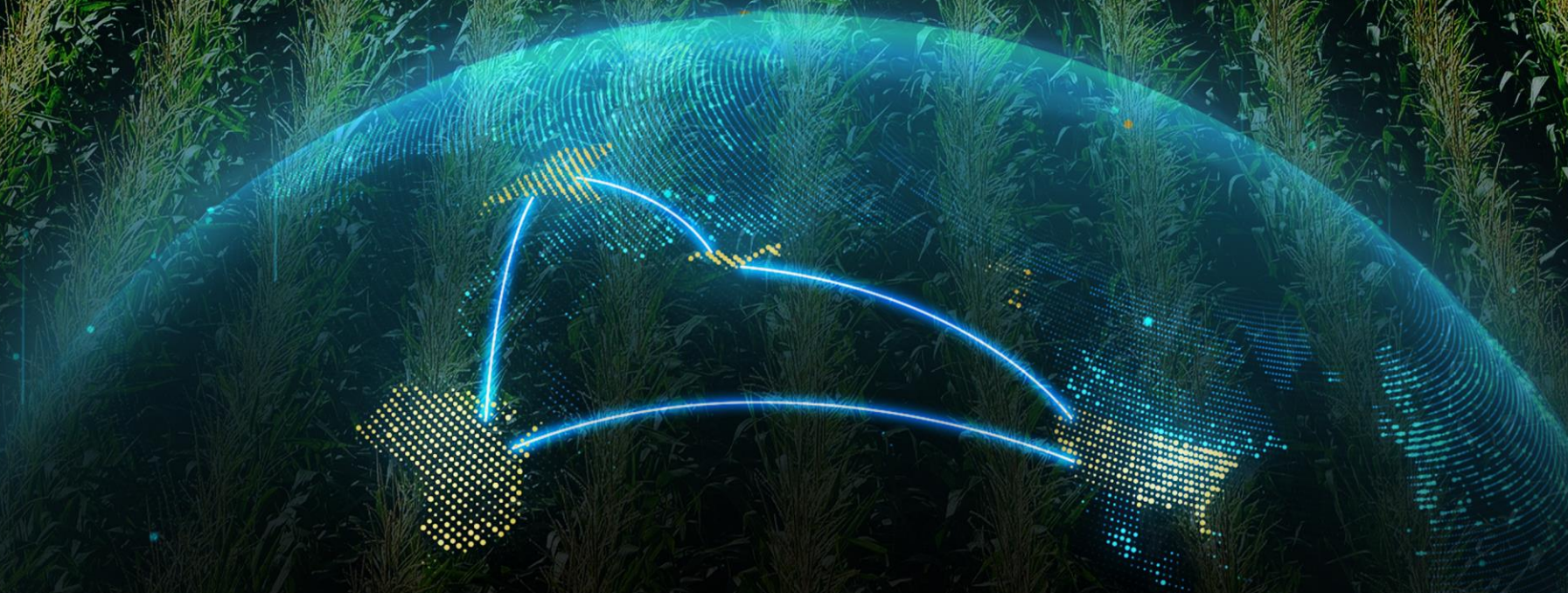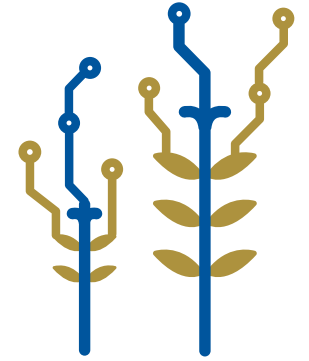# Advancing Innovation to Empower Next Generation AGriculturE (AI-ENGAGE)

U.S. National Science Foundation
Japan Science and Technology Agency
Indian Council of Agricultural Research
Commonwealth Scientific and Industrial Research Organisation of Australia

WEBINAR AGENDA

- Presentation by NSF, JST, ICAR, and CSIRO on the Joint Funding Opportunity

- Question & Answer Period

Zoom recording and PowerPoint Presentation will be available:

https://www.nsf.gov/od/oise/IntlCollaborations/Quad.jsp

RESEARCH AGENCY PARTNERSHIP

- In August 2024, NSF, JST, ICAR, and CSIRO signed a Memorandum of Cooperation on research cooperation.

