PROGRAM ANNOUNCEMENT – EXTENDED DEADLINE

ANNOUNCEMENT TITLE	**ASTRO-BCRF Emerging Investigator Award**
AWARD YEAR	2025
MECHANISM	Emerging Investigator Award (EIA)
PA NUMBER	EIA-2025-01-BCRF
PROGRAM PARTNER	Breast Cancer Research Foundation (BCRF)
POSTED DATE	September 5, 2024
PURPOSE	To foster and develop talented early-career breast radiation oncology researchers in biomedical research.
AWARD TERM	One year. One no-cost extension (NCE) may be considered by ASTRO at ASTRO's full discretion. **However, the total project period may not exceed two years.**
ELIGBILITY SUMMARY	Early-stage investigators with 20% of their career responsibilities dedicated to the research project and career development/training plan described in the application.
AWARD BUDGET	Total budget of up to $100,000 for one year can be awarded to the applicant's organization (Institution). No-cost extension is allowable pending acceptable justification evaluated by both ASTRO and BCRF. Neither ASTRO nor BCRF will pay indirect costs for this award.
ORIGINAL DEADLINE	January 10, 2025, 11:59 p.m. Eastern Time
EXTENDED DEADLINE	June 1, 2025, 11:59 p.m. Eastern Time
EARLIEST START DATE	January 1, 2026
PROGRAM CONTACT	Email questions about this PA to the Department of Scientific Affairs at science@astro.org. Technical questions about the ProposalCentral submission system should be directed to their customer support at 1-800-875-2562 or by email pcsupport@altum.com. Support is available during normal business hours: 8:30 a.m. - 5:00 p.m. Eastern Time (M - F).

ELIGIBILITY.

The general eligibility criteria for this PA are listed in this section. Meanwhile, ASTRO has full discretion in any funding decision and is not obligated nor liable to issue any award to any eligible or ineligible applicants at any time. Preference will be given to applicants who have not previously received this award.

Eligible Organizations

- Higher Education Institutions
  - Public/State Controlled Institutions of Higher Education
  - Private Institutions of Higher Education
- Nonprofits with 501(c)(3) IRS Status Other Than Institutions of Higher Education

- Non-Domestic (non-U.S.) Entities (Foreign Institutions) are ***not*** eligible to apply.
- Non-Domestic (non-U.S.) components of U.S. Organizations are ***not*** eligible to apply.

Eligible Individuals (Principal Investigators (PIs))

Early-stage investigators with 20% of their career responsibilities dedicated to the research project and career development/training plan described in the application.

Degree Requirements and Faculty Appointment for Applicants

At the time of application, an eligible individual must hold at least one terminal degree such as PhD, MD, MD/PhD, or other equivalent degrees in medicine or the sciences, and be an early stage investigator (ESI) as defined as NIH's ESI Policy. Generally, residents, postdoctoral fellows, or other trainees are not eligible to apply. However, if at the time of application submission, a trainee has secured an independent faculty position and provided supporting evidence and endorsement from an Eligible Organization which offers the aforementioned independent faculty position, ASTRO and BCRF can choose to accept the application from such a trainee for review, if all other eligibility criteria for such an application have been satisfied. Multiple PIs are not allowed.

Level of effort

The PI is required to commit at least 20% of their career responsibilities to the research project and career development/training plan described in the application.

ASTRO Membership

The applicant must be an ASTRO member in good standing at the time of award activation.

COMMITMENT FROM THE APPLICANT

Mentors and Collaborators

Transdisciplinary collaborations are encouraged but the proposed project team must include at least one radiation oncologist, radiation or cancer biologist, or radiation physicist. Investigators must designate a mentor, preferably one at the same Institution,

who will provide guidance and support for the successful completion of the proposed research project. Mentors should be senior investigators with a minimum of R01 or equivalent level funding and provide a letter of support detailing their oversight and support.

ASTRO Meetings

If awarded with this EIA, the PI is encouraged to attend at least one ASTRO Annual Meeting and present their research findings at the meeting.

BCRF Annual Meeting

If awarded, the PI is invited, at BCRF's expense, to attend the annual BCRF Scientific Conference, Symposium and Awards Luncheon held in October in New York City.

