Radiation Oncology Institute
The ASTRO Foundation

Innovation Awards

Optimizing Combination Radiation Therapy and Immunotherapy

2025-26 Request for Proposals

Key Dates

Letter of Intent Deadline
Required for all applicants
November 17, 2025

Full Proposal Invitations
December 2025

Full Proposal Deadline
By invitation only
February 17, 2026

Notification of Awards
April 2026

Award Start Date
August 1, 2026

About ROI

The Radiation Oncology Institute (ROI) – the ASTRO Foundation – was established in 2006 as the philanthropic partner to ASTRO to accelerate research and education. Since then, ASTRO and ROI have invested $12.5 million in the best and brightest investigators who are pursuing bold and innovative ideas in radiation therapy.

ROI issues an annual request for proposals (RFP) to catalyze discovery in radiation oncology by awarding grants to support high priority research that will improve outcomes for patients so they can live longer, healthier lives. The RFP topic is selected with input from stakeholders across the radiation oncology community to identify the most pressing challenges that can be addressed through research.

BACKGROUND

Recent advances in both radiation therapy and immunotherapy have expanded the possibilities for combining these modalities to more effectively and synergistically treat cancer and improve outcomes for patients. Radiation therapy can be delivered with much greater precision because of innovations in technology, and new immunotherapy treatments including tumor-targeting antibodies, checkpoint inhibitors and chimeric antigen receptor T-cell therapies, have provided novel methods to activate the immune system against a variety of cancers. Growing evidence of the immune system's role in the abscopal effect in which radiotherapy leads to the shrinkage of untreated tumors in other parts of the body is also very promising. With these breakthroughs, the interactions between radiation and immunotherapy must be better understood and better leveraged to personalize cancer care. Additional research is needed to better understand how to optimally combine both modalities, and understand the mechanisms for synergy, so that more patients can potentially benefit.

PURPOSE

Through this request, the ROI is seeking proposals for research on effectively combining radiation therapy and immunotherapy to enhance patient outcomes. Aims of the research project can include but are not limited to:

- Identifying the best combination of immunotherapy agent and radiation sequence, dose, fractionation and treatment sites
- Understanding the mechanism of immunotherapy and radiotherapy synergy
- Preventing or minimizing toxicity
- Developing educational materials for patients, caregivers and other medical professionals related to the combined use of radiotherapy and immunotherapy
- Advancing access to care that includes radiotherapy in combination with immunotherapy

In addition to optimizing combination radiation therapy and immunotherapy, the proposed research should align with the ROI Mission and Vision.

MISSION: Accelerating bold and innovative ideas in radiation therapy.
VISION: A world where every person has access to the best radiation therapy to live a longer, healthier life.

Proposals should focus on the highest impact research questions for the field of radiation oncology and clearly demonstrate the potential for securing additional funding to continue the research trajectory. Projects resulting in tangible deliverables with practical applications for radiation oncology professionals and their patients such as decision support tools, educational materials, abstracts, and manuscripts will be given priority. Knowledge derived from these studies should aim to improve outcomes for all patients and transform practice.

AWARD AMOUNT

A typical budget for a project supported by this mechanism is expected to be limited to a total of $50,000 over 2 years. However, larger budgets will be considered with the firm limit that costs may not exceed $100,000. Special attention will be given to projects that demonstrate efficiency and economy of resources to pursue the research proposed. No portion of the award can be used for any indirect or

overhead costs. Each proposal's total budget and how it fits into the ROI's available funds will be part of the proposal's evaluation.

The number of grants in each funding cycle is not predetermined by ROI. Awards are made based on application merit and the availability of funds.

Grants may be approved for up to a two-year period. Funding for the second half of the award period is contingent upon submission and approval of an interim progress report. Projects must start on August 1, 2026 and end no later than July 31, 2028.

ELIGIBILITY

- Qualified individuals from institutions and organizations in the radiation oncology (RO) community. Pre-doctoral students are not eligible.
- Applicants enrolled in residency programs or post-doctoral fellowships require a faculty mentor.
- The Institution that will receive and manage the grant funds must be a qualified 501(c)(3) organization or government-sponsored university in the United States or their equivalent in Canada.*

*Applicants not affiliated with a 501(c)(3) organization or government-sponsored university are eligible but should contact roi@astro.org for more information about identifying a qualifying Institution prior to submitting an LOI.

HOW TO APPLY

All application materials must be submitted through ProposalCentral at: proposalcentral.com. Log in, click on the "Grant Opportunities" tab and select "ASTRO and ROI" in the "Filter by GrantMaker" drop-down menu. Applicants are encouraged to start their application early to complete all required components by the deadline, including institutional signatures. The "Validate" button can be used to generate a list of missing required elements at any time before submitting the application.

