

**Please Check Your Abstract One More Time.**

- Then scroll all the way down to the bottom of this page and "Conclude Submission".
- 

**Using Social Constructivist Theory and Principles of Service Learning to Transform Public Health Doctoral Education**

**Lisa A. Ulmer, MSW, ScD**, Eunice Omanga, MS, Alia Turganbaeva, MD, MPH and Yeetey Enuameh, MD, MPH, Department of Community Health and Prevention, Drexel University School of Public Health, Philadelphia, PA

A key challenge facing 21st Century public health education is to strengthen public health capacity to solve ongoing and emerging problems. This paper reports on our response to this challenge with the development and evaluation of a DrPH Program in Community Health and Prevention. We identified and validated five competency domains and specific competencies within each domain: (1) to understand the mission, goals, and strategies of community health (n=16); (2) to understand and assess health status and needs (n=9); (3) to understand and assess individual and environmental determinants of health (n=14); (4) to design, implement, and evaluate public health programs and policies (n=19); and (5) to translate findings into policy recommendations and advocate for change (n=18). The DrPH Program was designed by creating a matrix linking competencies with specific curricular elements. Social constructivist theory guided the development of teaching principles: (1) goals and objectives are derived by the student in negotiation with the teacher; (2) the teacher structures activities to improve communication, to help students solve problems, and to reflect on learning; (3) small groups practice combining diverse perspectives and skills to solve real problems; (4) formative assessment is used to identify the nature of student difficulties and guide subsequent instruction; and (5) summative assessment is used to evaluate student competencies. A comprehensive set of service learning experiences were nested throughout the curriculum via group problem solving projects and applied research projects. The sample for the evaluation includes all DrPH students admitted to the program since it was founded in 2004. 19.2% of students are international students (Ghana, Kenya, Liberia, Kyrgyzstan, and Saudi Arabia), and 38.5% are minority students (African-American and Hispanic). An analysis of competencies over time indicated a significant overall increase in attainment of competencies, with no differences in attainment by international student status or minority student status.

---

**Abstract ID#:** 7218

**Password:** 926311

**Title:** Using Social Constructivist Theory and Principles of Service Learning to Transform Public Health Doctoral Education

**Preferred Presentation Format:** Oral

**Submitter's E-mail Address:** lisa.ulmer@drexel.edu

**Learning Objectives:**

- Understand the current level of public health capacity in developed and developing countries and the importance of increasing current capacity in order to improve health outcomes.
- Analyze and prioritize competencies needed to solve major public health problems.
- Construct/revise a doctoral program by linking competencies with curricular elements.
- Apply relevant theoretical principles and service learning principles to develop teaching practices.
- Evaluate student attainment of competencies over time, taking into account student diversity.
- Discuss strategies for translating these findings to the participants' own settings.

**Related Web Page:**

[http://publichealth.drexel.edu/Academics/Degrees/DrPH\\_Degree\\_in\\_Community\\_Health\\_and\\_Prevention/190/](http://publichealth.drexel.edu/Academics/Degrees/DrPH_Degree_in_Community_Health_and_Prevention/190/)

**Is your submission in Turkish?:** No

**First author**

**Presenting Author**

Lisa A. Ulmer, MSW, ScD

Department of Community Health and Prevention  
Drexel University School of Public Health  
1505 Race Street  
11th Floor  
Philadelphia, PA 19102

**Phone Number:** 215-762-7034

**Fax Number:** 215-768-4088

**Email:** lisa.ulmer@drexel.edu

**Personal Experience:** 1999-2003 Professor of Public Policy, Nelson Mandela School of Public Policy & Urban Affairs, Southern University, Baton Rouge, LA 2003-Present Chair of Community Health and Prevention, Director of DrPH Program, Professor of Public Health, Drexel University School of Public Health Honors and Awards 1974 Smithsonian Research Fellowship in Primate Biology 1982-1987 Public Health Service Training Fellowship 1988 Elected to Delta Omega, the National Public Health Honor Society 1989 International Research Exchange Professor, Humboldt University, German Democratic Republic 1990 Baltimore City Health Department Leadership Award 1992 Baltimore City Citizen Citation for Leadership, Mental Health Task Force for Children and Youth 2002 Nelson Mandela School of Public Policy Teacher of the Year Award 2003 Nelson Mandela School of Public Policy Research Investigator Award 2004 Drexel University School of Public Health Teacher of the Year Award 2004 National Job Corps Certificate of Appreciation for "School-based Strategies for Drug and Violence Prevention" Interviews for Film "Brain Power" 2002. NIDA documentary film about 6 scientists. The National Institute on Drug Abuse (NIDA) has developed science education materials for second- and third-grade students on the brain and the effects of drugs on the brain. The goal of the curriculum is to lay the foundation for future scientific learning and substance abuse prevention efforts by providing an early elementary school-age audience with a basis of knowledge and critical thinking skills. "Brain Power!" is available online from the NIDA web site, <http://www.drugabuse.gov>. Current Advisory Panels (Selected) 2005-Present Steering Committee and Evaluation Work Group for the HRSA Bright Futures for Women's Health and Wellness Initiative 2007-Present Scientist, Media Campaign Advisory Team, National Youth Anti-Drug Media Campaign, Office of National Drug Control Policy 2007-Present Society for Prevention Research, Knowledge Task Force Faculty Development 1996-1999 The Drug Abuse Research Technical Assistance Project (DARTAP). 1999-2002 Boston University NIDA Minority Research Center • Diversity, multiculturalism, and globalization in higher education – incorporate diversity into curriculum design and teaching methods • Collaborative research leadership –Collaborate with state health departments and local public agencies on developing, implementing, evaluating, and scaling up prevention initiatives. • Service Learning, Internships, & Experiential Development • Numerous presentations

**Qualified on the content I am responsible for because:** • Academic Leadership – Department Chair, DrPH Program Director, PhD Concentration Director • Curriculum Design – develop and evaluate doctoral curriculum for traditional and mid-career students • Diversity, multiculturalism, and globalization in higher education – incorporate diversity into curriculum design and teaching methods • Collaborative research leadership –Collaborate with state health departments and local public agencies on developing, implementing, evaluating, and scaling up prevention initiatives.

