



Innovation Crossroads

Launching new energy-related technology companies has become increasingly difficult, contributing to a significant decline in energy startups over the past decade. To address this challenge, Innovation Crossroads was founded and funded by the U.S. Department of Energy's (DOE) Advanced Materials and Manufacturing Technologies Office (AMMTO), with additional support from the Office of Energy Efficiency and Renewable Energy's Building Technologies Office (BTO), DOE's Office of Electricity, Office of Science's Advanced Scientific Computing Research program and Basic Energy Sciences program, and the Tennessee Valley Authority (TVA). This program harnesses the unique scientific resources and capabilities of Oak Ridge National Laboratory (ORNL) to connect the nation's leading innovators with experts, mentors, and networks in technology-related fields, helping to transform groundbreaking ideas from research and development (R&D) into market-ready solutions.

Empowering Aspiring Entrepreneurs

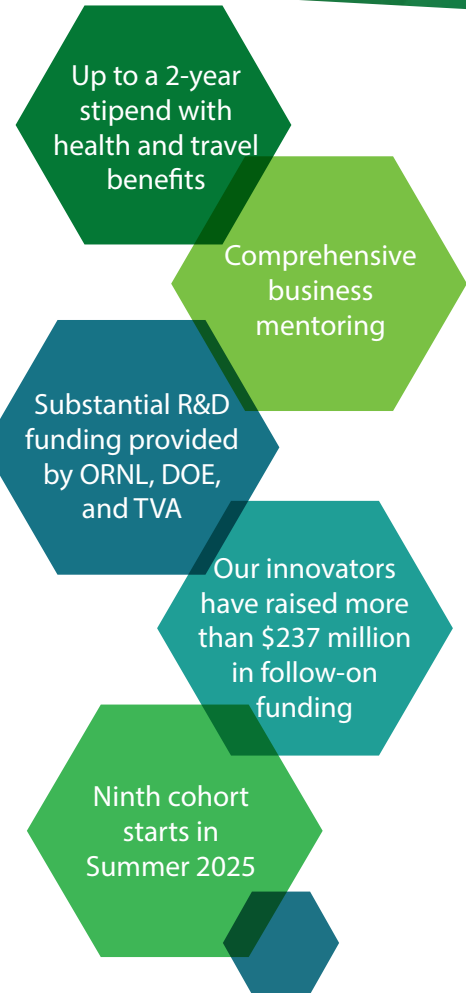
Through an annual national call, top entrepreneurial-minded innovators are selected to join this 2-year program. Participants receive a fellowship that covers living costs and benefits, a travel stipend, a substantial grant for collaborative R&D work at ORNL, and comprehensive assistance to build a sustainable business model.

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

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

Business mentoring assistance—Innovation Crossroads has a growing network of partners who offer a unique entrepreneurial and business mentoring experience. The program facilitates connections with industry executives, investors, entrepreneurs, and other experts from academia, government, and finance who can serve as advisors and mentors to help develop priorities, mature skills, provide guidance, and make connections to their broader networks.



"Working with Oak Ridge National Laboratory researchers is an amazing opportunity. They have helped us expand our additive manufacturing process' capabilities, increase application use cases, and will ultimately lead to digital manufacturing without any iteration. The top-notch mentorship and training have helped us understand fundraising and clarify our pitch both to potential investors and customers."

—Skuld Founder and CEO **Sarah Jordan**

Empowering Leaders, Igniting Innovation, Launching Businesses

Innovation Crossroads' impact is far reaching as it enters its eighth year of embedding entrepreneurs at ORNL. The program has supported 45 start-ups that have raised \$115 million in grants and awards, created over 281 jobs, raised \$122 million in venture funding, and have more than \$24.9 million in sales revenue.



Cohort 2024

Nicholas Sokol
Algaeo
Vinit Chaudhary
Aligned Composites Technology
Kevin Roccapriore
AtomQ
Katy Bradford
Cassette Construction
Jordan Cannon
Circular Biosciences
Tim Vosburgh
Coulomb Technology
Brian Iezzi
Fibarcode

Cohort 2023

Manas Pathak
EarthEn
Daniel Lee
Perseus Materials
Marouane Salhi
Qubit Engineering
Md "Arif"
Arifuzzaman
Re-Du
Sarah Jordan
Skuld
Ryan Spencer
ThermaMatrix
Shantonio Birch
ThermoVerse

Cohorts 2017–2022 Alumni

Joe Fortenbaugh
Actinic
Shuchi "SK" Khurana
Addiguru
Bianca Bailey
Agriwater
William Fitzhugh
American Nanotechnologies
Thomas Foulkes
AquaQuant Laboratories
Justin Nussbaum
Ascend Manufacturing
Rajan Kumar
Ateios Systems
Danielle Castley
Becq
Kim Tutin
Captis Aire
Caleb Alexander
DayLyte Batteries

Alex Lewis
Electro-Active Technologies
Hicham Ghossein
Endeavor Composites
Donald DeRosa
Eonix
Philip Stuckey
FC Renew
Jesse Thornburg
Grid Fruit
Tommy Gibbons
Hempitecture
Anca Timofte
Holocene Climate
Shane McMahon
Lux Semiconductors
Jesse Claypoole
MantaPoole Technologies

Trevor McQueen
Neptune Fluid Flow Systems
Megan O'Connor
Nth Cycle
Renee Carder
PixelEXX Systems
Leila Safavi
Purist
Erica Grant
Quantal Security
Forrest Shriver
Sentinel Devices
Mitchell Ishmael
Shift Thermal

Anna Douglas
SkyNano Technologies
Matthew Smith
TCPoly
Sam Evans
Unbound Water Technologies
Alex Stiles
Vitriform3D
Matthew Ellis and Samuel Shaner
Yellowstone Energy



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innovationcrossroads.
ornl.gov

CONTACT:

Dan Miller
Program Lead

innvcrossrds@ornl.gov
865-574-3640

One Bethel Valley Road
Oak Ridge, TN 37831