STEP 1: LETTER OF INTENT – REQUIRED FOR ALL APPLICANTS

Submit a Letter of Intent (LOI) by **November 17, 2025, at 5:00 p.m. ET** through ProposalCentral. ROI will review the LOIs and send notifications in December about proceeding to the next step in the process of preparing and submitting a full proposal. The LOI consists of the items listed below and a separate letter is not required. **Each applicant may submit only one LOI for this RFP.**

APPLICATION: Complete all of the required fields in the application form on ProposalCentral (project title, estimated budget, Principal Investigator's name, institution, contact information, other key personnel, etc.). ROI strongly encourages PIs to set up an ORCID profile and link it to their application.

ABSTRACT: Enter a preliminary technical abstract. The abstract should include the significance and innovation of the proposed research, the study question, the specific aims to be accomplished and a brief description of the experimental approach for each aim in a maximum of 4,000 characters including spaces. Clinical studies must specify the sample size. A system-generated page will be included in the application and a separate document does not need to be uploaded.

STATEMENT OF RELEVANCE: Explain how the proposed research fulfills the purpose of the RFP and its potential to impact practice and benefit patients. The statement of relevance should be no more than

2,000 characters including spaces. A system-generated page will be included in the application and a separate document does not need to be uploaded.

PRINCIPAL INVESTIGATOR BIOSKETCH: Upload the Principal Investigator's biosketch with selected relevant publications (following NIH format and not to exceed 5 pages) in the "Attachments" section of the LOI. The Faculty Mentor's biosketch must also be submitted if the PI is a resident or fellow.

SIGNATURES: Electronic signatures must be submitted through ProposalCentral. **The e-signatures of the applicant and an authorized institutional official are required by ROI on all LOIs.** Residents and fellows applying for an award must list a Faculty Mentor under Other Key Personnel, and the Faculty Mentor's e-signature is also required. Please account for any internal deadlines to secure institutional approval and check to see who is listed as the institutional official in ProposalCentral to make necessary changes before the deadline. **Applicants will only be able to submit the LOI when all e-signatures are complete.**

STEP 2: FULL PROPOSAL – BY INVITATION ONLY

After receiving an invitation, submit a full proposal by **February 17, 2026, at 5:00 p.m. ET** through ProposalCentral. Proposals must contain the items below.

APPLICATION: Complete all of the required fields in the application form on ProposalCentral (project title, Principal Investigator's name, institution, contact information, other key personnel, etc.). ROI strongly encourages PIs to set up an ORCID profile and link it to their application.

ABSTRACTS: Enter both a technical abstract and a lay abstract. The technical abstract will carry over from the approved LOI, and minor edits can be made prior to submitting the final proposal. The lay abstract should be a clear and concise summary for the general public and media. The technical abstract can be a maximum of 4,000 characters including spaces, and the lay abstract should be no more than 2,000 characters including spaces. System-generated pages with these items will be included in the application and separate documents do not need to be uploaded.

STATEMENT OF RELEVANCE: The statement of relevance will also carry over from the approved LOI. Small modifications are allowed to clarify how the proposed research fulfills the purpose of the RFP and its potential to impact practice and benefit patients. A system-generated page will be included in the application and a separate document does not need to be uploaded.

PROPOSAL: Upload a brief project description (up to 4 pages, single-spaced, including figures) that contains:

- A statement of the project's principal objectives
- A discussion of significance, outcomes and impact, including the value of the end-product to the radiation oncology community
- A statement of innovation
- A description of the research plan and methodologies to be employed, including clear discussion of how data will be collected. Clinical studies must specify the sample size.
- A plan for evaluation that will measure the outcomes of the project in terms of the purpose and objectives

- A description of the tangible deliverables including, decision support tools, educational materials, abstracts and manuscripts, and additional grants resulting from the project
- A clear discussion of next steps and dissemination strategy
- A timetable

BUDGET: Grant funds may be used to support project staff salaries and benefits, consultant fees, data management, supplies and other direct expenses. All costs must be entered into the Budget Detail section and a justification describing each line item must be included in the Budget Summary & Justification section of the application on ProposalCentral. Be sure to include details on the following items:

- **PERSONNEL:** List the names and roles of all professional and non-professional personnel involved in the project and whether salaries and fringe benefits are requested. Salary and benefits for the Principal Investigator may be requested but the combined costs are limited to 20% of the total award amount or a maximum of $10,000 over the entire award period, whichever is lower. Costs for the salary and benefits of residents and clinical fellows participating in an ACGME-accredited program are not permitted. Indicate the percent effort on the project for all personnel even if salary and benefits costs are not being requested. The institutional base salary of an individual should not exceed the current federal salary cap established by NIH at the time of the proposal submission.
- **CONSULTANT FEES:** Give the name and institutional affiliation of any consultant and a brief description of the services to be performed.
- **EQUIPMENT AND SUPPLIES:** Include materials and software required to the conduct the project. Equipment purchases are allowed with sufficient justification. List all items requested and the cost of each item.
- **TRAVEL:** Describe the purpose of any travel. Conference travel expenses are limited to $2,500 to attend ASTRO-sponsored meetings and can only be charged if presenting an abstract that includes results of the ROI-funded research.
- **PUBLICATION COSTS:** Fees associated with publishing manuscripts can be requested. Incentives for publishing in an ASTRO journal may be provided to award winners.
- **OTHER DIRECT EXPENSES:** Itemize other expenses by major categories, such as computer services, human subject participation fees, data management, etc.