**Any relevant financial relationships?** No

Signed on 11/30/2008 by *Lisa Ulmer*

## Second author

Eunice Omanga, MS  
Department of Community Health and Prevention  
Drexel University School of Public Health  
1505 Race Street  
Philadelphia, PA 19102

**Phone Number:** 215-762-7034

**Fax Number:** 216-762-4088

**Email:** eao27@drexel.edu

**Personal Experience:** Eunice Omanga is a DrPH student at Drexel University School of Public Health. She is the recipient of a Provost Fellowship and is one of nine women to receive the Margaret McNamara Memorial Fund (MMMF) Scholarship from the World Bank Family Network in 2008. to conduct her dissertation research. Eunice worked with the government body responsible for regulating the sugar industry in Kenya soon after receiving her bachelors' degree in Chemistry and Biochemistry from the University of Nairobi. As the chemist in the unit, she was responsible for analytical quality control work, including pollution control. All the sugar factories are in the rural areas of Kenya, and share resources with the local community. The factories draw water from the river, and the wastewater is sent back to

the same river after 'treatment'. Eunice was responsible for analyzing the water before and after treatment, and she was deeply disturbed by the quality of the water being returned to the river. She felt compelled to act, and what is more unusual among recently graduated college students in their first position, she did act. With great tact and diplomacy, she established rapport with her technical colleagues in the sugar factories to gain their commitment and appreciation for the quality of the water being sent back to the rivers. That was Eunice's first major project for the Kenyan sugar industry and it took about four years of concentrated technical work and political acumen, but her work resulted in all the factories establishing environmental departments. She is justifiably proud to have left a legacy in the Kenyan sugar industry, and now pollution control is given serious consideration, not just water treatment, but air and soil contamination as well. Eunice then acquired additional skills by obtaining a masters degree in environmental science. When she returned to her job in Kenya, she learned that a national environmental management authority (NEMA) had been commissioned; however, after a brief dialogue with NEMA officials about her experience and the critical environmental issues in the Kenyan sugar industry, it became clear to Eunice that the Authority was more concerned ensuring that new projects had an environmental impact assessment (EIA) before they were commissioned than regulating the existing factories which have been polluting and potentially endangering the health of the rural population for years. At that point, she decided to obtain doctoral training in public health to work with rural communities to influence environmental health issues that continue to escalate as Kenya, like other developing nations, get more industrialized.

### Third author

Alia Turganbaeva, MD, MPH  
Department of Community Health and Prevention  
Drexel University School of Public Health  
1505 Race Street  
11th Floor  
Philadelphia, PA 19102  
**Email:** [ajt52@drexel.edu](mailto:ajt52@drexel.edu)

**Personal Experience:** Alia Turganbaeva is a DrPH student. She is a recipient of an Open Society Institute Network Scholarship Programs' Global Supplementary Grant. After graduating from Kyrgyz State Medical University Alia worked as an OB/GYN in a gynecological hospital. After 6 years of working in a clinical setting, she entered the Public Health Program at the University of North Carolina at Chapel Hill, Department of Maternal and Child Health and graduated in 2006 with an MPH degree. After graduating from the UNC she returned to Kyrgyzstan and worked as a Monitoring and Evaluation Coordinator in a Swiss Red Cross project which coordinates Community Action for Health efforts in Kyrgyzstan in partnership with Kyrgyz Republican Health Promotion Center, the Ministry of Health, SDC, SIDA and USAID projects. Alia's interests include nutrition and anemia in mothers and children.

### Fourth author

Yeetey Enuameh, MD, MPH  
Department of Community Health and Prevention  
Drexel University School of Public Health  
1505 Race Street  
11th Floor  
Philadelphia, PA 19102  
**Email:** [yeetey@gmail.com](mailto:yeetey@gmail.com)

**Personal Experience:** Yeetey Enuameh is a DrPH student and a recipient of a Provost Fellowship. Yeetey is a physician who was trained at the Pirogov Vinnitsa State Medical University, Vinnitsa, in the Ukraine. He has been practicing as a Medical Doctor in Ghana over the past ten years. In 2005, he graduated from the Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana with a Master of Science in Health Service Planning and Management. Yeetey's dissertation at the Master's level focused on assessing and improving the Reproductive Health needs of students of KNUST. Prior to enrolling at Drexel University, he was a Clinical Research Fellow working with a team of scientists on Malaria Vaccine Trials at the Kintampo Health Research Institute (KHRC) in Ghana. He is the convener of the Joanna Briggs Institute- Kintampo Health Research Centre Evidence Synthesis Group (JBI- KHRC ESG). Yeetey's areas of interests include (Adolescent) Sexual and Reproductive Health, Infectious Diseases and Evidence Based Clinical Practice.

## FINAL STEPS

1. **Check spelling and contact information.**
2. **Make necessary corrections:**
  - Click any value in the Abstract Control Panel you want to change (e.g., Author, Disclosure)
  - Edit the information and click the submit button.
3. **Click [here](#) to print this page now.**

[Conclude Submission](#)