26.25%)								
Have you published any original peer-reviewed works of educational scholarship?								
Yes 25 (31.25%)								
No 55 (68.75%)								
In which areas of the ACC's educational mission are you currently or have previously been active	ive?							
ACC state chapter								
Currently active Previously active Currently and Never active previously active	Never active							
25 (31.25%) 11 (13.75%) 10 (12.5%) 34 (42.5%)	34 (42.5%)							
Presentations at scientific sessions								
Currently active Previously active Currently and Never active previously active	Never active							
26 (32.5%) 17 (21.25%) 32 (40%) 5 (6.24%)								
Committee and/or section participation								
Currently active Previously active Currently and Never active previously active	Never active							
37 (46.25%) 8 (10%) 27 (33.75%) 8 (10%)	8 (10%)							

Continued on the next page

personal gain. They learn from observing and doing, with subsequent feedback. Starting with the workshop, they have the rare opportunity to hear personalized comments about their communication skills from leaders within and from outside the College (Central Illustration).

TEACHING SKILLS WORKSHOP FOR EMERGING FACULTY

The first exercise on arrival at Heart House (Washington, DC) is a short presentation about a specific topic that serves as a baseline measure of presentation skills. This talk is recorded, critiqued, revised, and presented later to the group in expanded form. During subsequent breakout sessions over the ensuing weekend, participants work through educational scenarios in small groups, thus encouraging interaction and networking. Topics are derived from the objectives noted previously and include improvement of presentation skills, opportunities to become involved in the ACC, design of educational course curricula, and writing multiple-choice questions. Meeting participants frequently collaborate during later committee work and routinely discuss administrative or educational dilemmas through informal e-mail list servers and social media exchanges throughout the year. At the conclusion of the workshop, 2 participants are chosen by course faculty members to receive the W. Proctor Harvey, MD, Young Teacher Award, which is formally presented at the subsequent annual scientific sessions.

The initial feedback sessions with ACC master educators are also the start of a mentoring connection with junior faculty that transcends geographic locations and institutional affiliations, by providing a chance to learn and develop through interactions with internationally recognized thought and educational leaders they may not have otherwise been able to meet. Finally, 28 of the 130 graduates (22%) have since become directors of cardiology fellowship or internal medicine residency programs and are thus responsible for the education of the next generation of cardiologists.

LASTING IMPACT

Once finished with the EF program, graduates return to their home institutions empowered by their new knowledge and contacts. Published testimonials note the positive impact resulting from their ability to articulate best practices in presentation and curriculum planning that they learned in the workshop. As a result, graduates serve as an enhanced resource for their divisions and departments by modeling the

skills that were strengthened during their interactions at Heart House (7,8,10). Workshop participants describe their development as authorities on presentation organization and delivery, as well as planning of continuing medical education activities. They also cite the privilege of being an ambassador for the College in multiple educational settings. Their individual professional development as educators is also bolstered by their new engagement in a national organization that overlaps with common criteria for academic promotion and helps with the challenging task of documenting educational activities as scholarly work to be recognized within their faculty portfolios (11).

Information gathered from a fall 2015 survey of EF graduates (Table 3) confirms the program's original aspirations and their widespread effects on educators. A 19-question instrument was developed using Survey Monkey (12), with the purpose of refining demographic data, obtaining information about EF graduates as educators and volunteers within the ACC, and assessing the impact of the original objectives of the Teaching Skills Workshop. The questions were drafted and revised by EF members and members of the ACC Section of Academic Cardiology. An initial e-mail response to all EF graduates was followed with 2 reminders, 1 week and 2 weeks later. The data were aggregated and analyzed by all the authors of this paper.

Of the 130 EF graduates, 80 were survey respondents (62%), with a balanced representation from each class. After selection for workshop participation, they have since progressed in their academic careers and have advanced from instructor or assistant professor (84%) at the time of entering the program to associate professor or professor (75%) in 2015. The majority of their time is spent in education of cardiology fellows, with internal medicine residents, other health care professionals, and medical students, respectively, making up the remainder of learners. Most EF members hold formal educational positions at their institutions (70.8%), and many have received awards in recognition of their teaching (73.4%). In terms of involvement within the ACC, program graduates have participated in the following: activities at the state chapter level (52%); the annual scientific sessions (95%); College committees or sections (91%); drafting of guidelines, expert consensus, and statement manuscripts (50%); and executivelevel positions (28%). As a lasting validation of workshop objectives, EF members state that participation in the program has had a large impact on their ability to apply instructional design principles (49%) and present in face-to-face settings (47%). Finally, survey results indicate that participation in the

