Building Capacity in Physical Activity and Public Health

Russell R. Pate, Jennifer L. Gay, David R. Brown, and Michael Pratt

As with any new and growing field of study, building capacity for research, teaching, and training remains of central importance. Capacity-building in the Physical Activity and Public Health field is perhaps even more critical, given the few formal doctoral training programs in the field and that we are a hybrid of exercise science, behavioral science, and public health science. This supplement of the Journal of Physical Activity and Health is intended to recognize the contributions of the Physical Activity and Public Health (PAPH) Postgraduate Course on Research Directions and Strategies in building such capacity. The 8-day course has been offered annually since 1995 and, through 2010, more than 440 fellows have participated. The course offers intense, focused training aimed at expanding the cadre of researchers to advance the scientific base in physical activity and health. The underlying assumption is that the body of knowledge on physical activity and health will develop optimally only if there are sizeable numbers of investigators who are prepared to compete successfully for funding to support research on relevant topics.

Given the need to move science to action, a 6-day Physical Activity and Public Health Practitioner Course on Community Interventions was developed in 1996 and began to run concurrently with the Researcher course. This course has trained more than 360 fellows since its inception. The Practitioner course is an equally intense training experience focused on evidence-based strategies to promote physical activity. Fellows from the Practitioner course return to their states, communities, or community-based settings armed with state-of-the-art information and resources to promote and increase physical activity.

Two factors have been central to the success of the PAPH Research course over the years. First, it has been able to attract and retain the loyal commitment of a faculty that includes many of the field’s most notable scholars. It is particularly noteworthy that many of these leading researchers have participated in all or many of the annual courses. Second, and in the context of this special supplement, the course has consistently attracted highly diverse and motivated fellows. This special supplement celebrates the outstanding research produced by PAPH Fellows.

Origins of the PAPH Courses

The idea to conduct a national training course on physical activity and public health was spawned as part of a strategic planning process conducted by the American Heart Association (AHA) in the early 1990s. In 1993, the AHA formally stated that lack of sufficient physical activity is a major risk factor for development of atherosclerotic cardiovascular disease. Following the release of that statement, the AHA launched a planning process that was aimed at identifying actions that should be taken to promote increased physical activity at the population level.

A central recommendation from the AHA strategic plan was that the nation’s capacity for conducting cutting-edge research on physical activity be enhanced by developing a training course that would produce a cadre of researchers that is prepared to conduct important research on physical activity and its public health implications.

Subsequent to adoption of the AHA strategic plan, the U.S. Centers for Disease Control and Prevention (CDC) acted on the AHA’s recommendation by providing funding to conduct an initial training course. The funds were made available through a competitive process available to the Prevention Research Centers, which are funded by the CDC and based in accredited schools of public health or departments of preventive medicine. The University of South Carolina Prevention Research Center competed for the funding to conduct a training course, and in 1994 it was awarded funding for an initial 3-year cycle. The first 8-day course on Research Directions and Strategies was conducted in September, 1995 at Seabrook Island, South Carolina. Since 2000, the annual courses have alternated between meeting sites at Hilton Head Island, South Carolina and Park City, Utah.

Pate is with the Dept of Exercise Science, Arnold School of Public Health, University of South Carolina, Columbia, SC. Gay is with the Dept of Health Promotion and Behavioral Sciences, University of Texas School of Public Health, Brownsville, TX. Brown and Pratt are with the Centers for Disease Control and Prevention, Atlanta, GA.
The Importance to CDC and the Division of Nutrition, Physical Activity, and Obesity

From the perspective of the CDC, the researchers and practitioners courses are very important on multiple fronts, including national and international levels as well as internally to the Division of Nutrition, Physical Activity, and Obesity and the Physical Activity and Health Branch. The researcher course is geared to train scientists to successfully develop grants and to do well-conducted research incorporating a variety of methods and research designs related to physical activity and public health, such as highlighted in this supplement. However, there is a much greater need than ever before for researchers and practitioners to collaborate. Large-scale national efforts and funding in the U.S., such as provided for Communities Putting Prevention to Work and Community Transformation Grants, means an increased need for practitioners and researchers to collaborate through research-to-practice, practice-to-research, and evaluation research activities. The PAPH courses uniquely provide an opportunity for researchers and practitioners to interact.

The course(s) curricula also provide a means for CDC to promote physical activity population-based epidemiology research, and research that focus on community-wide and community-based interventions. These interventions include policy, settings, and environmental change approaches that often go beyond the basic science or laboratory-based individual and small group interventions that may have served as the educational foundation for many fellows. The Courses also provide an environment where fellows can meet 1-on-1 and in small groups with faculty who are leaders in the Physical Activity and Public Health field. There are very few training opportunities where such personal and valuable interactions can occur for both faculty and fellows in the same setting.

From a national capacity-building perspective, the courses have also been valuable in training national leadership with more than 60 CDC researchers (eg, Epidemic Intelligence Service Officers, Visiting Scientists) and 60 practitioners to date. These fellows go on to leadership positions in national public health institutions and provide technical assistance in a variety of settings, including advising state and local health departments and community agencies. Thus, public health has benefited greatly from training professionals to promote physical activity—not only outside of CDC, but also as a critical mass within the agency.

A Research Fellow’s Perspective

Participation in the course as a fellow leads not only to an increased understanding of physical activity research and public health practice, but also to developing networks and collaborations with new colleagues. Fellows of the courses spend approximately 10 hours each day discussing intervention and research issues surrounding physical activity and public health. The backgrounds of the fellows are diverse in expertise and geography, making for interesting conversations ranging from physiology, to experimental design methodology, behavioral science, policy, and community-wide interventions. These interactions are then supplemented by stimulating presentations, seminars, and shared meals and activities with the course faculty. And with courses in Park City, Utah and Hilton Head Island, SC, there are opportunities for being physically active before and after sessions as well as during breaks from the coursework.

A particularly novel feature of both the researcher and practitioner courses is the willingness of the faculty to engage with fellows long after the week has ended. Although the training is intense, participation in the courses forces reconsideration of how to engage communities in physical activity; the kind of creative thinking possible only through interactions with established and new physical activity professionals. After the courses end, fellows, both invigorated and exhausted, disperse back home across the world to apply and disseminate their newfound knowledge and skills to their academic and local communities.

Capacity building is essential to advancing the science and practice in the field of physical activity and public health. If worldwide improvements in health are to be realized, particularly in noncommunicable diseases, capacity in physical activity and public health must continue to grow on all fronts. A primary purpose of the Physical Activity and Public Health Postgraduate Courses is to build such capacity in research and practice. This supplement to the Journal of Physical Activity and Health is meant to highlight original research contributions of fellows who have participated in the research course since its inception. The lead authors of each paper are former fellows of the PAPH course. Each paper in this supplement has undergone the rigorous peer-review process that is standard for the journal. We trust these reports highlight excellent science in the field and inspire future work.