COMMITMENT from the APPLICANT's AFFILIATED ELIGIBLE ORGANIZATION(S)

- If awarded, the host department will act as the fiscal intermediary. The Institution will administer the funds to the PI and be responsible for satisfying tax withholding, deposit and/or reporting requirements applicable to the payment of the award. The PI will be responsible for individual income taxes. The Institution will be required to provide sufficient additional funds to supplement salaries or supplies as needed for the research project. The ***Terms & Conditions*** for this Award are attached and should be shared with organizational officials before applications are submitted.
- Any change in Institution, mentor and chair or in the applicant's position that might affect their ability to successfully complete their training should be communicated as soon as possible to ASTRO so that appropriate action can be taken.
- When a mentor at the grantee Institution is to be replaced, the Institution must submit a letter from the proposed mentor documenting: 1) the need for substitution; 2) the new mentor's qualifications for supervising the program; and 3) the level of support for the applicant's career development.
- Only one grant can support the proposed research project. If independent funding is obtained for the same scope of work selected by ASTRO-BCRF for this award the recipient must refuse either this or the competing award(s).

APPLICATION GUIDELINES

Submission

All applications are due by April 28, 2025, 11:59 p.m. Eastern Time. Proposals will not be considered after the deadline. Applications must be submitted online using the application tool and document templates and requirements therein at ProposalCentral: https://bit.ly/ASTRO-BCRF

Application Instructions

It is critical that applicants follow the instructions. Conformance to the requirements in this PA is required and strictly enforced. Applications that are out of compliance with these instructions may be delayed or not accepted for review.

All materials must be prepared in English, single spaced, using a font size of 11 or 12 points. Smaller text in figures and charts is acceptable if it is legible when the page is viewed at 100%. Arial or Times New Roman fonts are recommended. A minimum of one-half inch margins must be used on all page borders.

1. **Title Page**: Enter the Project Title, Discipline of Research, and indicate whether you have other research funding.
2. **Templates and Instructions**: Download PA and templates.
3. **Enable Other Users to Access this Proposal**: Allow others (e.g. Institutional administrators or collaborators) to view, edit, or submit the proposal.
4. **Applicant**: Complete all required fields that include PI's name and contact information, and level of effort (%) that will be allocated to the proposed research project. Applicant must include their ORCID ID; if awarded ASTRO will add this grant to their ORCID profile.
5. **PI Demographics**: Providing this information is optional and is not shared with reviewers.
6. **Institution and Contacts**: Provide the Institution name, address and type of organization and requested contact information of the mentor and organizational signing official.
7. **Key Personnel**: List and provide contact information for key persons.
8. **Abstracts, Impact Statement, Modalities and Common Scientific Outline (CSO) Codes**:
    - Provide a general audience abstract (non-technical) (2,000 characters including spaces max) and a technical abstract (3,000 characters including spaces max) that concisely describe the background, rationale, specific aims, approach including model system and statistical approach (if applicable), anticipated outcomes and impact of the project. Note: these abstracts may become public if the award is selected for funding, therefore, it should not include any proprietary information.
    - Impact Statement: The applicant should prepare a concise statement of their career goals and how the award will facilitate their success. (1,000 characters including spaces max).
    - Select all relevant Modalities and CSO Codes that best represent the proposed research.
9. **Other Support**: List any additional research support that the PI currently holds. Include Project Title, Funding Source, Project Status, Award Number, Start and End Dates, Person Months, and Overlap.
10. **Research Assurances**: Indicate status of IRB/IACUC approvals as applicable, use of recombinant DNA, biohazardous materials, genetically engineered organisms, or fetal tissue.
11. **Application Documents**: Upload the below required application documents.
    - *Project Plan (six-page limit)*: Project description to fit within the one-year project period and should include:
        - ✓ Background

- ✓ Preliminary data and figures (if applicable, but not required)
- ✓ Specific aims
- ✓ Research design/methods
- ✓ Statistical analysis plan
- ✓ Anticipated outcomes
- ✓ Potential pitfalls and alternatives
- ✓ Significance
- ✓ Future Directions

References should be included but do not count towards the 6-page limit.

