



Herbert Wertheim
College of Engineering
UNIVERSITY of FLORIDA

Science and Security Summit

Hannah E. Gardiner

21st April 2017

Louisiana State University

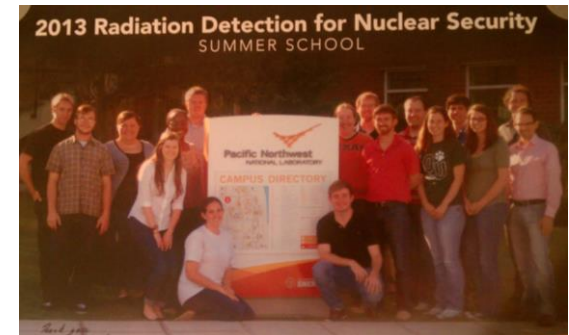
- BS in Physics in 2014 from Louisiana State University
- Research experiences:
 - 2011 – 2014 Dr. Jeff Blackmon and Dr. Catherine Deibel
 - 2012 – Summer REU at Indiana University under Dr. Mike Snow



Shift to Politics/National Security

Summer 2013

- May – Nuclear Physics Fly-In Day
- July – Radiation Detection for Nuclear Security Summer School
 - 50% lectures – 50% hands-on activities
 - Neutron Counting and Gamma Spectroscopy
 - Nuclear Archaeology
 - Comprehensive Test Ban Treaty
 - Second Line of Defense
 - Reachback
 - Emergency Response & Aerial Measurements
- Met my future advisor, Dr. Jim Baciak



University of Florida

- PhD Program in Nuclear Engineering under Dr. Jim Baciak
 - “Verification of Minimum Detectable Activity for Radiological Threat Source Search”
 - “Atmospheric ^{41}Ar Plume Tracking of the UF Training Reactor Using a Large-Volume NaI Detector”
 - “Measurements and Comparison of High Energy Neutron Spectra in He-4 Gas Neutron Detectors for D-T Fusion Research”
- Relevant Coursework
 - Nuclear Nonproliferation and Advanced Safeguards



Heat map of background radiation around UF



He-4 Neutron Detector

The background is a blue-tinted collage of various images showing students and faculty members in engineering settings, such as classrooms, labs, and meetings. A solid orange vertical bar is on the left side of the page.

UF | Herbert Wertheim
College of Engineering
UNIVERSITY *of* FLORIDA

POWERING THE NEW ENGINEER TO TRANSFORM THE FUTURE