

NSF's Convergence Accelerator tackles national-scale complex challenges by merging innovative ideas, approaches, and technologies from a diverse range of disciplines, expertise and sectors. The program funds multidisciplinary teams to solve national-scale challenges through convergence research and innovation.

A UNIQUE INNOVATION PROGRAM

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 diverse disciplines, expertise and organizations.



Cross-cutting partnerships

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



Hands-on journey

Researchers gain skills and knowledge to move an idea to a proof of concept, to prototype and then solution.



Societal impact

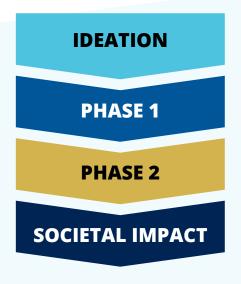
At the end of the fixed three-year term, teams are expected to provide high-impact deliverables that address complex challenges.



Coopetition environment

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

PROGRAM MODEL



- Ideas are gathered from the community.
- Selected ideas are funded by NSF into community workshops.
- The workshop findings assist NSF in developing the final convergence research track topics to be funded for future years.
- An accelerated nine-month planning effort, funding up to \$750,000.
- Teams develop an initial idea into a proof of concept and identify new team members and partners.
- Teams engage in a hands-on innovation curriculum, which includes humancentered 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.
- 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.

ENGAGING THE CONVERGENCE ACCELERATOR

There are several opportunities to engage with the Convergence Accelerator.

- Submit an idea during the ideation process
- Further an idea through a NSF-funded workshop
- Form a team and apply to a convergence research solicitation
- Contribute to a currently funded team and solution
- Be a reviewer and assist NSF in funding the best research ideas and solutions

PROGRAM PORTFOLIO

2019 COHORT Complete



TRACK A:

OPEN KNOWLEDGE NETWORKS

Phase 1: 21 teams | Phase 2: 5 teams



TRACK B:

AI AND THE FUTURE OF WORK

Phase 1: 22 teams | Phase 2: 2 teams

2020 COHORT Phase 2



TRACK C:

QUANTUM TECHNOLOGY

Phase 1: 11 teams | Phase 2: 4 teams



TRACK D:

AI-DRIVEN DATA SHARING AND MODELING

Phase 1: 18 teams | Phase 2: 6 teams

2021 COHORT Phase 2



TRACK E:

NETWORKED BLUE ECONOMY

Phase 1: 16 teams | Phase 2: 6 teams



TRACK F:

TRUST AND AUTHENTICITY IN COMMUNICATION SYSTEMS

Phase 1: 12 teams | Phase 2: 6 teams



TRACK G:

SECURELY OPERATING THROUGH 5G INFRASTRUCTURE

in partnership with the Department of Defense

Phase 1: 16 teams



TRACK H:

ENHANCING OPPORTUNITIES FOR PERSONS WITH DISABILITIES

Phase 1: 16 teams

2022 COHORT Phase 1



TRACK I:

SUSTAINABLE MATERIALS FOR GLOBAL CHALLENGES

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

Phase 1: 16 teams



TRACK J:

FOOD & NUTRITION SECURITY

Phase 1: 16 teams



TRACK K:

EQUITABLE WATER SOLUTIONS

Phase 1: 16 teams



TRACK L:

REAL WORLD CHEMICAL SENSING APPLICATIONS

in partnership with the

Swedish Research Council and Vinnova

Phase 1: 16 teams





TRACK M:

BIO-INSPIRED DESIGN INNOVATIONS

Phase 1: 15 teams