- *Professional and Career Development Plan (two-page limit)*: Describe the applicant's career development and/or training objectives. It is important to clearly state the applicant's career goal(s), specify what competencies will be required to achieve those goals, what competencies the applicant plans to acquire/strengthen through this EIA, and how the applicant plans to develop those competencies.
- *Biosketches (five-page limit)*: The applicant and lead mentor must each submit a biosketch including a list of relevant publications and currently funded research projects. DoD and NIH formats will be accepted. Biosketches for collaborators and research support staff are not required.
- *Budget and Budget Justification*: Submit a detailed budget (can be prepared using the NIH budget form e.g., PHS 398) and Budget Justification with a breakdown and description of annual estimated costs. ASTRO and BCRF will cover only direct costs. Funding ***cannot*** go towards supporting salaries of mentors or collaborators. Up to 20% of the awarded budget should support the PI's stated career development or training objectives.
    - Published data generated by BCRF funding is expected to be made available to the research community to the fullest extent possible, subject to applicable government regulations and policies. BCRF expects any data that supports published work supported by BCRF to be uploaded to the BCRF Global Data Hub (https://bcrfglobaldatahub.org/). The cost associated with data sharing is an allowable direct cost, up to five percent (5%) of the budget for the Award Funds.
- *Mentoring plan (two-page limit)*: A detailed mentoring plan from the applicant's mentor that outlines courses, lectures, meetings, and other ways to support the applicant and help increase likelihood of success must be included. (This is separate from the career development/training objectives, but describe the mentor's role in achieving those goals, if applicable)
- *Letters of support (2)*: Upload letters of support. One must be from your mentor. The other can be from a collaborator. Letters of support from additional collaborators can be appended but are not required.

- *Institutional letter of support*: Upload a letter of support from the Institution or Department.

12. **Validate:** Review entire proposal for missing required information.
13. **Signature Page:** Before submitting the application, complete all fields within the signature page. **An electronic signature is required from both the Applicant/PI and a Signing Official from the applicant's institution**. Applications will not be considered for review if required signatures are missing.

APPLICATION REVIEW

All proposals will undergo a rigorous peer review by the ASTRO Grants Review Panel. Reviewers are members and committee appointment holders of ASTRO. A study section consisting of researchers with expertise in the areas and topics of each grant will review the application for merit and appropriateness for funding. Final decisions will be subject to the approval of the ASTRO and BCRF Boards of Directors. If no suitable candidates are found, no awards may be issued.

- Each 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.
- ASTRO Reviewers will not score or discuss applications from their own institution or organization.

Review Criteria: In general, reviewers should evaluate the candidate's potential for making important contributions to the field of radiation oncology and breast cancer, taking into consideration the years of experience and the likely value of the proposed project as a vehicle for developing a successful, independent career. Selected proposals will have strong merit and impact, possess an innovative and transformative approach, and demonstrate potential for progression to the clinic or other significant impact.

Scored Review Criteria

Reviewers will score (rate 1-9) Factor 1 and 2 and will determine whether Factor 3 is sufficient or insufficient.

Factor 1: Importance of the Research

Significance

- Evaluate the importance of the proposed research in the context of current scientific challenges and opportunities, either for advancing knowledge within the field, or more broadly. Assess whether the application addresses an important gap in knowledge in the field, would solve a critical problem, or create a valuable conceptual or technical advance.
- Evaluate the 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.

Innovation

- Evaluate the extent to which innovation influences the importance of undertaking the proposed research. Note that 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.
- Evaluate 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.

Factor 2. Rigor and Feasibility

Approach. Evaluate the scientific quality of the proposed work. Evaluate the likelihood that compelling, reproducible findings will result (rigor) and assess whether the proposed studies can be done well and within the timeframes proposed (feasibility).

Rigor

- Evaluate the potential to produce unbiased, reproducible, robust data.
- Evaluate the rigor of experimental design and whether appropriate controls are in place.
- Evaluate whether the sample size is sufficient and well-justified.
- Assess the quality of the plans for analysis, interpretation, and reporting of results.
- Evaluate whether the investigators presented adequate 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, also evaluate:
  - 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).
- For applications involving human subjects, including clinical trials, assess the adequacy of inclusion plans as appropriate for the scientific goals of the research. Considerations of appropriateness may include disease/condition/behavior incidence, prevalence, or population burden, population representation, and/or current state of the science.