TABLE 3 Continued

Demographics

Drafting of guidelines, consensus statements, and/or and statement papers Currently active Previously active Currently and Never active previously active 21 (26 25%) 40 (50%) 10 (12 5%) 9 (11.25%) Executive-level involvement Currently active Previously active Currently and Never active previously active 9 (11.25%) 4 (5%) 4 (5%) 63 (78.75%) Do you participate in educational activities within any other national organizations? 66 (82.5%) Yes 14 (17.5%) No

Impact on Workshop-Specific Objectives

Please rate the impact that the EF Teaching Skills Workshop had on your ability to: Apply instructional design principles, including selection and use of appropriate media, in planning and delivering education

No impact		Moderate impact		Large impact			
0	2 (2.5%)	14 (17.5%)	24 (30%)	40 (50%)			
Effectively present in face-to-face settings, including the use of media and humor							
No impact		Moderate impact		Large impact			
0	2 (2.5%)	13 (16.25%)	27 (33.75%)	38 (47.5%)			
Differentiate between appropriate and inappropriate content							
No impact		Moderate impact		Large impact			
0	7 (8.75%)	25 (31.25%)	24 (30%)	24 (30%)			
Envision creative ways in which to use emerging technology to further learning							
No impact		Moderate impact		Large impact			
0	10 (12.5%)	15 (18.75%)	28 (35%)	27 (33.75%)			

General Impact of Participation on Career

Please quantify the impact that the EF Teaching Skills Workshop had on your personal career in terms of: Mentorship No impact Moderate impact Large impact 2 (2.5%) 6 (7.5%) 16 (20%) 20 (25%) 36 (45%) Networking No impact Moderate impact Large impact 1 (1.25%) 8 (10%) 8 (10%) 19 (23.75%) 44 (55%) Career advancement/promotion No impact Moderate impact Large impact 4 (5%) 11 (13.75%) 15 (18.75%) 21 (26.25%) 29 (36.25%) Your ability to positively contribute to your division/section/department No impact Moderate impact Large impact 3 (3.75%) 5 (6.25%) 21 (26.25%) 18 (22.5%) 33 (41.25%) The overall impact on your career No impact Moderate impact Large impact 1 (1.25%) 5 (6.25%) 15 (18.75%) 19 (23.75%) 40 (50%)

Values are n (%). *80 respondents of 130 graduates = 62% response rate. †Any peer-reviewed publications describing educational concepts, theory, or methods; research projects involving an educational innovation or

 $\mbox{ACC} = \mbox{American College of Cardiology; EF} = \mbox{emerging faculty}.$

program has had a moderately large to large positive impact on the personal careers of EF members through the following: mentorship (69%); networking (78%); their career advancement or promotion (62%); an increased ability to contribute positively to their division, section, or department (40%); and overall

For the EF program to enjoy continued success over the coming decade, both awareness and support from the members of the ACC Academic Cardiology Section are vital. Division chiefs from academic medical centers, fellowship program directors, ACC educational program directors, and ACC education committee members, as well as our colleagues in the Surgical Council and the College Board of Trustees, all receive notification by mail to requests nominations for the program. Recipients of the letters are encouraged to select young faculty members who have the potential to become skilled educators and contributors to the various missions of the ACC. These early career members may not be aware of the EF program's existence, or even the value of becoming engaged in a prestigious national organization. Those in a position to nominate applicants should also strive to expand the diversity of the group to reflect the race and sex of physicians and their patients. Finally, in a continual effort to grow and improve the program, course directors and ACC staff should work to build a more robust infrastructure that allows tracking of graduate accomplishments, provides more sustained feedback to emerging educators, and sets the stage for measurement of outcomes that could demonstrate attainment of programmatic goals.

Without the vision of Dr. Michael Wolk and the inspirational efforts of the founding directors, Drs. Rick Nishimura and Elizabeth Klodas, the program would not have achieved its current success. It has become a powerful example of how combining several elements of the College's strategic plan in a single program not only provides member value to early career professionals but also leverages that value into sustained benefit for the cardiovascular community and its patients for years to come.

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