- The Memorandum of Cooperation (MoC)

  - Framework to **encourage collaboration** between researchers from the Quad countries

  - Research teams collaborate to **write a single proposal**

  - **Single review process** at NSF, the Coordinating Agency

  - Researchers receive support from their home agency

NSF DEAR COLLEAGUE LETTER

NSF 24-132

Dear Colleague Letter: Special Guidelines for Submitting Joint Proposals under the Quad AI-ENGAGE Collaborative Research Opportunity

September 19, 2024

Dear Colleagues:

A. BACKGROUND

The U.S. National Science Foundation (NSF), Japan Science and Technology Agency (JST), Indian Council of Agricultural Research (ICAR), and Commonwealth Scientific and Industrial Research Organisation of Australia (CSIRO) have signed a Memorandum of Cooperation (MoC) concerning Research Cooperation on the Advancing Innovations for Empowering NextGen AGriculturE (AI-ENGAGE) Initiative. The MoC provides an overarching framework to encourage collaboration between U.S., Japan, India, and Australia research communities working at the intersection of emerging technologies and agriculture and sets out the principles by which jointly supported activities might be developed.
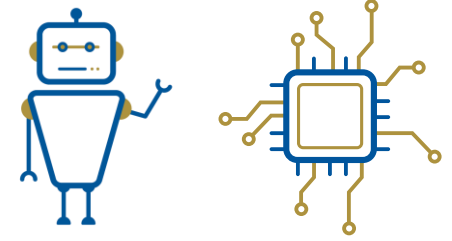
By 2050, the world's population is anticipated to increase to an estimated 9.7 billion people, with corresponding increases in food demand and pressure on land and water resources. Many of the impacts of these trends will be strongly felt in the Indo-Pacific region, but so will the hope for meaningful solutions. By collaborating on cutting edge research and innovations in areas such as artificial intelligence, robotics, communications, and sensing through this Quad AI-ENGAGE effort, researchers collaborating across the diverse environments in Australia, India, Japan and the U.S. can help transform agricultural approaches to empower farmers everywhere to increase yield and resilience. By forming research networks that span Quad countries, ideas and best practices can be disseminated quickly to all Indo-Pacific nations resulting global impact on people, our economies, and our planet.

The goals of the AI-ENGAGE partnership initiative are to strengthen research collaboration among the Quad countries – Australia, India, Japan and the U.S. and to increase the impact of critical technology research on people, our economies and in the Indo-Pacific region. The Quad countries are major research performing countries, but research collaborations among researchers in the four countries together have been limited to date. This partnership initiative provides for a multilateral arrangement to enable researchers to collaborate more effectively.

https://www.nsf.gov/pubs/2024/nsf24132/nsf24132.jsp

4

SCOPE OF RESEARCH

Advance the field(s) of artificial intelligence, robotics, sensing, and/or communications with applications to agriculture

- Potential topic examples:

  - Artificial intelligence-enabled crop planning and monitoring for diseases & pests

  - Crop improvement through image-based high throughput phenotyping & genotyping

  - Farm supply chain management

  - Robotics to improve efficiency of the farm workforce

  - Data-driven agriculture risk information & management system

  - Assessing, monitoring, and management of land and aquatic resources

  - Etc...

A FEW IMPORTANT DETAILS...

