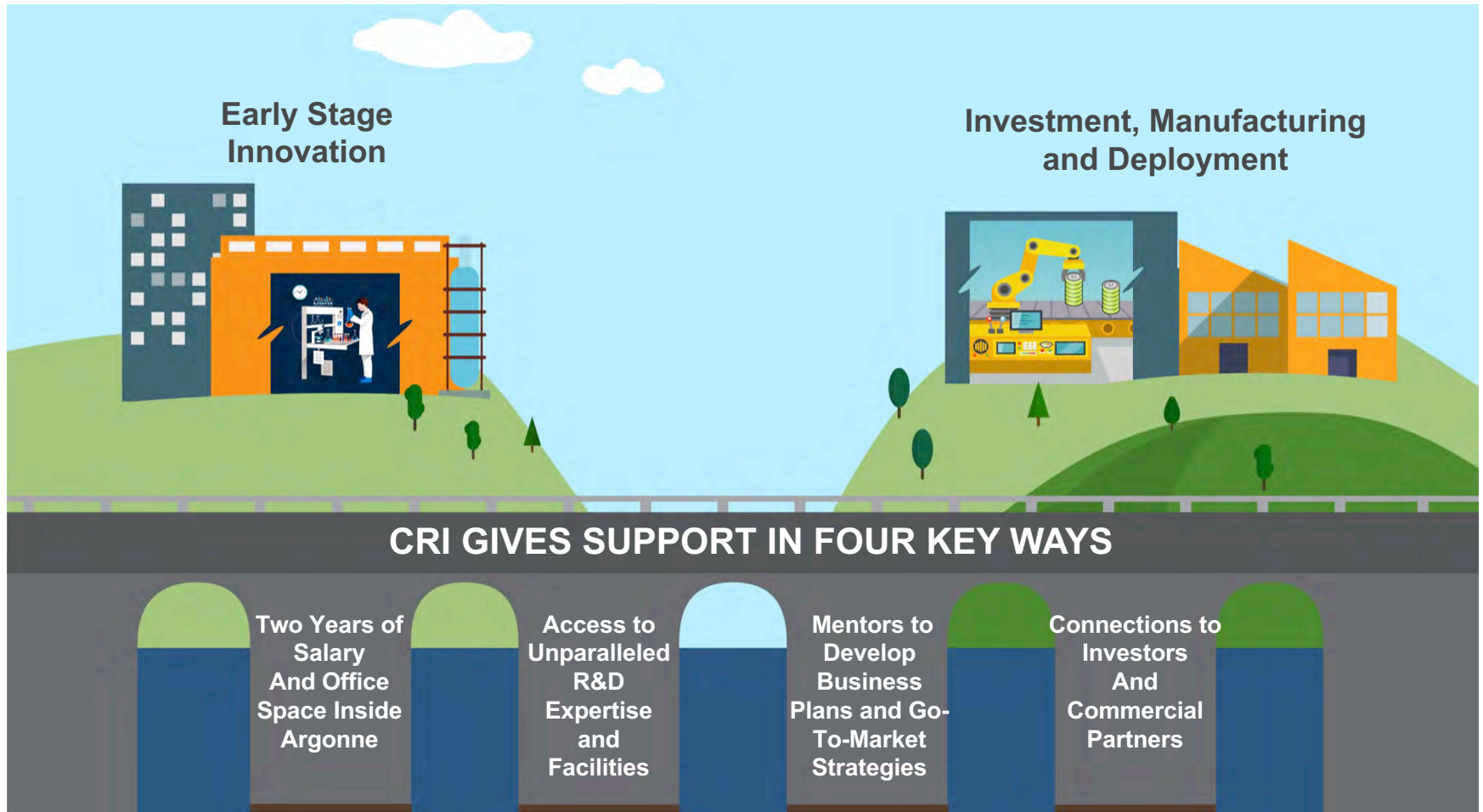


# CHAIN REACTION INNOVATIONS

## INNOVATION APPLICANT INFORMATION

8/18/2017

# THE CHAIN REACTION INNOVATIONS MODEL BRIDGES THE ENERGY AND PHYSICAL SCIENCE TECHNOLOGY VALLEY OF DEATH



# OUR MISSION

- Developing transformative energy technologies and greener manufacturing processes and materials requires more than a great idea and some committed people.
- These complex science challenges require hefty capital investment, access to complex tools and facilities, and lengthy development timescales beyond the typical software startup and venture capital models. To bridge this valley of death between the science workbench and the marketplace, the U.S. Department of Energy's Advanced Manufacturing Office (AMO) and Argonne National Laboratory created a new innovation accelerator program for technology entrepreneurs called Chain Reaction Innovations (CRI).



# A HIGH-TECH ENVIRONMENT IN WHICH TO SCALE



- This is the first time innovators have been given such an extensive level of support and the opportunity to be embedded in a national laboratory in the Midwest.
- This national program gives innovators the financial and technical support needed to mature nascent long development cycle energy and science products to the proof-of-concept level where they can launch into the marketplace and access conventional sources of financial support to scale.

