

SACNAS Scientific Symposium Submission

The blue text is the on-line prompt from the website. The black words are my response.

Title:**Arms Control Verification Careers****Description***

In 50 words or less, describe your session to potential session attendees as it should appear in publication (online and in print). Please be clear and be sure to check for spelling errors.

Arms control and verification for weapons faces challenges as international agreements/treaties are formed to reduce global nuclear dangers. New technology is needed to verify these agreements. This session presents an overview of arms control, new technologies for this mission, and potential career paths in academia, government, and national laboratories.

Session Goals*

In 150 words or less describe your session goals and objectives. Please clarify your objectives, for example "As a result of this session, participants will be able to _____".

Participants will gain an understanding of nuclear arms control and verification, how new technology may be used within this mission and explore how their education and goals can be applied to arms control with concrete examples of how to journey from a degree to working in the field. Three talks designed to frame arms control and verification in a multidisciplinary fashion are planned. First, an overview of arms control agreements/treaties is presented with the historical role of technology's contribution and current limitations. Second, the challenges and opportunities that applying publicly accessible electronic media to furthering arms control and verification goals will be addressed. Third an interactive presentation, highlighting the paths successful people take for these careers including the path the Undersecretary of State, Rose Gottemoeller is given. The funding to develop this session comes from the Department of State, with the express purpose to engage a diverse cross-section of students.

Speaker Diversity Statement*

In 300 words or less, briefly describe the diversity of session presenters, such as how they offer a balanced representation of the topic, institutional affiliation, career stage, ethnicity, and gender.

The three presenters that will participate in this session are as follows:

Lorraine Sadler works at Sandia National Laboratories in Livermore CA. She has worked for almost eight years in nuclear non-proliferation and arms control developing technology and working at the intersection of policy and technology. She is of Caucasian descent.

Justin Fernandez has worked at Sandia National Laboratories for six years in Albuquerque NM. He has an M.S. in Mechanical Engineering. For the past four years, he has developed technology for future arms control agreements and was a Nuclear Scholar for the Center for Strategic & International Studies Project on Nuclear Issues. He is of Puerto Rican and Cuban ancestry and considers himself Hispanic/Latino.

Patricia Pacheco is a newer scientific staff member at Sandia National Laboratories in Livermore CA. Having a Ph.D. in engineering, Patricia is excited to apply her technical background to policy issues relating to homeland security and arms control. She considers herself of Hispanic/Latino decent.

Furthermore, the third portion of the session has recorded interviews of people who are active in the arms control community. These people include: Jason Reinhardt (Sandia National Laboratories), Julia Jones (Sandia National Laboratories), Erik Brubaker (Sandia National Laboratories), Rose Gottemoeller (U.S. Department of State) and Kyler Turner (U.S. Department of State).