

India RISE Fellowship Capstone Project

India RISE Fellowship Capstone Project: Quick Guide for Candidates

Purpose

The India RISE Fellowship Capstone Project is a culminating experience that allows fellows to:

- Apply skills from the 12-month fellowship to a real-world STEM health/medicine challenge in India.
- Demonstrate research, writing, and communication competencies.
- Present their work to academic and professional audiences in India and the U.S.

Capstone Project Overview

- Fellows choose a Capstone Project topic aligned with their interests and career goals.
- Projects are developed with guidance from a self-selected technical Research Advisor and assigned India RISE Program Mentor.
- Project formats may vary (e.g., research paper, grant proposal, implementation plan), but all must be feasible to pursue within the 12-month fellowship period and ethically sound.

Examples of Capstone Projects

Capstone Projects are encouraged to be creative and relevant to the fellow's disciplinary expertise and professional goals. Examples include, but are not limited to:

- ☐ **Literature review and policy report** on a pressing STEM-related issue (e.g., science funding priorities, pandemic-preparedness frameworks, digital health ethics, or climate-informed public health strategies).
- ☐ **Training curriculum** designed for a health systems strengthening initiative (e.g., in the ethical use of AI, data privacy, or implementation science for rural diagnostics).
- ☐ **Innovative product or intervention proposal**, such as a digital tool for disease surveillance or an AI-driven clinical decision aid, accompanied by a **start-up pitch deck** for social or health innovation.
- ☐ **Implementation plan** for a STEM-based intervention (e.g., integrating bioethics into medical education, or community-based water quality testing in rural areas).
- ☐ **Grant proposal** with defined research aims, study design, and significance, targeting major national/international funders.
- ☐ **Data-driven research project**, including pilot studies or secondary data analysis, using qualitative, quantitative, or mixed methods, culminating in a research report or policy brief.
- ☐ **Applied ethics research project**, such as an analysis of informed consent practices in AI-powered diagnostics, or a stakeholder-informed ethical framework for digital health deployment.

Capstone Type	Example Projects
Policy & Ethics	• Literature review and policy brief on digital health ethics • Stakeholder-informed ethical framework for AI in diagnostics
Training & Curriculum Design	• Curriculum on digital health innovations for health systems • Faculty workshop series on inclusive research methods
Innovation & Pitch Development	• AI product concept and startup pitch deck • Prototype of a diagnostic app with use case documentation
Implementation Planning	• Rollout plan for maternal health tech in rural India • Institutional action plan for a STEMM department
Grant Writing & Research Design	• ICMR/NIH-style research proposal with Specific Aims page • Concept note and budget justification for a pilot study
Data & Evidence Generation	• Mixed-methods research report on women's participation in STEMM. • Scoping review with annotated bibliography

Additional considerations:

- Capstone Project scope should be based on the stage of the project and feasibility for progress throughout the 12-month fellowship period.
- Research can encompass quantitative, qualitative, or mixed methods approaches.
- Capstone Projects can be ongoing research with existing data sets or new proposals the initial stages of conceptualization.
- Human Subjects Research
 - IRB approval from a local institution is required if working with human subjects.
 - If applicable, fellows must submit proof of local IRB approval with their application to the India RISE fellowship.

Required Deliverables

1. **Peer Review** participation
2. **Drafted manuscript**, policy brief, or other written report
3. **Final presentation** (10-minute talk + 5-minute Q&A at India RISE Capstone Symposium)
4. **Reflective report** and self-assessment on the research process and learning outcomes

Timeline & Planning

- Fellows are responsible for managing their Capstone Project timeline.
- A Gantt chart and planning tools will be introduced early in the program curriculum.
- The first draft is due ~5 weeks before the final submission.
- Regular feedback from advisors, mentors, and peers is expected.
- Completion of required curricular activities related to Capstone Projects are due by the final submission deadlines. Final materials must be submitted to receive a JHU/GKII Certificate of Competency micro-credential at the conclusion of the fellowship period.

Recognition & Awards

- **India RISE Capstone Awards:** Token of recognition for the top three (3) projects.
- **GKII Grand Challenge Breakthrough Grant (India RISE Alumni):** \$50,000 award for high-impact research proposals (post-fellowship).

India RISE Fellowship Capstone Project: FAQs for Fellows

What stage of my research career do I need to be at to qualify for the India RISE Fellowship?

The India RISE Fellowship is intended for early-career* women researchers in STEMM (Science, Technology, Engineering, Mathematics, and Medicine) fields who are beginning to establish their own research direction. Applicants may be postdoctoral researchers, junior faculty, or advanced PhD scholars based at eligible Indian research institutions.

Ideal candidates are those who:

- Have initiated or are preparing to begin an independent research project.
- Are looking to strengthen their research design, deepen their inquiry, or explore new directions.
- Would benefit from mentorship, structured training, and dedicated time to advance their research.
- Are preparing to apply for independent funding or fellowships, including national and international grants.

Whether you're piloting a new idea, building on preliminary findings, or expanding the scope of an ongoing project, the Fellowship is designed to support your growth as a future leader in STEMM research in India.

** "Early career" classified as <7 years of work experience in a STEMM research role. Note: The total cumulative work experience does not have to be consecutive, allowing for career breaks and career changes.

Do I need to complete a finished Capstone Project by the end of the fellowship?

You are expected to **initiate and design** a Capstone Project that is research-focused throughout the fellowship. The culmination of the fellowship requires submission of a final capstone paper or written report that is a draft prepared for publication and a final presentation of your project for a varied audience of U.S. and India stakeholders that will be presented at our India RISE Commencement and Capstone Symposium event. While completion of the research and/or project undertaken is encouraged, we understand that timelines for academic and scientific research vary. The emphasis is on building capacity to conduct meaningful research and progress, receive feedback, and demonstrate a clear trajectory and methodology for impact, even if the full project extends beyond the fellowship period.

What support is available for the Capstone Project?

The fellowship curriculum is thoughtfully designed to take fellows through each stage of the research lifecycle. Fellows work on a self-selected research project in the STEMM health/medicine domain related to India. Technical guidance comes from your Research Advisor, while India RISE Program Mentors and expert-led training workshops support broader project development and individualized career development goals.

Can students be involved in my Capstone Project work?

Yes, students can support your research, and we encourage mentorship as a skillset. However, we expect that you are the Principal Investigator (PI) for your Capstone Project and that your student interns/mentees are not specifically developing your Capstone Project deliverables required for the India RISE Fellowship curriculum. We also ask that you acknowledge the specific contributions of your student interns/mentees in your Capstone report.

Can I work with a co-investigator on my Capstone Project?

The Capstone Project must be led solely by the fellow for purposes of completing the fellowship's curricular requirements and educational components. You will be seeking informal guidance or feedback from colleagues, mentors, advisors, community partners, stakeholders, and peers along the way; yet the design, execution, and output of the Capstone Project deliverables should be entirely your own work. While we encourage collaborative research, co-authored Capstone Projects are typically not eligible. If requested due to individual circumstances, exceptions may be considered on a case-by-case basis.