- Multilateral teams
  - Must include researchers from at least 3 of the Quad countries
  - Teams with members from all 4 of the Quad countries will be prioritized for funding

- Proposal Title must begin with "AI-ENGAGE"

- Proposal must adhere to the *NSF Proposal & Award Policies & Procedures Guide (PAPPG)*

- Proposal must make clear that proposed activities constitute a well-integrated, collaborative project
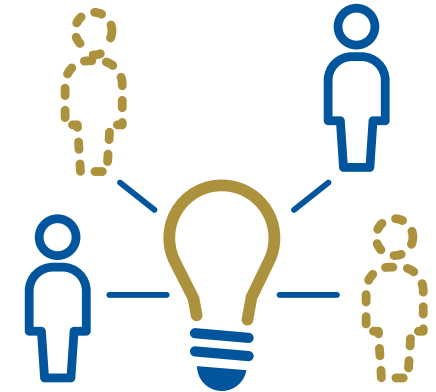
THE PROCESS:
Proposal Submission to Award
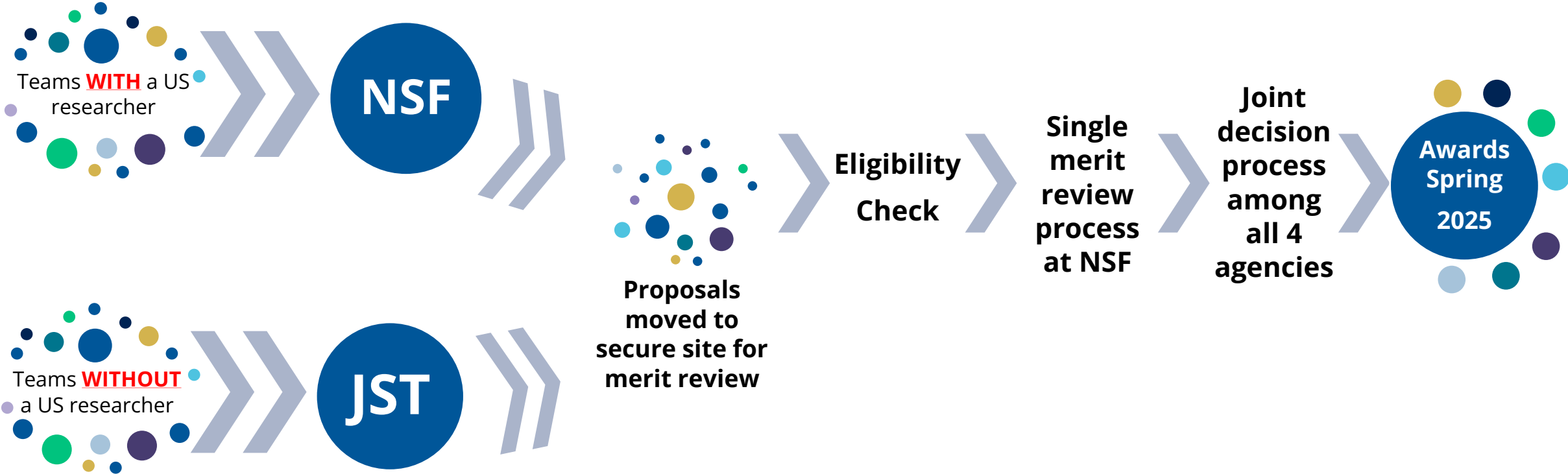
U.S. RESEARCHERS

- Budget – Up to $400,000 and an award duration of up to three years.

- Submit proposal in Research.gov to OD/OISE program description - MultiPLEx

- Deadline – January 22, 2025; 5:00PM in the submitting U.S. organization's time zone

https://www.nsf.gov/pubs/2024/nsf24132/nsf24132.jsp

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JAPANESE RESEARCHERS

- Budget – Up to 60,000,000 Japanese Yen (including indirect costs) and an award duration of up to three years.