In the justification, **an explanation of how costs to carry out the research not covered by this grant, such as departmental or institutional funds, will be paid is also required**. Any other sources of funding supporting the same scope of work must be reported to the ROI immediately if they are not described in the original proposal.

REFERENCES CITED: References should be numbered in the sequence that they appear in the text (not to exceed 1 page).

BIOGRAPHICAL SKETCHES: Upload biosketches with selected relevant publications for all of the key project personnel (following NIH format and not to exceed 5 pages each). This includes Co-PIs for all projects and/or the Faculty Mentor's biosketch if the applicant is a resident or fellow.

LETTERS OF SUPPORT: A letter of support from the department chair or other institutional research leader is required. Additional letters from collaborators or faculty mentors are optional.

APPENDICES: Only include if necessary to communicate essential information, but please limit to 2 pages (e.g., excerpts from in-press papers, essential figures or other media).

TRANSITION PLAN – REQUIRED FOR RESIDENTS AND FELLOWS: Residents and fellows must upload a statement that outlines a plan for the completion of the project at the Institution if their training concludes and they move to another institution before the project has ended. A transition plan must be submitted even if the award end date is prior to the scheduled end date of training.

PROPOSAL FORMATTING

- **FONT:** Use Aptos, Arial, Helvetica, Palatino Linotype, Calibri or Georgia typeface, a black font color, and a font size of 11 points or larger.
- **PAGE MARGINS:** Use at least 0.5 inch margins (top, bottom, left, and right) for all pages.
- **PAGE FORMATTING:** Single-spacing should be used, and applicants are strongly encouraged to use only standard, single-column format for the text. Page numbers should be included.
- **PAGE LIMITS:** Proposals are not to exceed the 4-page maximum (excludes application form, abstracts and statement of relevance, budget, references, biosketches, letters of support, appendices, and transition plan).

SIGNATURES: Electronic signatures must be submitted through ProposalCentral. **The e-signatures of the applicant and an authorized institutional official are required by ROI on all proposals.** Residents and fellows applying for an award must list a Faculty Mentor under Other Key Personnel, and the Faculty Mentor's e-signature is also required. Please account for any internal deadlines to secure institutional approval and check to see who is listed as the institutional official in ProposalCentral to make necessary changes before the deadline. **Applicants will only be able to submit the proposal when all e-signatures are complete.**

CONTACTS

Please contact ProposalCentral customer support for any issues with the online application site at pcsupport@altum.com or 800-875-2562 (toll free U.S. and Canada). Customer support specialists are available Monday through Friday from 8:30 a.m. to 5:00 p.m. ET. For questions regarding the RFP and required elements of the application, please contact ROI at roi@astro.org or 703-839-7356.

USE OF ARTIFICIAL INTELLIGENCE IN PROPOSALS AND PEER REVIEW

APPLICANTS: A large language model, such as ChatGPT, or a generative artificial intelligence (AI) tool can be used to generate and/or edit content in research proposals submitted to ROI. This information must be disclosed at the time of submission. Disclosure of this information does not impact peer review. Should this information not be disclosed accurately, and use of these tools is identified, the proposal may be administratively withdrawn.

PEER REVIEWERS: ROI does NOT permit the use of large language models, such as ChatGPT, or a generative AI tool to generate and/or edit content in the peer review process. Uploading any portion of a research proposal into a large language model or an AI tool to assist in writing a critique of the proposal is explicitly prohibited.

PEER REVIEW PROCESS

The ROI Research Committee reviews all applications for scientific and technical merit and relevance to the RFP topic and ROI's Mission and Vision. Additional expert reviewers also participate as needed. Funding of awards is based on the priority score assigned to each application and the recommendations of the Research Committee. The ROI Board of Trustees reviews and gives final approval to all award decisions.

- Each LOI and proposal will be scored by at least three qualified reviewers.
- Individuals who submit an application in response to this RFP or are designated as key personnel, including the mentor of an applicant, may not review applications for this RFP.
- The ROI Board of Trustees, ROI Research Committee, and expert reviewers will not score or discuss applications from their own institution or organization.

