

The U.S. National Science Foundation Convergence Accelerator tackles complex challenges by merging innovative ideas, approaches and technologies from a wide range of disciplines, expertise and sectors. The program funds multidisciplinary teams to solve national-scale challenges through convergence research and innovation.

ACCELERATING INNOVATION



Entities formed



600+

Partnerships formed



\$67M+

Follow-on funding



100+

Patents/patents pending

A UNIQUE INNOVATION PROGRAM

The NSF Convergence Accelerator's unique program structure offers researchers and innovators the opportunity to accelerate their research toward tangible solutions that make a difference.



Multidisciplinary approach

Funded teams are composed of varied disciplines, expertise and organizations.



Hands-on journey

Researchers gain skills and knowledge through the program's innovation curriculum to move an idea from a proof of concept to a tangible solution.



Coopetition environment

Funded teams compete and share expertise and resources to assist solutions in advancing to the next phase.



Cross-cutting partnerships

Catalyzed partnerships strengthen funded efforts by providing end-user insights, resources, services, infrastructure and transition-to-practice pathways.



National-scale impact

At the end of the program, teams are expected to provide high-impact deliverables, technologies and solutions that address complex challenges and enhance the nation's competitiveness and security.

ENGAGING THE CONVERGENCE ACCELERATOR

There are several opportunities to engage with the Convergence Accelerator:

- · Submit an idea during the ideation process.
- Participate in an NSF-funded workshop to further develop an idea.
- Form a team and apply to a convergence research solicitation.
- Contribute expertise or resources to a currently funded team and solution.
- Be a reviewer and assist NSF in funding the best research ideas and solutions.



PROGRAM GROWTH



\$450M+

NSF research and development investment



Convergence Accelerator tracks



Federal and international partners



curriculum participants

RESEARCH PORTFOLIO: ACTIVE TRACKS

The Convergence Accelerator is composed of a variety of convergence research track topics designed to accelerate technologies and solutions toward real-world impact. Since 2019, the program has completed six convergence research tracks. Currently the program is actively funding seven research tracks.



Bio-Inspired Design Innovations



Enhancing Opportunities for Persons with Disabilities



Food & Nutrition Security



Future Water Systems



Real-World Chemical Sensing Applications

in partnership with the Swedish Research Council and Vinnova



Securely Operating Through 5G Infrastructure





Sustainable Materials for Global Challenges

in partnership with Australia's Commonwealth Scientific and Industrial Research Organisation

PROGRAM MODEL

Ideation

- Ideas are gathered from the community.
- Selected ideas are funded by NSF into community workshops to assist in developing the final convergence research topics to be funded for future years.

Convergence Research Focus

Phase 1

- Phase 1 is an accelerated nine-month planning effort, with funding up to \$750,000.
- Teams identify new team members and partners, develop an initial idea into a proof of concept and engage in a hands-on innovation curriculum, which includes human-centered design, team science, communications, storytelling and pitching.
- At the end of Phase 1, teams participate in a formal pitch and proposal evaluation process. Selected teams advance to Phase 2.

Phase 2

- Selected teams continue solution development through a two-year effort, with funding up to \$5 million.
- Teams participate in an entrepreneurial curriculum that includes product development, intellectual property, financial resources, sustainability planning and more.

Impact

 By the end of Phase 2, teams are expected to provide deliverables that impact societal needs at scale and are successful beyond NSF support.