Feasibility

- Evaluate whether the proposed approach is sound and achievable, including plans to address problems or new challenges that emerge in the work. For proposed studies in which feasibility may be less certain, evaluate whether the uncertainty is balanced by the potential for major advances.
- For applications involving human subjects, including clinical trials, evaluate the adequacy and feasibility of the plan to recruit and retain an appropriately diverse population of participants. Additionally, evaluate the likelihood of successfully achieving the proposed enrollment.
- For clinical trial applications, evaluate whether the study timeline and milestones are feasible.

Factor 3: Expertise and Resources.

Investigator. Evaluate whether the investigator(s) have demonstrated background, training, and expertise, as appropriate for their career stage, to conduct the proposed work.

Environment. Evaluate whether the institutional resources are appropriate to ensure the successful execution of the proposed work.

Additional Review Criteria:

As applicable for the project proposed, reviewers will consider the following additional items while determining scientific and technical merit and in providing an overall impact score, but will not give scores for these items:

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, the committee will 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, the committee will 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 NIH Guidelines for the Review of Human Subjects.
- When the proposed project involves human subjects and/or NIH-defined clinical research, the committee will evaluate the proposed plans for the inclusion (or exclusion) of individuals on the basis of sex/gender, race, and ethnicity, as well as the inclusion (or exclusion) of individuals across the lifespan (including children and older adults) to determine if it is justified in terms of the scientific goals and research strategy proposed. For additional information on review of

the Inclusion section, please refer to the NIH Guidelines for the Review of Inclusion in Clinical Research.

Vertebrate Animals

- The committee will evaluate the involvement of live vertebrate animals as part of the scientific assessment 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 American Veterinary Medical Association (AVMA) Guidelines for the Euthanasia of Animals. Reviewers will assess the use of chimpanzees as they would any other application proposing the use of vertebrate animals. For additional information on review of the Vertebrate Animals section, please refer to the NIH Worksheet for Review of the Vertebrate Animal Section.

Biohazards

- Reviewers will assess whether materials or procedures proposed are potentially hazardous to research personnel and/or the environment, and if needed, determine whether adequate protection is proposed.

Budget and Period of Support

- Reviewers will consider whether the budget and the requested period of support are fully justified and reasonable in relation to the proposed research.

OTHER INFORMATION

The *Terms and Conditions* for this award are attached to this Program Announcement as a reference for the organizational signing official. No changes or adjustments to the terms will be allowed.

American Society for Radiation Oncology (ASTRO) – Breast Cancer Research Foundation (BCRF) Emerging Investigator Award

Terms and Conditions

This document contains the Award Terms and Conditions ("Terms and Conditions") applicable to the ASTRO-BCRF Emerging Investigator Award. Please read these Terms and Conditions carefully. The purpose of this award is to support research career development for U.S. based faculty in radiation oncology. 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 ("Award") granted in the Award Letter, the Principal Investigator ("Principal Investigator") acknowledges, and the Institution ("Institution"), (collectively, the "Recipient") agrees to the Terms as follows.

(A) Compliance: Recipient shall perform the research described in the submitted Research Plan (See Exhibit A) ("the Research") in full compliance with (i) all applicable laws and regulations; (ii) the Program Announcement; (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 Plan.

(B) Approvals: Recipient shall obtain ASTRO's written approval prior to making any significant changes to the Research Plan. 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 promptly notify ASTRO in writing of the same, and shall fully comply with ASTRO's written instructions regarding the continuation of the Research Plan.

(C) Progress Report: Recipient shall provide ASTRO with a final written report within thirty (30) days after completion of the Research. 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 report(s) shall include, at a minimum, a substantive discussion of the following (in addition to any other items reasonably requested in writing by ASTRO):

i. A short lay progress summary (250 words max) no later than June 15 of the funding year that ASTRO can provide to BCRF to communicate progress and impact to its audiences and donors.

ii. Summary of expenditures, activities, progress towards the proposed aims of the Research during the year, and any associated findings.

iii. List of publications, presentations, conferences, Award IP (as defined below), additional funding received from other sources, and any similar professional activities and outcomes supported by the Award.

iv. Discussion of any new collaborations relating to the Award, if applicable.

"Award IP" is defined as any patentable invention, discovery, improvement, and/or other work product conceived and reduced to practice during the performance of the Research Plan funded by the Award.