REVIEW CRITERIA

Proposals for research projects will be evaluated by ROI on the following criteria.

OVERALL IMPACT

- Likelihood for the project to lead to significant follow-on funding or initiate a new research direction that will have a sustained, powerful influence on the field of radiation oncology. An application does not need to be equally strong in all categories to be judged likely to have major scientific impact.

SIGNIFICANCE AND INNOVATION

- Importance of the proposed research in the context of current scientific challenges and opportunities, either for advancing knowledge within radiation oncology, or more broadly. The application should address an important gap in knowledge in the field, solve a critical problem, or create a valuable conceptual or technical advance.
- Rationale for undertaking the study, the rigor of the scientific background for the work (e.g., prior literature and/or preliminary data) and whether the scientific background justifies the proposed study.
- The extent to which innovation influences the importance of undertaking the proposed research. While technical or conceptual innovation can influence the importance of the proposed research, a project that is not applying novel concepts or approaches may be of critical importance for the field.
- Whether the proposed work applies novel concepts, methods or technologies or uses existing concepts, methods, technologies in novel ways, to enhance the overall impact of the project.
- How well the application addresses what the expected end-product is, the value of the end-product to the radiation oncology community, and how the product will be used for follow-on funding or to initiate a new research direction that will benefit the broader radiation oncology community.

APPROACH, RIGOR, AND FEASIBILITY

- The potential to produce unbiased, reproducible, robust data.
- The rigor of experimental design and whether appropriate controls are in place.
- Whether the sample size is sufficient and well-justified.
- The quality of the plans for analysis, interpretation, and reporting of results.
- The adequacy of plans to address relevant biological variables, such as sex or age, in the design, analysis, and reporting.

- For applications involving human subjects or vertebrate animals:
  - The rigor of the intervention or study manipulation (if applicable to the study design).
  - Whether outcome variables are justified.
  - Whether the results will be generalizable or, in the case of a rare disease/special group, relevant to the particular subgroup.
  - Whether the sample is appropriate and sufficiently diverse to address the proposed question(s).
- The adequacy of inclusion plans as appropriate for the scientific goals of the research for applications involving human subjects, including clinical trials. Considerations of appropriateness may include disease/condition/behavior incidence, prevalence, or population burden, population representation, and/or current state of the science.
- Whether the proposed approach is sound and achievable, including plans to address problems or new challenges that emerge in the work. If feasibility is less certain, the uncertainty is balanced by the potential for major advances.
- The adequacy and feasibility of the plan to recruit and retain an appropriately diverse population of participants if the project involves human subjects.
- The timeline is reasonable for achieving the proposed specific aims.

TOPIC AND PRACTICAL APPLICATION
- How well the project addresses the RFP topic and aligns with the ROI Mission and Vision.
- The extent to which the project will result in tangible deliverables that are designed to have an impact on practice in the near future and outcomes that are scalable.

INVESTIGATOR AND ENVIRONMENT
- The investigator(s) have demonstrated background, training, and expertise, as appropriate for their career stage, to conduct the proposed work.
- The institutional resources are appropriate to ensure the successful execution of the proposed work.

BUDGET
- The budget and the requested period of support are fully justified and reasonable in relation to the proposed research.

PROTECTIONS FOR HUMAN SUBJECTS

For research that involves human subjects but does not involve one of the categories of research that are exempt under 45 CFR Part 46, evaluate the justification for involvement of human subjects and the proposed protections from research risk relating to their participation according to the following five review criteria: 1. risk to subjects; 2. adequacy of protection against risks; 3. potential benefits to the subjects and others; 4. importance of the knowledge to be gained; and 5. data and safety monitoring for clinical trials.

For research that involves human subjects and meets the criteria for one or more of the categories of research that are exempt under 45 CFR Part 46, evaluate: 1. the justification for the exemption; 2. human subjects involvement and characteristics; and 3. sources of materials. For additional information on review of the Human Subjects section, please refer to the Guidelines for the Review of Human Subjects.

VERTEBRATE ANIMALS

When the proposed research includes Vertebrate Animals, evaluate the involvement of live vertebrate animals according to the following criteria: (1) description of proposed procedures involving animals, including species, strains, ages, sex, and total number to be used; (2) justifications for the use of animals versus alternative models and for the appropriateness of the species proposed; (3) interventions to minimize discomfort, distress, pain and injury; and (4) justification for euthanasia method if NOT consistent with the AVMA Guidelines for the Euthanasia of Animals. For additional information on review of the Vertebrate Animals section, please refer to the Worksheet for Review of the Vertebrate Animals Section.

BIOHAZARDS

When the proposed research includes Biohazards, evaluate whether specific materials or procedures that will be used are significantly hazardous to research personnel and/or the environment, and whether adequate protection is proposed.

