

NEWS RELEASE

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Six new innovators selected for elite Chain Reaction Innovations program

LEMONT, IL (April 20, 2020) — Six new innovators will be joining [Chain Reaction Innovations](#) (CRI), the entrepreneurship program at the U.S. Department of Energy’s (DOE’s) Argonne National Laboratory, as part of the elite program’s fourth cohort.

The six will join the two-year program starting this June, and each innovator will collaborate with a host scientist on staff at Argonne National Laboratory, while embedded full-time there, to develop revolutionary technologies that will reduce greenhouse gas emissions and increase U.S. competitiveness in emerging fields like quantum computing. The resulting technologies will assist the U.S. Department of Energy’s Office of Science and Argonne National Laboratory in solving pressing, national problems related to science and technology.

“We are excited to be welcoming some of the brightest and most promising innovators in the country to Argonne,” Argonne Director Paul Kearns said. “Chain Reaction Innovations is a rare program that offers tremendous resources to visiting innovators, while also bringing fresh ideas into the lab.”

The six new innovators in Chain Reaction Innovations Cohort 4 are as follows:

- **Matthew Ackerman** (University of Chicago)
Quantum Dot-Based Extended Shortwave Infrared Detectors for Machine Vision
- **Karin Calvino** (Rutgers University)
Waste Carbon Dioxide to Plastics
- **Pranav Gokhale** (University of Chicago)
Full-Stack Cross-Layer Quantum Computing for Smart Grid Optimization
- **Margaret Kocherga** (University of North Carolina at Charlotte)
Materials for Single-Layer OLEDs
- **Christopher Passolano** (Illinois Institute of Technology)
Silicon-Based Rechargeable Batteries
- **Carol Scarlett** (Florida A&M University)
Chip-Scale, Quantum Random Number Generator

Innovators were selected following an extensive national solicitation process and two-part pitch competition, with reviews from industry experts, investors, scientists and engineers. A total of 156 innovators applied to the program, with the top 15 participating in the Finals Pitch Competition held at Argonne on February 18, 2020.

Argonne's Chain Reaction Innovations program, which is under the lab's Science and Technology Partnerships Outreach directorate, is funded by The Advanced Manufacturing Office within the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy.

Chain Reaction Innovations' impact is far-reaching as it enters its fourth year of embedding entrepreneurs at Argonne National Laboratory. CRI's first cohort graduated in June 2019, [amassing millions in investment](#). The combined total raised by CRI innovators through February 2020 is nearly \$18 million. In addition, the program helped create 76 jobs to date.

"I'm pleased to welcome our newest innovators to the Chain Reaction Innovations Program. I look forward to supporting their efforts at Argonne and also working with our partners in the Chicago innovation ecosystem. This year's cohort is particularly well aligned with Argonne's initiatives in quantum computing, sustainable economy, energy storage, and advanced manufacturing," said John Carlisle, Director of Chain Reaction Innovations.

Argonne's capabilities include three important DOE Office of Science user facilities — the Argonne Leadership Computing Facility, the Center for Nanoscale Materials and the Advanced Photon Source, the nation's highest-energy X-ray synchrotron for materials characterization. In addition, the laboratory is home to 1,600 scientists and engineers and a variety of other resources, such as the Center for Transportation Research and energy storage leaders [ACCESS](#) and the [Joint Center for Energy Storage Research \(JCESR\)](#).

Applications for CRI's fifth cohort will open on September 15, 2020.

About Chain Reaction Innovations

Chain Reaction Innovations provides a two-year program for entrepreneurs focusing on energy and science technologies. Selected annually through an application call, the program enables innovators to work on their technology full-time, de-risking their technologies with the help of leading experts and equipment from a national laboratory. Each cohort works to build their innovations into market-ready businesses. CRI is located at Argonne and supported by area mentors from the [Polsky Center for Entrepreneurship and Innovation](#) at the University of Chicago and [mHUB](#).

Chain Reaction Innovations is part of the [Lab-Embedded Entrepreneurship Programs](#) from the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE). EERE created the Lab-Embedded Entrepreneurship Programs to provide an institutional home for innovative postdoctoral researchers to build their research into products and train to be entrepreneurs.

[**The Office of Energy Efficiency and Renewable Energy**](#) supports early-stage research and development of energy efficiency and renewable energy technologies to strengthen U.S. economic growth, energy security, and environmental quality.

Argonne National Laboratory seeks solutions to pressing national problems in science and technology. The nation's first national laboratory, Argonne conducts leading-edge basic and applied scientific research in virtually every scientific discipline. Argonne researchers work closely with researchers from hundreds of companies, universities, and federal, state and municipal agencies to help them solve their specific problems, advance America's scientific leadership and prepare the nation for a better future. With employees from more than 60 nations, Argonne is managed by [UChicago Argonne, LLC](#) for the [U.S. Department of Energy's Office of Science](#).

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