- Deadline – January 23, 2025; 5:00PM in the Japanese PIs time zone
  - (For all team) Japan-side Application Form
  - (For team with a U.S. researcher) Copy of a proposal submitted by a U.S. researcher to NSF
  - (For team without a U.S. researcher) Full proposal for a team that does not include a U.S. researcher

https://www.jst.go.jp/moonshot/aiengage/a_koubo/202409/index.html

AI-ENGAGE

新着情報　　公募情報 ∨　　関係者向け

AI-ENGAGE ＞ 公募情報 ＞ AI-ENGAGE（日米豪印4カ国 国際共同研究）における公募について

公募情報

AI-ENGAGE（日米豪印4カ国 国際共同研究）における公募について

【2024/09/20 更新】　AI-ENGAGEにおける日米豪印共同公募を開始しました

プログラム概要

国立研究開発法人科学技術振興機構（JST）では、米国国立科学財団（NSF）、オーストラリア連邦科学産業研究機構（CSIRO）、インド農業研究委員会（ICAR）の3機関と協力し、日米豪印4カ国の研究者間での「新興技術（Advancing Innovations）× 農業」分野の国際共同研究を支援することになりました。このたび、AI-ENGAGE（正式名称：Advancing Innovations for Empowering NextGen AGriculturE）に関する共同研究課題を公募いたします。
本公募は、2023年5月20日開催の日米豪印QUAD4カ国首脳会合の共同声明において支持が表明された、新興技術により農業のイノベーションを推進するための4カ国共同研究支援の枠組みの中で実施するものです。
また、本公募ではNSF主導のもと、選考評価等を行います。応募要件等の詳細については本募集ウェブサイトのほか、NSFのDear Colleague Letter（DCL）を必ず参照してください。

＞ NSF公開のDear Colleague Letter（DCL）：

JAPANESE RESEARCHERS CONTINUED
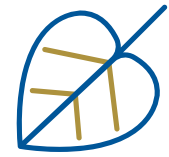
- If your international collaborative team does not include US researchers, Japan-based PI must submit an original full proposal to JST through e-Rad.

- The respective PIs from India and Australia also should submit a copy of the proposal to their respective agency.

To JST: https://www.e-rad.go.jp/
To ICAR: https://icar.org.in/quad-cooperation
To CSIRO: https://csiro.au/en/work-with-us/International/Quad-AI-Engage

INDIAN RESEARCHERS

- Budget – Rupees. 30,000,000.00 for each joint proposal and an award duration of up to three years.
- Deadline – January 23, 2025; 5:00PM in the submitters time zone
- Copy of the full proposal to aiengage.quad@icar.gov.in

https://icar.org.in/quad-cooperation

भारतीय कृषि अनुसंधान परिषद
INDIAN COUNCIL OF AGRICULTURAL RESEARCH
Ministry of Agriculture and Farmers Welfare

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QUAD COOPERATION

Home / Quad Cooperation

Quad Cooperation

Submitted by vspladmin on Mon, 09/23/2024 - 17:57

Advancing Innovations for Empowering NextGen AGriculturE (AI-ENGAGE) Initiative

Call for Australia-India-Japan-US joint-research proposal on artificial intelligence, robotics, communications in Agriculture

