



2022 Annual Program Review Agenda

Monday, June 20 – Thursday, June 23
Eldorado Hotel & Spa, Santa Fe, New Mexico

Updated June 21, 2022

Monday, June 20 (Fellows Only)

- 3:30 – 7:00pm **Fellows' Registration** — *Anasazi Concourse*
- 4:00 – 5:00pm **Fellows' Welcome Session** — *Anasazi North*
All fellows welcome to attend.
- 5:00 – 7:00pm **Fellows' Reception & Game Night** — *Anasazi North*

Tuesday, June 21

- 6:00 – 7:00am **Breakfast** — *Anasazi North*
- 7:00am **Bus Departs for Los Alamos National Laboratory Tour** (*fellows only*)
- 4:00 – 6:00pm **Registration** — *Anasazi Concourse*
- 6:00pm **Bus Returns from Laboratory Tour**

Wednesday, June 22

- 7:30 – 9:00am **Registration** — *Anasazi Concourse*
- 7:30 – 8:30am **Breakfast** — *Anasazi North*
- 7:30 – 8:30am **2022 Fellows' Portrait Session** — *Cava Lounge*
- 8:30 – 9:00am **Krell Institute Welcome** — *Anasazi South*
Shelly Olsan — President, Krell Institute
Ralph Schneider — Consultant, Krell Institute
- 9:00 – 10:00am **DOE NNSA Welcome and Opening Keynote**
Njema J. Frazier — Assistant Deputy Administrator (Acting), Strategic Partnership Programs, Office of Defense Programs, National Nuclear Security Administration
"Maintaining Scientific Leadership for the Nuclear Security Enterprise: An NNSA Perspective"
- 10:00 – 10:15am **Break** — *Anasazi Concourse*

Session I — *Anasazi South*

Moderator: Jolie Cizewski — Professor of Physics, Rutgers University

- 10:15 – 10:40am **Drew Morrill** — University of Colorado Boulder
"Development of Mid-Infrared Lasers for Soft X-Ray High Harmonic Generation"
- 10:40 – 11:05am **Michael Wadas** — University of Michigan
"Hydrodynamics of Shocked Interfaces"
- 11:05 – 11:30am **Chad Ummel** — Rutgers University
"Measuring the $^{134}\text{Xe}(d,p)^{135}\text{Xe}$ Reaction with GODDESS to Probe the Single-Particle Structure of ^{135}Xe "

11:30 – 11:55am **Olivia Pardo** — California Institute of Technology
"Probing a Hydrous Iron-Sulfate Within Extreme Planetary Environments"

12:00 – 1:00pm **Luncheon** — *Anasazi North*

Session II — Anasazi South
Moderator: Ralph Schneider — Consultant, Krell Institute

1:15 – 1:40pm **Eldred Lee** — Dartmouth College
"Towards the Photonic Efficiency Enhancement of Si-Based High-Energy X-ray Detectors"

1:40 – 2:05pm **William Riedel** — Stanford University
"Interpenetration and Kinetic Mix in Weakly Collisional, Fully-Ionized Plasma Jets"

2:05 – 2:30pm **Stephanie Miller** — University of Michigan
"Analysis of Laser Preheating Stage of MagLIF to Increase Laser Energy Coupling and Validate Simulations"

2:30 – 3:00pm **Poster Session Set Up** — *Anasazi North*

2:30 – 3:00pm **Outgoing Fellow Portraits & Fellow/Alumni Retakes** — *Cava Lounge*

3:00 – 4:00pm **Practicum/Residency Panel** — *Anasazi South*
Practicum and residency coordinators will discuss how to select and complete a successful research experience at their respective laboratories. Topics will include exploration of the logistics of relocation, how to find a mentor, research topics, site selection, lab life, social outlets, and, generally, what one can expect when embarking on this immersive opportunity afforded by the DOE NNSA SSGF and LRGF programs.

- **Shelly Olsan**, Moderator — Krell Institute
- **Kris Moran**, Panelist — Krell Institute
- **Laura Berzak Hopkins**, Panelist — Lawrence Livermore National Laboratory; DOE NNSA SSGF Alumna
- **Paul Bradley**, Panelist — Los Alamos National Laboratory
- **Matt Gomez**, Panelist — Sandia National Laboratories; DOE NNSA SSGF Alumnus
- **Richard Kraus**, Panelist — Lawrence Livermore National Laboratory; DOE NNSA SSGF Alumnus

4:00 – 5:00pm **DOE Laboratory Poster Session** — *Anasazi North*

5:00 – 6:30pm **DOE NNSA SSGF and LRGF Fellows' Poster Session** — *Anasazi North*

Thursday, June 23

7:30 – 9:00am **Registration** — *Anasazi Concourse*

7:30 – 8:30am **Breakfast** — *Anasazi North*

7:30 – 8:30am **2020 & 2021 Fellows' Portrait Session** — *Cava Lounge*

Session III — Anasazi South
Moderator: Ralph Schneider — Consultant, Krell Institute

8:30 – 8:40am **Announcements**

8:40 – 9:30am **Keynote**
Marcus D. Knudson — Senior Scientist, Pulsed Power Center, Sandia National Laboratories
"Research Highlights From the Sandia Z Accelerator"

9:30 – 10:00am **Alumni Keynote Richard Kraus** — Senior Research Scientist, Lawrence Livermore National Laboratory; DOE NNSA SSGF Alumnus
"Explosions, Lasers, Exoplanets, and Lessons Learned at a National Lab"

10:00 – 10:30am **Alumni Keynote Samantha K. Lawrence** — Leader, Materials Compatibility Team, Los Alamos National Laboratory; DOE NNSA SSGF Alumna
"The Lighter Side of Heavy Metals: Science at the Frontier of Uranium Metallurgy "

10:30 – 11:00am **Break/Hotel Check Out**

11:15am – 12:00pm **Science Communication Panel** — *Anasazi North*
Bill Cannon, Thomas R. O'Donnell and Sarah Webb — Krell Institute
"Science Between Floors"

12:00pm **Luncheon** — *Anasazi North*
Grab-and-go options available for those with early afternoon departures.

