## Title:

Using Diplomacy Lab to Teach Interdisciplinary Students About Global Public Health

# Daniel B. Oerther, PhD, MS, BS, BA

Department of Civil, Architectural, and Environmental Engineering, Missouri University of Science and Technology, Rolla, MO, USA

#### **Session Title:**

Interprofessional Collaborations in Education

Slot:

F 08: Monday, 30 October 2017: 9:30 AM-10:15 AM

**Scheduled Time:** 

9:50 AM

# **Keywords:**

diplomacy, global and project

# References:

Anwar Nasim, Nisreen DaifAllah AL-Hmoud, Sabah AlMomin, Najat Rashid, Khalid R. Temsamani, Kavita Berger, David R. Franz, 2013, Paths to Biosafety and Biosecurity Sustainability, Science Diplomacy

Matthew D. Brown, Tim K. Mackey, Craig N. Shapiro, Jimmy Kolker, Thomas E. Novotny, 2014, Bridging Public Helath and Foreign Affairs, Science Diplomacy

Luk Van Langenhove, 2016, Global Science Diplomacy for Multilateralism 2.0, Science and Diplomacy

Jan-Stefan Fritz, 2016, Observations, Diplomacy, and the Future of Ocean Governance, Science and Diplomacy

## **Abstract Summary:**

Diplomacy Lab is a public-private partnership of the United States Department of State with the dual objective of engaging citizens in diplomacy and course sourcing research challenges. US DoS needs citizen scientists - in the classroom working with professors - to tackle complex, over-the-horizon challenges.

# **Learning Activity:**

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner should be able to describe the value of Diplomacy Lab as a component of a	Diplomacy Lab will be defined. The process for submitting a proposal for an institution to
larger, term-length course.	service as a Diplomacy Lab site will be
	provided. Hints for successful submission of proposals will be provided. Learners will be
	asked to pair-and-share with their neighbors to
	brainstorm their perceived value from participating in Diplomacy Lab.

The learner should be able to describe how to The process for reviewing Diplomacy Lab offerings each semester will be presented, and form a team and integrate a Diplomacy Lab project into a term-length course. examples of projects will be introduced. Hints for submission of successful bids will be discussed, and the importance of forming multidisciplinary teams will be presented. The learn should be able to describe multiple The results of Diplomacy Lab three projects --1) antibiotic resistance: 2) infectious disease case studies of successful Diplomacy Lab projects in the area of Global Health. outbreaks attributed to incarcerated populations; and 3) the link among food security, nutrition, and food safety in the face of a changing climate -- will be presented. Course syllabi, assignments with grading rubrics, representative results, and demographics of the students will all be presented. To encourage engagement, the audience will be asked for 'how to improve' the case studies that are discussed. And each audience member will be asked to briefly write a statement of 'how' the approach presented in the seminar could be adapted for use at their own institution. These statements will be shared among participants in the seminar as a means of cross fertilizing ideas for best

## **Abstract Text:**

Diplomacy Lab is a public-private partnership launched by the United States Department of State in 2013. The dual-fold objectives of the program include: 1) engaging US citizens in the important work of setting foreign policy; and 2) course-sourcing difficult problems from the Department of State to the university classroom where student teams - guided by professors - work to make recommendations that State Department personnel can use in their ongoing diplomatic work. Diplomacy Lab recognizes that diplomacy is becoming increasingly complex in a world of limited resources, and therefore, forming partnerships with universities is a way for the important work of the Department of State to be completed in a timely, cost effective fashion. Students, and their professors, learn about 'how' the Department operates, and they have an opportunity to engage in the 'who,' 'what,' 'where,' 'when,' and 'why' of foreign policy.

practice of implementing Diplomacy Lab in

nursing programs.

This presentation highlights efforts to incorporate Diplomacy Lab projects into dual-level courses on environmental health, science, and engineering as a way of training interdisciplinary students - including nurses, healthcare providers, engineers, and scientists - about global health challenges. The results of three projects will be discussed including: 1) the role of social sciences in helping to encourage improved stewardship of antibiotics; 2) the relationship among incarcerated populations and contagious diseases observed in nearby, local communities; and 3) the importance of proper communication tools to share the value and benefits of both agroecology and sustainable intensification to produce more, healthy, nutritious, safe food.

Experience with term-length projects integrated into existing courses on environmental microbiology, environmental systems modeling, and environmental health engineering as well as independent, undergraduate and graduate research, will be presented in the form of case studies. Demographics of students will be included for comparison to other courses and other institutions. What worked well, and what didn't work well will be highlighted. Participants will be invited to share their views on 'how' to integrate Diplomacy Lab into their own courses and their own institutions. The process for how to submit a Diplomacy Lab project request will be reviewed and expert hints on strategies for successful submission of Diplomacy Lab project bids will be presented.

Participants will gain specific knowledge on 'what' is Diplomacy Lab, and 'how' to apply for a Diplomacy Lab project at their own institution. Participants will also be provided with exemplars of 'positive' and 'negative' experiences through a case study review. The overall objective is for some of the participants to return to their home institutions with a desire - and the tools - to successfully complete the integration of Diplomacy Lab into their own course curricula.

The long term benefit is that future nursing students will be increasingly exposed to the challenges and opportunities of scientific diplomacy in an increasingly interconnected global community. Faculty and students interested in the United Nations Sustainable Development Goals or in organizations such as Nurses Without Borers would be ideal audience members.