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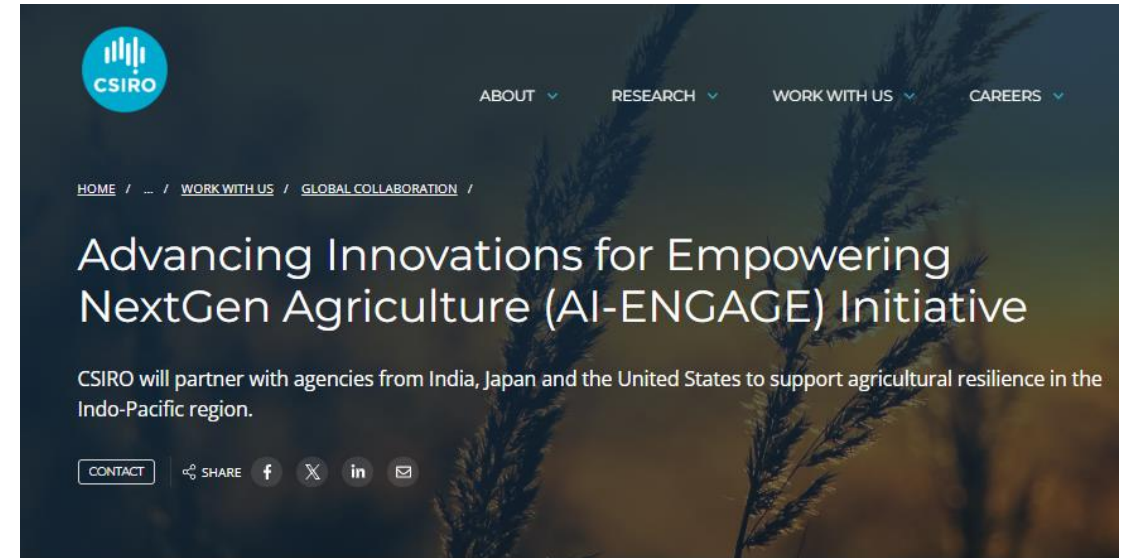
AUSTRALIAN RESEARCHERS

- Budget – No direct funding may be requested

- Deadline – January 23, 2025; 5:00PM in the submitters time zone

- Existing Programs
  - McMaster Fellowship
  - Industry PhD Program

https://www.csiro.au/en/work-with-us/International/Quad-AI-Engage

Advancing Innovations for Empowering NextGen Agriculture (AI-ENGAGE) Initiative

CSIRO will partner with agencies from India, Japan and the United States to support agricultural resilience in the Indo-Pacific region.

Applications for the AI-ENGAGE Initiative are now open for Australian researchers. Applications close: **5pm Thursday 23 January 2025**

Empowering farmers in the Indo-Pacific

By 2050, the world's population is estimated to increase to 9.7 billion people, with a corresponding rise in food demand and pressure on land and water resources.

Many of the impacts of these trends will be strongly felt in the Indo-Pacific region, but so will the hope for meaningful solutions.

CSIRO is leading collaborative opportunities for Australia with agencies in Quad countries, India, Japan and the United States, on cutting-edge research and innovation in areas such as artificial intelligence, sensors and robotics to help transform agricultural approaches and empower farmers in the Indo-Pacific to increase yield and resilience.

These networks and advances in innovation will have a beneficial impact on the livelihoods, nourishment and economic wellbeing of people in our region and around the world.

12

AI-ENGAGE UPCOMING EVENTS

NSF
Office of International Science & Engineering

AI-ENGAGE Office Hours
For U.S.-based researchers

October 17, 2024 – 2:00PM EDT
October 23, 2024 – 1:00 PM EDT

Zoom Links available at:
https://www.nsf.gov/od/oise/IntlCollaborations/Quad.jsp

JST
AI-ENGAGE Explanatory Webinar

For Japan-based researchers

**Thursday, October 17, 2024
2:00p.m. – 3:00p.m.
Japan Standard Time**

Language: Japanese

Registration:
https://form2.jst.go.jp/s/AI-ENGAGE_ExplanatoryWebinar

AI-ENGAGE POINTS OF CONTACT

NSF Office of International Science & Engineering

Anne Emig – aiengage@nsf.gov

Cate Flanley – aiengage@nsf.gov

JST Department of Moonshot R&D Program

Yuta Kobayashi – ai-engage@jst.go.jp

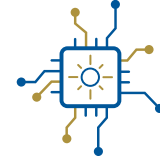## ICAR International Relations Division

Bikash Mandal –

aiengage.quad@icar.gov.in

CSIRO Agriculture & Food

Jen Taylor – AI-Engage@csiro.au

QUESTIONS & ANSWERS

THANK YOU!