AWARD REQUIREMENTS

The terms and conditions of accepting an ROI research award are included below. The PI and a representative of the Sponsoring Institution should review them before submitting an application.

Terms and Conditions

This document contains the Award Terms and Conditions ("Terms and Conditions") applicable to the ASTRO and its affiliates ("ASTRO") _____ Grant ("Award"). Please read these Terms and Conditions carefully. By accepting the Award as set forth in the Award letter ("Award Letter"), both the Principal Investigator and the Institution acknowledge that they have read, understand, and agree to comply with the Terms and Conditions herein.

1. **Conditions of the Award.**

As a condition of receiving the Award granted in the Award Letter, the Principal Investigator ("Principal Investigator") acknowledges, and the Institution ("Institution") agrees (Institution and Principal Investigator are collectively defined as the "Recipient") to enter into an agreement to comply with the Terms and Conditions as follows ("Agreement").

(A) Compliance: Recipient shall perform the research ("Research") described in the submitted Research Proposal ("Research Proposal") in full compliance with (i) all applicable laws and regulations; (ii) the Request for Proposal ("RFP"); (iii) these Terms and Conditions, referenced herein or later modified with notice provided in writing per Section 1(D); (iv) the Award Letter; and (v) the Research Proposal.

(B) Approvals: Recipient shall obtain ASTRO's written approval prior to making any significant changes to the Research Proposal. In addition, Recipient shall promptly notify ASTRO in writing of any change in the individual(s) assigned to manage the project or those involved in the project as indicated in the Proposal, including if the individual designated as the Principal Investigator in the Award Letter (i) ceases to conduct the Research; (ii) is unable to continue to serve as the Principal Investigator; or (iii) departs from, or is otherwise no longer affiliated with the Institution named in the Award. Recipient shall fully comply with ASTRO's written instructions regarding the continuation of the Research Proposal.

(C) Progress Reports: Recipient shall provide ASTRO with a final written report, as set forth in the Reporting Schedule. Recipient will use the progress report form provided by ASTRO and grants ASTRO permission to review, use, and retain such reports, in whatever manner ASTRO chooses in its sole discretion. The reports shall include, at a minimum, the following (in addition to any other items reasonably requested in writing by ASTRO):

i. Summary of expenditures, activities, and findings from the performance of the Research Proposal during the year, including a financial statement related to the use of the funds and additional funding received from other sources. The responsible financial officer for the Institution must attest to the accuracy of any financial statements.

ii. List and copies of any work product produced during the performance of the Research Proposal funded by the Award (including, without limitation, publications, presentations, conferences, research, findings and manuscripts) ("Work Product"), Award IP (as defined below), and any similar professional activities and outcomes supported by the Award. "Award IP" is defined as any patentable invention, discovery, improvement, and/or other product conceived and reduced to practice during the performance of the Research Proposal funded by the Award.

iii. Discussion of any collaborations with industry groups relating to the Research Proposal, if applicable.

All required reporting in this paragraph (C) should be submitted through ProposalCentral.

(D) Notices:

1. Recipient shall promptly notify ASTRO in writing if any item in the below list occurs, whether during the award period, or after:

   i. Findings, breakthroughs, or events of unusual interest funded with this Award.
   ii. Filing of an Invention Disclosure (or similar form) regarding any Award IP.
   iii. Any monetization event that occurs regarding Award IP or Work Product.
   iv. Problems, delays, or adverse conditions that will or may materially affect the Research Proposal, its objectives, or time schedules or budget, together with proposed Recipient actions to address such problems, delays, or adverse conditions.
   v. Expected or unexpected adverse events that negatively impacted the safety or wellbeing of any human or vertebrate animal subjects associated with the activities, as described in the Research Proposal.
   vi. Any expenditure from the Award made for any purpose other than those for which it was awarded.

2. All notices to the parties shall, unless otherwise modified in writing and acknowledged in writing by the other party, be sent to the following addresses:

   If to ASTRO/ROI:
   American Society for Radiation Oncology
   251 18th Street South, 8th Floor
   Arlington, VA 22202
   roi@astro.org

   If to the Institution: (enter information below)

Any such notice, communication or delivery will be deemed given upon receipt. Notices sent via email (return receipt requested) are deemed to be official notice.

2. **Award Management and Payment.**

(A) Distribution: Subject to each Recipient's submission of a signed copy of this Agreement and compliance with the Terms and Conditions required herein, ASTRO will distribute the Award as set forth in the RFP. The Award may only be used to fund the direct expenses of conducting the Research Proposal, and in no event may any portion of the Award be used for any indirect or overhead costs. Allowable costs for the Grant will be defined in the RFP. Payments will be disbursed through ACH.

