

"Working within the ORNL ecosystem has given us the unique opportunity to leverage leaders across many disciplines in our field, rapidly increasing both the quality and pace of our development."

Matt Ellis & Sam Shaner, Yellowstone Energy



## **Innovation Crossroads**

Starting new energy-related technology companies is a real challenge, and the number of new energy startups has declined significantly over the past decade. Innovation Crossroads, supported by the US Department of Energy's (DOE's) Advanced Manufacturing Office, leverages Oak Ridge National Laboratory's (ORNL's) unique scientific resources and capabilities and connects the nation's top innovators with experts, mentors, and networks in technology-related fields to take world-changing ideas from research and development (R&D) to the marketplace.

# **Empowering Aspiring Energy Entrepreneurs**

Through an annual national call, up to five entrepreneurs are selected to join the program each year. Participants receive a fellowship that covers living costs and benefits, a travel stipend for up to 2 years, a substantial grant to use on collaborative R&D at ORNL, and comprehensive mentoring assistance to build a sustainable business model.

By embedding the next generation of top technical talent within ORNL, Innovation Crossroads positions entrepreneurial researchers to address fundamental energy and manufacturing challenges identified by industry.

**National Lab Expertise**—ORNL is DOE's largest science and energy laboratory and home to some of the nation's most significant user facilities. Because Innovation Crossroads entrepreneurs work within ORNL, they have access to essential tools and resources immediately. This access reduces cost, risk, and R&D time, allowing researchers to focus on creating the next generation of game-changing energy technologies.

**Multidisciplinary Collaboration**—Innovation Crossroads participants work with ORNL's renowned scientists and engineers across many disciplines, including biological and environmental sciences, advanced materials, neutron sciences, nuclear science and engineering, and high-performance computing, providing a platform for collaborative research.

Up to a 2 year stipend with health and travel benefits

Substantial R&D funding provided by ORNL, DOE, and TVA

Comprehensive business mentoring

Cohort 3 starts in May 2019



Innovation Crossroads participant Megan O'Connor is helping advance recycling technologies.



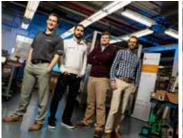














**Business Mentoring Assistance**—Innovation Crossroads has a growing number of partnerships that offer a unique business mentoring experience. Innovators have opportunities to participate in Launch Tennessee's Energy Mentor Network. They are also supported by and have the opportunity to work with interns from the University of Tennessee's Bredesen Center, who assist with market research and customer discovery. Additionally, each innovator establishes his/her own advisory board and is introduced regularly by Innovation Crossroads staff to potential customers and investors. Other established partnerships provide legal, finance, and accounting assistance to Innovation Crossroads innovators.

## **Empowering Leaders, Launching Businesses**

R&D funding from industry partners supports collaboration opportunities with researchers across ORNL. Innovation Crossroads has partnered with the Tennessee Valley Authority to fund additional innovators for cohort 3.

Contact:

Tom Rogers, Director, rogerstc@ornl.gov 865-241-2149

Dan Miller, Program Lead, millerdw@ornl.gov 865-574-3640

One Bethel Valley Road, Oak Ridge, TN 37830 innvcrossrds@ornl.gov









#### Cohort 1

Anna Douglas | SkyNano Technologies

Matthew Ellis and Samuel Shaner Yellowstone Energy

Mitchell Ishmael | Active Energy

### **Cohort 2**

Donald DeRose | Eonix

Shane McMahon | Lux Semiconductors

Justin Nusbaum | Ascend Manufacturing

Megan O'Connor | Nth Cycle

