Opportunity Title: Exobiology: AI/ML Resource Development and In-situ Life Detection
Opportunity Reference Code: 0116-NPP-MAR26-ARC-Astrobio

Organization National Aeronautics and Space Administration (NASA)

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How to Apply All applications must be submitted in Zintellect

Please visit the NASA Postdoctoral Program website for application instructions and requirements: How to Apply | NASA Postdoctoral Program (orau.org)

A complete application to the NASA Postdoctoral Program includes:

1. Research proposal
2. Three letters of recommendation
3. Official doctoral transcript documents

Application Deadline 3/1/2026 6:00:59 PM Eastern Time Zone

Description **About the NASA Postdoctoral Program**

The NASA Postdoctoral Program (NPP) offers unique research opportunities to highly-talented scientists to engage in ongoing NASA research projects at a NASA Center, NASA Headquarters, or at a NASA-affiliated research institute. These one- to three-year fellowships are competitive and are designed to advance NASA's missions in space science, Earth science, aeronautics, space operations, exploration systems, and astrobiology.

Description:

The effort to understand life in the universe confronts the most complex phenomenon known; exhibiting hierarchical and varied spatial-temporal properties and intricate historical dependencies linked to environments, chemical pathways, and feedback mechanisms. The tools of artificial intelligence (AI) and machine learning (ML) may be uniquely suited to addressing elements of this challenge, especially through application in life detection strategies.

We seek an NPMP postdoctoral researcher to work across programmatic and technical projects in these areas. The successful candidate will work with their mentors to drive the development of an online community resource hosted at NASA Ames that provides extensive support and guidance for AI/ML research in astrobiology. This will require excellent skills in coordinating across NASA's data ecosystem, liaising with program officers, creating collaborations, and seeking innovative approaches to address the future AI/ML needs of astrobiology and NASA's science programs.

The research component of this NPMP opportunity will contribute to ongoing studies of biomarkers such as lipids and novel techniques in instrumentation applied to concept development work for Mars and broader solar system exploration science. Applicants will have the opportunity to

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participate in the design and proposal of projects and to work in collaboration to support cross-cutting efforts in astrobiology at NASA Ames.

Field of Science: Astrobiology

Advisors:

Caleb Scharf
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(650) 604-3668

Applications with citizens from Designated Countries will not be accepted at this time, unless they are Legal Permanent Residents of the United States.?A complete list of Designated Countries can be found at: https://www.nasa.gov/oiir/export-control. ?

Eligibility is currently open to:

- U.S. Citizens;
- U.S. Lawful Permanent Residents (LPR);
- Foreign Nationals eligible for an Exchange Visitor J-1 visa status; and,
- Applicants for LPR, asylees, or refugees in the U.S. at the time of application with 1) a valid EAD card and 2) I-485 or I-589 forms in pending status

Questions about this opportunity? Please email npp@orau.org

Point of Contact Mikeala

Eligibility Requirements

- **Degree:** Doctoral Degree.