# CRI PROGRAM SUMMARY

- Summary: Provide an established support program for entrepreneurs with start-ups based on energy and hardware-based science to help them navigate the path from idea to eligibility for private funding

### Funding to cohort members:

- ~\$100,000/ per year for 2 years in ( a fellowship for salary, benefits and a travel stipend)
- Up to \$220,000/ over 2 years for for work done inside Argonne Laboratory

### Additional potential funding sources:

- The start-up is eligible for support from the business mentor (incubation services, non-dilutive funding/grants)
- The start-up will work with the Lab and the business mentor to avail of other non-dilutive funds (SBV, TCF, SBIR etc.)

### Program Benefits:

- Startups embedded in a national lab with dedicated lab and office space
- Lab assistance in conducting R&D
- Funding fellowship for 2 years
- Advisory network of business mentors
- Connections to commercial partners and investors

# CRI PROGRAM SUMMARY

Selected innovators may receive additional benefits, which may include:

- Continued benefits after “graduating” for up to 5 years in total (innovators will graduate after the earlier of 2 years in the program or upon raising \$2M in cumulative private-sector funding, whichever is earlier) and may include the following:
  - Continued technical collaboration support from Argonne National Laboratory through Cooperative Research and Development Agreements (CRADA) on a pay-in basis;
  - On-site Chain Reaction Innovations lab occupancy on a pay-in basis; or
  - Access to Chain Reaction Innovations programming on a pay-in basis.

*\*Each of the above is contingent upon availability of funds and personnel, negotiation of a mutually agreeable scope of work, as well as DOE approval.*

# A DIFFERENT KIND OF INNOVATION DRIVER:

Innovators get support to get started:

- Funding for up to two years
- Dedicated lab and office space at Argonne Laboratory
- Support obtaining additional project funds
- Assistance conducting R&D

World-class R&D support at Argonne National Laboratory

- \$760 million annual budget
- 3,298 employees
- 1,623 scientists and engineers
- 15 research divisions
- 5 national scientific user facilities
- A suite of research centers and joint institutes

Unparalleled access to an innovation ecosystem

- Advisory network of business mentors
- Connections to commercial partners and investors
- A vibrant network of area innovation and accelerator resources

## WHAT YOU GET:

Up to 2 years of Chain Reaction Innovations project support\*:

- ✓ Personal stipend, travel allowance, and health benefits
- ✓ Lab space & technical collaboration support from Argonne National Laboratory
- ✓ Chain Reaction Innovations programming and mentorship

\*subject to performance & availability of funds



# STIPEND, TRAVEL ALLOWANCE, AND BENEFITS

- Provided by a US DOE fellowship program
- No constraints upon your IP
- Full personal health benefits
- Relocation expenses covered up to \$5,000
- Pay scale
  - Base salary: \$88,800
  - Salary may be increased commensurate with experience at time of award
  - Travel allowance: \$20,000/year

# LAB SPACE AND TECHNICAL COLLABORATION SUPPORT AT ARGONNE NATIONAL LABORATORY

- Provided through a Cooperative Research and Development Agreement (CRADA) with Argonne Laboratory
- New IP generated within the CRADA scope of work follows the inventor
- Designated office space per company
- Up to \$220,000 over two years per company in funding from DOE and Argonne Laboratory to support collaborations with Argonne Laboratory
  - Funding will be allocated based on project scope and need

# CHAIN REACTION INNOVATIONS PROGRAMMING AND MENTORSHIP

- Strategy sessions with Chain Reaction Innovations core team
- Targeted guidance from Chain Reaction Innovations staff
- Access to Chain Reaction Innovations Advisory Network
- Connections to additional entrepreneurship resources

## WHY IT MATTERS

Chain Reaction Innovations' unique ability to embed innovators into Argonne National Laboratory for unprecedented access world-leading R&D tools provides key unique benefits:

- **Reduced start up time and cost for your company**
  - No need to buy expensive equipment for an individual lab
- **De-risks technologies to improve performance and market acceptance**
  - Fast access to equipment enables development pivots
  - Validation, scale-up, and predictive modeling tools increase consumer and investor confidence
  - Fabrication facilities
- **An ability to work full-time on your startup**
  - More collaboration time and partners means better products and faster development

# ELIGIBILITY

## Requirements:

- Technical leads must:
  - Possess a minimum of 5 years hard technology R&D experience
  - Be a first time technical founders
  - Be either a U.S. citizen or permanent resident
- Must be focused on an advanced materials or manufacturing related energy technology
- Must have the potential for broad impact that aligns with DOE's mission to advance the national, economic, and energy security of the United States.
- Must apply as an individual
- Projects that have raised more than \$1M in private-sector funding are not eligible to receive cohort support under this program



**View a video on how CRI can benefit  
you:**

**[https://www.youtube.com/watch?v=Gb0m  
ykNAOgs](https://www.youtube.com/watch?v=Gb0mykNAOgs)**

**Apply at [Chainreactions@anl.gov](mailto:Chainreactions@anl.gov) Innovations  
to join the first cohort or become a mentor.**



# CHAIN REACTION INNOVATIONS

U.S. DEPARTMENT OF  
**ENERGY** | Energy Efficiency &  
Renewable Energy  
ADVANCED MANUFACTURING OFFICE

Argonne   
NATIONAL LABORATORY