

Johns Hopkins University Institute for Assured Autonomy (IAA)

Call for Proposals (CFP)

December 19, 2022

Frequently Asked Questions (FAQ)

1. Where can I find out more information about IAA?

Autonomous systems have become increasingly integrated into all aspects of every person's daily life. In response, the Johns Hopkins University Institute for Assured Autonomy (IAA) focuses on ensuring that those systems are safe, secure, reliable, and that they do what they are designed to do. You can find out more at <http://iaa.jhu.edu/>.

2. Where can I find out more information about this CFP?

IAA has set up a webpage for faculty and APL staff to register their research areas of interest to facilitate the partnering across divisions. See: <http://iaa.jhu.edu/research/call-for-proposals/>.

3. Is this really a proposal to write a proposal?

Yes. We would like to provide seed funding for you to produce a proposal to an external funding source that addresses one or more existential challenges to assuring autonomous systems.

4. Why are you willing to fund me to write a proposal?

IAA was provided five years of initial funding by the president of Johns Hopkins University to build a world-class institute for addressing the most difficult problems in assuring autonomous systems. We started by funding a number of research projects that addressed some of the core challenges of assuring autonomy in the areas of technology, ecosystem, and ethics & governance. We are ready to build on those successes by developing larger foundational and applied research programs that will impact society. Through these programs, we intend to continue building IAA and to continue amplifying our contributions to assuring autonomy across society.

5. How is this proposal related to the earlier research programs that were funded by IAA?

IAA funded multiple research efforts over the last few years. You may choose to build on that research or forge a new path forward independent of previous IAA research.

6. What should my proposal to this CFP focus on?

The purpose of this call for proposals is to provide seed funding to develop ambitious multi-disciplinary foundational and applied research ideas that will help overcome the critical assurance challenges many autonomous systems face, thus enabling society to

fully realize the benefits of autonomy. The seed funding granted by this IAA CFP will enable the selected teams to develop large-scale proposals (e.g. >\$10 million) to external funding sources, including government, industry consortia, and philanthropic organizations.

7. Can the ultimate proposal include developing autonomy as well?

We recognize that assuring autonomy goes hand-in-hand with autonomy. It may be necessary to develop autonomy to address assurance. However, the ultimate focus is assurance of autonomy.

8. To whom can I submit my proposal to this CFP?

David Silberberg - david.silberberg@jhuapl.edu

9. Will I be part of the IAA team? How will IAA assist me with creating the proposal?

Absolutely! You will be part of the IAA team and IAA leadership will work with you and your team and provide resources to ensure your success, including tailoring your proposal to potential funding sources.

10. Who is eligible to propose to this CFP?

Any member of the JHU community.

11. Who is eligible to be a principal investigator (PI)?

Proposals should have a co-PI from the Whiting School of Engineering and a co-PI from the Johns Hopkins University Applied Physics Laboratory. Either the WSE or APL co-PI will be designated as the lead PI. Additional co-PIs from other divisions are encouraged.

12. Are early and mid-career researchers eligible to participate and lead teams?

Early career faculty and researchers are encouraged to participate as either co-PIs or team members. Mid-career faculty and researchers are encouraged to lead teams. All teams will be provided support and mentorship by IAA leadership.

13. Will funding be provided to APL staff to develop proposals for this CFP?

Yes. Once the Notification of Intent to Propose is submitted, APL teams will be allocated funding for proposal development.

14. What is the maximum award amount for this CFP? What can the awarded funding be used for?

IAA proposal requests will be considered up to \$150K, which includes indirect costs. Funding can be used for salary, overhead, necessary travel, convenings, support staff, and indirect costs.

15. Why is the funding limit for individual projects only \$150K, which is less than the first round of IAA seed funding?

The first round of IAA seed funding was designed to jump start critical research in areas important to assured autonomy. This round is focused on helping researchers form teams and develop external proposals on exciting big ideas to solve the existential challenges of assurance for AI and autonomy.

16. What is the timeline for this proposal?

- 01/31/23 – Notifications of Intent (NOI) to propose to this CFP must be submitted.
- 02/10/23 – Proposal writing resources will be allocated to teams (for APL efforts) based on the NOI after review.
- 05/01/23 – Submission deadline for applications to this CFP.
- 06/01/23 – Anticipated start date for the awards.
- 12/31/24 – Last date to submit proposals to external funding opportunities.

17. What are the criteria for evaluation?

- Identification of critical challenge(s) that inhibit the rapid, safe, secure, ethical, and responsible introduction of autonomy.
- Innovative and high-impact conceptual approaches to overcome those critical challenges in an exemplar domain.
- Clear strategy and timeline for engaging one or more specific external funding sources.
- Thoughtful assessment of the risks and competitive landscape associated with the strategy for external funding. There is an expectation that ambitious proposals will carry a higher level of risk.
- Identification of a core interdisciplinary team consisting of a lead PI, co-PI(s) and an initial team committed to building the program.

18. Who will evaluate the proposals?

Submitted proposals to this CFP will be evaluated by reviewers that have relevant subject matter expertise across Johns Hopkins.

19. Who can I contact for more information?

Questions on the Call for Proposals should be directed to the IAA Research Director:

- David Silberberg, david.silberberg@jhuapl.edu

Contact information for IAA Leadership is as follows:

- James Bellingham, Executive Director, jbellingham@jhu.edu
- Cara LaPointe, co-Director (APL), cara.lapointe@jhuapl.edu
- Anton Dahbura, co-Director (WSE), anton.dahbura@jhu.edu