METHODOLOGY CENTER STRATEGIC PLAN: 2014/2015 - 2018/2019

Updated 5/31/15 (key updates from 2014 in italics)

Priority: Strategic faculty hires to strengthen our Center and other academic units in HHD. If a department and a center team up, they can often attract an outstanding faculty hire who is particularly excited about the prospect of involvement in both units. We would love to partner with any department in the College (e.g., Biobehavioral Health, Nutrition, Kinesiology, Health Policy and Administration) that would like to build in the area of methods. Candidates would ideally have backgrounds in areas such as health economics, optimization, decision science, biostatistics, or quantitative psychology, and work in a content area that is consistent with their home department. Such faculty members would be 100 percent in the department but would ideally build a strong connection with our Center and participate in the intellectual life of the Center. We are particularly interested in building on the Center's new alignment with Biobehavioral Health (through Dr. Lanza's faculty appointment) and hope to see a cluster of methods faculty hires in that department.

Priority: Continue to expand our funding portfolio. Financial stability of the Methodology Center requires a cornerstone NIH center grant that can support broad technical, dissemination, and administrative goals, but also requires substantial diversity in funding beyond this single grant; such additional grants provide additional security and also can fund an increasingly diverse group of scientists. In September, 2014 we submitted an application for a five-year P50 program project to NIDA. This application received a perfect score, due largely to our innovative research directions, and is expected to begin September 1, 2015. This award will give the Center continuous NIDA support via this mechanism since 1996. In addition, we continue to expand our portfolio with additional grants through R03, R01 and K01 awards from NIH as well as funding from NSF. During the 2014/15 academic year, Center researchers submitted two NSF applications and numerous NIH applications to NIDA, NIAAA, and NIA. Two R01 awards are being issued, one from NIAAA (PI: Collins) and one from NIDA (PI: Lanza). Another R01 was awarded from NIDA April 1, 2015 (PI: Megan Patrick, U of Michigan, Subcontract PI: Lanza) to enable collaboration between the two universities on longitudinal analyses of the Monitoring the Future data. All of the Center research involves developing and adapting methods that hold promise to advance social, behavioral and health sciences. Key emerging areas of focus in our research include methods for analyzing intensive longitudinal data (e.g., EMA, ambulatory assessments), for informing the development of behavioral interventions, and for understanding differential effects of treatment.

Priority: <u>Develop online training in statistical methods</u>. We eagerly await construction of the new College building, which will house a high-tech recording studio on the fourth floor. Our current staff, working with an instructional designer at the Schreyer Institute, plans to design specialized online training using modern design principles. This training, which will be provided free to all researchers, will be on a variety of basic and advanced statistical techniques as well as use of statistical software. These will be short, noncredit courses focused on continuing education. The Methodology Center will continue to seek external funding to support this endeavor. *Initial development of online training materials will be supported in the new P50 project, which is expected to begin September 1, 2015. This initiative will be led by the Center's outreach director, Dr. Bray. Also, in 5/15 we launched the Center's "Year Of" dissemination campaign, which is designed to highlight one key methodological advancement each academic year. These initiatives are part of a broader and more coordinated plan to increase our dissemination activities to have a more global focus.*

Priority: Continue to form new and strengthen existing collaborations within PSU. The Methodology Center has numerous active collaborations with scientists around the United States. We look forward to developing strategic collaborations with Dr. Fishbein in her new role as director of the Prevention Research Center. The first step in this direction was the submission to NIDA of a competitive renewal for the T32 Prevention and Methodology Training Program (PI: Collins, Co-I: Fishbein, Bray). Next we summarize some of the collaborations we are engaged in within PSU. Active collaborations within the College:

Biobehavioral Health (Lanza part of NSF and UH2/UH3 proposals with Dr. Smyth)

Center for Childhood Obesity Research (Kugler KL2)

Kinesiology (Coffman K01; Lanza part of NSF and UH2/UH3 proposals with Dr. Conroy)

Nutrition (Coffman, Kugler collaborate)

Recreation, Park, and Tourism Management (Collins involvement in Healthwise South Africa)

Prevention Research Center (T32 PAMT training grant submitted 5/15: Collins, Fishbein, Bray)

Human Development and Family Studies (collaborations with Noll, Cleveland, Maggs, Almeida)

Center for Healthy Aging (Lanza part of UH2/UH3 proposal with Drs. Sliwinski and Almeida)

Active collaborations with other colleges:

Public Health Sciences (Hershey; Li collaborates)

Psychiatry (Hershey; Lanza part of funded R01)

Statistics (Eberly College of Science; Li is faculty)

Electrical Engineering (College of Engineering; Lanza part of NSF proposal)

Psychology (faculty regularly serve on dissertation committees)

Sociology (College of Liberal Arts; Lanza and Coffman serve on P01 with Dr. van Hook)

Priority: Enhance professional development opportunities for junior faculty and research associates at **PSU.** For the third year in a row, The Methodology Center has organized and implemented a year-long seminar series designed to improve the potential of junior scientists for publishing and getting grants early in their careers. The series currently runs as a co-op, with faculty from the Center, HDFS, BBH, the Prevention Research Center, and the Center for Healthy Aging participating. The fall semester focuses on professional development and preparation of a manuscript to be submitted before the holiday break; the spring semester is known as the "R03 bootcamp" as participants are expected to learn about NIH funding and submit a grant in the June cycle. We would like to expand these proven activities so that more early-career researchers in the College, including both advanced graduate students and pre-tenure faculty, can participate.