(B) No Cost Extensions: Requests for extensions of time beyond the end date of the Award must be made to ASTRO in writing thirty (30) days prior to the end date of the Award and in compliance with

ASTRO's written instructions. No additional funding will be made available for such extensions ("No Cost Extensions"). No Cost Extensions are granted on a case-by-case basis and in ASTRO's sole discretion. If a No Cost Extension is granted, ASTRO may request additional reporting from Recipient in connection with the Research Proposal similar to that reporting set forth in Section 1(C) above.

(C) Budget Deviations: Expenditures must adhere to the budget submitted to ASTRO by the Principal Investigator and included in the Research Proposal. In addition, expenditures must comply with the budget guidelines in the RFP and all applicable laws and regulations. Significant changes to the award budget requests are granted on a case- by-case basis in ASTRO's sole discretion.

(D) Restrictions on Use of Funds: In no event may the Award be used for any of the following purposes:

i. To attempt to influence legislation or the outcome of any specific public election;

ii. To carry on, directly or indirectly, any voter registration drive;

iii. To make, without ASTRO's written consent, grants to individuals or other organizations; or undertake any activities for other than a charitable, educational, or scientific purpose.

(E) Award Closeout: At the end of the Award Period, the Institution shall refund any unspent portion of the Award to ASTRO.

3. **Confidentiality.**

During the term of this Agreement, certain confidential information ("Confidential Information") may be disclosed by Recipient (including Principal Investigator or Institution) to ASTRO or by ASTRO to the Principal Investigator and/or Institution. Each Disclosing Party agrees to clearly identify in writing any such information as "Confidential Information" to any Receiving Party. If Confidential Information is transmitted orally, Disclosing Party shall provide written notice within thirty (30) days indicating that such oral communication constitutes Confidential Information. Each Receiving Party agrees: (A) to take reasonable measures, but in any event, no less stringent measures than it uses to protect its own confidential information, to protect the Confidential Information of the Disclosing Party; (B) the Confidential Information shall remain the sole property of the Disclosing Party; (C) to restrict internal access to Confidential Information and only disseminate such Confidential Information on a need to know basis, provided that representatives who receive such shall be bound by the confidentiality obligations set forth in this Section; (D) to use Confidential Information solely for the purpose of the Award; and (E) except as otherwise provided in these Terms and Conditions, not disclose such Confidential Information to any third parties. These confidentiality obligations shall not apply to information which is: (A) information known to the Receiving Party prior to receipt from or on behalf of the Disclosing Party; (B) information that is disclosed to the Receiving Party by a third person who has a right to make such disclosure without any obligation of confidentiality to the Party seeking to enforce its rights under this Section; (C) information that is or becomes generally known in the trade without violation of this Agreement by the Receiving Party or is or becomes public knowledge without breach of this award letter; (D) information that is independently developed by the Receiving Party or its employees or affiliates without reference to the Disclosing Party's information, or (E) information that is authorized for release in writing by the Disclosing Party.

4. **Institution Representations and Warranties.**

Institution represents and warrants to ASTRO to the best of its knowledge that the Terms and Conditions hereof do not and will not conflict with or violate any provision of the articles of incorporation, bylaws, limited partnership agreement or any similar instrument of Institution, as applicable, in any material way, and do not and will not conflict with, violate, or breach or constitute a default or require any consent under, any contractual obligation, policy or law by which Institution is bound, including any agreements with or policies applied to its researchers, employees, contractors, or other sources of funding.

5. **Publications and Publicity.**

(A) Publication and Presentations: ASTRO anticipates that all scientifically significant results of the Research Proposal, whether negative or positive, will be published or otherwise publicly presented by Recipient. Any publication of research using the funding under the Award, unless otherwise requested by ASTRO, shall conspicuously acknowledge the support of the ASTRO _____ Grant and include the Grant Number provided in the Award Letter. Recipient shall also acknowledge the ASTRO ___ Grant as a funding source in presentations reporting on research supported by the

Award. Recipient is expected to submit an abstract with results of the Research to the ASTRO Annual Meeting. Presentations or posters at major meetings must include the statement, "Supported by a grant from _____."

(B) Release of Information: Copies of all publications, articles, abstracts, or presentations, whether written or oral, related to the Research Proposal shall be provided to ASTRO, subject to the rights of publishers or other third parties to the extent such rights have been communicated to ASTRO in writing by Recipient.

(C) License: ASTRO will be entitled to use, refer to, reproduce, and disseminate reprints of scientific, medical, and other published articles, subject to the rights of other third parties, directly relating to the Research Proposal or this Award, without any further compensation to any Recipient or any third party under applicable copyright law. As between ASTRO and Recipient, the intellectual property rights in and to the Work Product created by use of the Award shall remain with Recipient subject to the license below. Recipient hereby grants to ASTRO a non-exclusive, royalty-free, perpetual, irrevocable, worldwide right and license to use, copy, distribute, display, publish, publicize, modify and perform the Work Product for non-commercial purposes only, subject to the rights of other third parties in the Work Product.

