

LA-UR-17-21940

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Title: UC/Los Alamos Entrepreneurial Postdoctoral Fellowship Pilot Program

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Intended for: Web

Issued: 2017-03-06

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UC/Los Alamos Entrepreneurial Postdoctoral Fellowship Pilot Program

What: The UC/Los Alamos Entrepreneurial Postdoctoral Fellowship Pilot Program (Pilot) for existing postdoctoral researchers at Los Alamos National Laboratory (Los Alamos) to gain skills in entrepreneurship and commercializing technology as part of their postdoctoral experience. This program will incorporate training and mentoring during the first 6-month period, culminating in a focused 6-month Fellowship aimed at creating a new business in Northern New Mexico.

Why: The UC/Los Alamos Entrepreneurial Postdoctoral Fellowship Pilot Program has goals to provide experience for new generations of scientists and engineers to strengthen national scientific and technical capabilities, and to serve as a pipeline for technical staff at the Los Alamos. There is a national trend among students in graduate programs in science and engineering to look beyond the conventional career tracks for technical Ph.D.s. Traditionally, the Los Alamos has hired about a third of its postdoctoral staff as permanent technical staff. The Fellowship will foster entrepreneurial talent within our postdoctoral program, and increase the opportunities for young scientists and engineers to stay in New Mexico to drive innovation through entrepreneurship outside of employment at Los Alamos as a career goal.

In addition to enhancing our Postdoctoral Program, the Pilot is aimed at addressing the Los Alamos need to foster more frequent and better quality transitions from our science and technology research into new businesses and technology products, particularly within the Northern New Mexico region.

Solution: The Fellowship will prepare young scientific leaders in the skills necessary to excel in high-tech commercialization and entrepreneurship, through a two phased approach by offering education and training to develop business knowledge to better steer their early research directions along a path that will increase the possibility of adoption, and offering selected postdocs a focused 6-month Fellowship with the goal of creating or participating in a new entrepreneurial venture.

Phase 1:

- **DisrupTECH** - is a series of coaching activities by experienced investors and entrepreneurs to provide targeted guidance for scientists to polish their research for presentation to funding partners, learning to refine their story, hone their pitch, and sharpen their presentation skills. DisrupTECH culminates at a forum where LANL technical staff where finalists will pitch their research to a panel of entrepreneurs, investors, regional leaders, policy makers, and industrial partners.
- **Lab Accelerator** - Prepare Lab scientists and engineers with the knowledge and tools to better steer their early research directions along a path that will increase the possibility of adoption. The Accelerator offers a 3 day intensive business concepts training for Lab technical staff on how to develop, analyze, and validate the commercial potential of their research and technology, and advising by business experts and experienced entrepreneurs to further develop their business concepts will be offered, by experienced entrepreneurs.

Phase 2:

- Fellows will be selected through a competitive process from postdocs completing Phase 1 ensuring that only qualified and motivated individuals are chosen. Investment mentors will be chosen through an open process from qualified entities that are willing to commit time and resources to the success of the program.
- Training will continue on the technology commercialization and business development
- External mentoring will be provided to refine competitive business and technology concepts based on this training, with the following goals:
 - Building skills in developing a compelling business model
 - Gaining understanding of current market needs and technology gaps in their area of focus
 - Obtaining seed funding for a new entrepreneurial venture

Fellows Selection Process: To be eligible for the 2017 UC/Los Alamos Entrepreneurial Postdoctoral Fellowship class, candidates must have completed at least one year of a Los Alamos postdoctoral research appointment, and be a US citizen or permanent resident alien. Participants must be nominated or endorsed by their Laboratory postdoctoral research mentor and Responsible Line Manager (RLM). Distinguished Fellows (Curie, Feynman, Oppenheimer, and Reines) are not eligible.

- December 2016 - Initial orientation and training session - Interested postdocs may participate in an initial orientation and training session that will address processes and policies for transferring innovations. Postdocs interested moving further in being a part of entrepreneurial training courses and mentoring sessions during Jan-June of 2017 will need to submit an application by Dec. 9, 2016.
- January 2017 - Phase 1: Qualified postdocs will be requested to submit a penta-chart and pitch their idea to LANL Subject Matter Experts. An initial cohort will be selected to participate in DisrupTECH coaching and Lab Accelerator training. Phase 1 will be part-time and pursued while maintaining the current postdoctoral appointment.
- July 2017 - Phase 2: Up to 5 Fellows will be selected based on a business plan pitch competition, to be held in conjunction with the 2017 DisrupTECH event in Los Alamos. Fellowships in their second year of the existing postdoctoral appointment, to allow sufficient time to complete existing postdoctoral work and prepare publications.
- At the end of the 6-month Fellowship, if a viable business has been defined with successful seed funding, the Fellows will terminate employment with the Laboratory, and commence work outside the Laboratory. If a viable business has not yet been funded, Fellows will have the option of returning to their previous Laboratory postdoctoral appointment for an additional 6-month period. During this period, it is expected that only programmatic work will be done at the Laboratory, and further pursuit of external business opportunities will be done as a pre-approved Outside Activity under standard conditions for outside activities. At the discretion of the Laboratory RLM, Fellows who terminate to start a new venture may be offered a temporary return position as a postdoctoral researcher, up to 12 months after termination, if they wish to return to the Laboratory. This is contingent on available funding and approval from the Los Alamos Postdoctoral Program.

Selection Process (External Experts):

Both phases of the UC/Los Alamos Postdoctoral Program will incorporate external experts to provide coaching, training, advising and mentoring.

Phase 1:

- Coaches – Contracted through FCI for the DisrupTECH coaching activities to provide targeted guidance for scientists to polish their research for presentation to funding partners, learning to refine their story, hone their pitch, and sharpen their presentation skills.
- Advisors – FCI will solicit volunteer advisors in topic areas related to entrepreneurial training course that will help the participant develop their business concepts. Included will be a study guide and monthly one-on-one interactions.

Phase 2:

- Mentors - Investment mentors will be solicited via a Los Alamos Request for Proposal (RFP) to meet fairness of opportunity standards, and pre-qualified to ensure that the Fellows have access to a diverse group of experts across a broad range of technologies and industry sectors. Mentors will participate on a volunteer basis, and be expected to devote time and energy to the program as follows:
 - 1) Judging commitment: serve as judge for the Fellowship selection event in July 2017
 - 2) Mentoring commitment: Aug 2017-Feb 2018: Willingness to spend up to 20 hours (total) in mentoring discussions with Fellows over the period of the Fellowship.
 - 3) Meeting commitment – Monthly from Aug 2017-Feb 2018. Participate in monthly updates to review progress of the Fellowship participants. This can be on person or by webcast.
 - 4) Investment pre-qualification: Be qualified as an investment entity (fund or individual) for seed-stage investments in New Mexico start-up companies.