(D) Publicity: Except as set forth in this section, neither party will use the name, symbols, or marks of the other party in any form of publicity without prior written consent of the other party; provided, however, that the Principal Investigator, Institution, and ASTRO may state factually on any of their websites and other materials the information authorized or approved per this Agreement. Furthermore, ASTRO may issue a press release and make public statements regarding the Award, the identity and general biographical information, any photographs or videos of the Recipient, Principal Investigator, and Institution and the general nature of the Award, its purpose, and the title and abstracts of any Research named as part of the Research Proposal, other published/printed information or materials (provided by the Principal Investigator) and Principal Investigator's activities on the ASTRO websites, social media platforms, periodic public reports, newsletters, news releases, publicly accessible databases of privately funded grant awards, or in any other format. If a Party wishes to make any other press or other announcement or release relating to this Agreement, the Research Proposal, or the Research occurring under this Agreement, that Party will discuss with, and obtain advance written agreement from the other Party regarding the content, form and manner of the announcement or release. If, and to the extent that the announcement or release is required to be made by the Party by law or by a stock exchange regulation, the Party will notify the other Party, Principal Investigator, and Institution, as applicable, in advance of the announcement or release to the greatest extent possible.

6. **Other Award Obligations.**

(A) Recipient must obtain all relevant approvals [e.g. Institutional Review Board ("IRB") or Institutional Animal Care and Use Committee ("IACUC") approvals] for the conduct of human- or vertebrate animal-subject research before research can begin. Recipient must make these approvals available to ASTRO for review or audit upon request. ASTRO reserves the right to retract ASTRO funds from the Recipient if the Recipient conducts human or vertebrate animal subject research without having obtained relevant approvals from regulatory bodies such as an IRB or IACUC.

(B) Principal Investigator is expected to send an electronic high-resolution, 300DPI, 4-color headshot photo (preferably 5x7 inches) and brief bio (~250 words) to ASTRO for use on the ASTRO website, *ASTROnews* and in other applicable ASTRO publications.

(C) To assist ASTRO with tracking the Principal Investigator's grant progress and career progression and impact of the ASTRO Grant program, Principal Investigator is expected to respond to ASTRO's related survey or email requests during or after the award period.

(D) Records: Recipient shall keep systematic and complete records on the receipt and disbursement of all Award funds and may not co-mingle any funds from other sources with the Award funds. Recipient shall retain all such records for a period of at least three (3) years after the expiration date of the Award Term (as defined in the Award Letter), or for longer period(s) as may otherwise be required by applicable law. Recipient shall make these records available to ASTRO for review or audit upon request.

7. **Termination.**

(A) Termination

1. ASTRO reserves the right to terminate the Award immediately upon written notice if Recipient (i) is unable to complete the Research Proposal; (ii) terminates or suspends the Research Proposal; (iii) materially alters the Research Proposal; (iv) violates applicable laws or standards, or commits misconduct (including falsification, fabrication or plagiarism of data or results, omission of material data or results that occurs during the application process for, performance of or reporting on the Research Award, or other fraudulent or unlawful activity), as determined in ASTRO's discretion, or (v) upon the insolvency, receivership, bankruptcy filing, or dissolution of the Institution or ASTRO.
2. In addition, ASTRO may terminate this Award for breach of the Award Letter or these Terms and Conditions, if such breach is not cured within thirty (30) days of receipt of written notice thereof or immediately if such breach is deemed material or not subject to cure in ASTRO's reasonable discretion. Use of the Award grant for prohibited expenses shall be considered a breach of these Terms and Conditions.
3. Furthermore, if the Principal Investigator departs from, or is otherwise no longer affiliated with, the Institution (each, an "Investigator Departure"), ASTRO reserves the right to terminate the Award with respect to any or all parties to the Award in its discretion.
4. ASTRO reserves the right to modify or terminate the amount of funds granted under the terms of the ASTRO Award upon advance written notice.

(B) Effects of Termination: In no event shall either Party be responsible for any lost profits or other lost opportunities arising from any early termination of this Award. In the event of early termination of the Award, the Institution shall promptly refund any unspent portion of the Award to ASTRO not associated with non-cancellable obligations in accordance with ASTRO's written instructions.

(C) Transition Assistance: In the event of an Investigator Departure, the Institution agrees to assist ASTRO and/or its designee, with the orderly transfer of any of its obligations under the Award to ASTRO or ASTRO's designee as expeditiously as possible.

(D) Survival: In addition to any provisions that by their nature survive expiration or termination of the Award, Section 1(C)-(D), 3-6, 7(C)-(D), and 8-9 shall survive the termination or expiration of the Award for any reason.

8. **Indemnification and Liability.**

(A) ASTRO Disclaimer: ASTRO IS A PASSIVE GRANTOR AND HEREBY DISCLAIMS ALL WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, CONCERNING THE AWARD, THE RFP, OR THE RESEARCH PROPOSAL. UNDER NO CIRCUMSTANCE SHALL ASTRO BE LIABLE FOR, AND PRINCIPAL INVESTIGATOR AND SPONSORING INSTITUTION WAIVE ANY AND ALL LIABILITY AGAINST ASTRO FOR, ANY DAMAGES ARISING FROM OR IN RELATION TO THIS AWARD, THE RESEARCH PROPOSAL, OR THE USE OF THE RESEARCH RESULTS (WHETHER IN CONTRACT, TORT, NEGLIGENCE, STRICT LIABILITY, BY STATUTE, REGULATION OR OTHERWISE).

(B) Indemnification: Institution agrees to indemnify, defend, and hold harmless ASTRO, its officers, directors, personnel, and agents from and against any and all actual and alleged liabilities, damages, losses, claims, or expenses (including court costs and reasonable attorneys' fees), resulting from or arising in connection with the grant of this Award, the RFP or the performance of the Research Proposal, including without limitation, any claims brought by or on behalf of a third party such as subjects participating in any Research or activities related to the Research Proposal.

(C) Institution shall maintain insurance in adequate amounts and coverage to fulfill its and Principal Investigator's obligations hereunder. This provision shall survive the expiration or earlier termination, for any reason, of the Award Term.

9. **Miscellaneous Provisions.**

(A) Force Majeure: Neither Party shall be liable for any failure to perform any obligations under the Award if such failure results from causes beyond its reasonable control, including, but not limited to, war, sabotage, insurrection, riots, civil unrest, fires, flood, epidemics, earthquake, or other similar occurrences (including any mechanical, electronic, or communications failure, but

excluding failure caused by Institution's own financial condition or negligence). If a Party is unable to perform any obligations under the Award pursuant to this provision, the affected Party shall give immediate written notice to the other party.

(B) Governing Law: This Agreement will be governed by and construed in accordance with the laws of Virginia, without giving effect to its principles or rules of conflict of laws to the extent such principles or rules would require or permit the application of the laws of another jurisdiction.

(C) Amendments: ASTRO may, with mutual written agreement with Institution, amend or add to these Terms and Conditions.

(D) Nature of Relationship: Nothing in these Terms and Conditions or the Award Letter shall constitute a partnership or joint venture or establish a relationship of agency between or among ASTRO and any Recipient. No employee of ASTRO or any Recipient shall be considered to be an employee of any of the others, and neither ASTRO nor Recipient shall enter into any contract or agreement with a third party that purports to obligate or bind any of the others.

(E) Waiver of Default or Breach: Failure to enforce the rights hereunder, regardless of the length of time such failure continues, shall not constitute a waiver of those or any other rights.

(F) Assignment: The Award Letter or Award may not be assigned or transferred without ASTRO's prior written consent, and any attempted transfer or assignment in violation of the Award Letter or these Terms and Conditions shall be void and of no force or effect.

(G) Entire Agreement: These Terms and Conditions, along with the Award Letter, the RFP, the Research Proposal, and the ASTRO Research Policies, all of which are incorporated by reference, constitute the full agreement of the parties as it relates to the Award. In the event of any inconsistency between the Terms and Conditions and the Award Letter, the terms of the Award Letter shall govern and control.

(H) Severability: Should any term or condition of the Award or these Terms and Conditions be determined to be unlawful by a court of law or adjudicative body with jurisdiction over the parties, the remainder will continue to remain in force and effect and shall be interpreted to best effect the original intentions of the parties.

The undersigned certify that they have read the above Terms and Conditions and are authorized to execute this Agreement to the Terms and Conditions on behalf of Institution, to obligate Institution to observe all of the Terms and Conditions contained in this Agreement, and in connection with this Agreement to make, execute, and deliver on behalf of the Institution all agreements, representations, receipts, reports, and other instruments of every kind.

ACKNOWLEDGEMENT:

I, the **Principal Investigator**, acknowledge that I have read and understood the terms and conditions of this Grant and provide my consent and agreement on the provisions that pertain to the Principal Investigator, including but not limited to the provisions that relate to submitting to ASTRO's Annual Meeting, as well as the permissions granted regarding ASTRO's use of the Work Product produced during the performance of the Research Proposal funded by the Award and of my name, likeness, and personal information as set forth in the Terms and Conditions. **I WAIVE ANY CLAIMS AGAINST ASTRO, ITS DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS RELATED TO THE AWARD OR ANY PROJECT ASSOCIATED WITH THIS AWARD.**