Additionally,

(D) Notices:

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

i. Findings, breakthroughs, or events of unusual interest funded with this award.

ii. Filing of an Invention Disclosure (or similar form) at the institution regarding any Award IP.
iii. Any monetization event that occurs regarding Award IP.
iv. Problems, delays, or adverse conditions that will or may materially affect the Research, 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 Plan.

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:
American Society for Radiation Oncology
Attn: Scientific Affairs
251 18th Street South, 8th Floor
Arlington, VA 22202
science@astro.org

If to the Institution:
INSTITUTION
ADDRESS
CITY, STATE ZIP
EMAIL

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.

(E) ASTRO's Annual Meeting:
The Principal Investigator is expected to attend ASTRO's Annual Meeting during the term of the Award and submit an abstract for future ASTRO Annual Meetings.

2. **Award Management and Payment.**

(A) Distribution: Subject to each Recipient's compliance with the Terms and Conditions required herein, ASTRO will distribute the Award in one installment to the Institution at the beginning of the Award Term.

(B) Use of Award funds: The Institution shall be responsible for administering the Award funds. Award funds are to be used for salary and benefits of the Principal Investigator, supplies or research-related expenses under the Research Plan, and registration and travel to ASTRO's Annual Meeting. The award may only be used to fund direct expenses, and in no event may any portion of the Award be used for any indirect or overhead costs.

(C) Allowable expenses will be given the definition used by the NIH Grants Policy Statement. Checks will be mailed to:

Attn: (To be determined)

(D) 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 must comply 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, and will typically not be granted for a period in excess of 12 months. If a No Cost Extension is granted, ASTRO may request additional reporting from Recipient in connection with the Research Plan similar to that reporting set forth in Section 1(C) above.

(E) Award Closeout: At the end of the Award Term, 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 will 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 or policy 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: ASTRO and BCRF anticipate that all scientifically significant results of the Research Plan, 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 or BCRF, shall conspicuously acknowledge the support of the ASTRO-BCRF Emerging Investigator Award. Recipient shall also acknowledge the "ASTRO-BCRF Emerging Investigator Award" as a funding source in presentations reporting on research supported by the Award.

(B) Contribution to BCRF Global Data Hub: Published data generated by BCRF funding is expected to be made available to the research community to the fullest extent possible, subject to applicable government regulations and policies. BCRF expects any data that supports published work supported by BCRF to be uploaded to the BCRF Global Data Hub (https://bcrfglobaldatahub.org/). The cost associated with data sharing is an allowable direct cost, up to five percent (5%) of the budget for the Award Funds.

(C) Release of Information: Copies of all publications, articles, abstracts, or presentations, whether written or oral, related to the Research Plan shall be provided to ASTRO and BCRF, subject to the rights of publishers or other third parties to the extent such rights have been communicated to ASTRO in writing by a Recipient, and ASTRO and BCRF 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 Plan or this Award, without any further compensation to any Recipient or any third party under applicable copyright law.

(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 Recipient may disclose the existence of the Award, including the title of the Award, its purpose, and the amount and duration of the Award grant, without prior written consent. ASTRO and BCRF shall be permitted to use Principal Investigator's name and general biographical information, such as title or publicly known credentials, including Institution's name, or other information in connection with ASTRO or BCRF's public and general business communications for the purposes of disclosing the existence of the Award, identifying Recipient as a recipient of the Award, along with a non-confidential description of the research related to the Principal Investigator or funded by the Award. Furthermore, ASTRO or BCRF may issue a press release and make public statements regarding the Award, the identity 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 Plan. If a Party wishes to make any other press or other announcement or release relating to this Agreement 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) Principal Investigator must agree to become a member of ASTRO by the time the award begins.

(B) Principal Investigator and institutional mentor are expected to meet (in person or via teleconference) at initiation of Award, and at least monthly thereafter to boost the academic development of the Principal Investigator.

(C) 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 provide ASTRO with a copy of these approvals. 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.

(D) Principal Investigator is expected to send an electronic high-resolution, 300DPI, 4-color photo (preferably 5x7 inches) and brief bio (~250 words) to ASTRO and BCRF for use on their respective websites and in other applicable ASTRO or BCRF publications.

(E) After the Award term has expired, the Principal Investigator agrees to continue to respond to ASTRO's reasonable requests for information on their career progress and may be requested to respond to surveys, provide their current Curriculum Vitae, update their contact information, or provide other relevant information. The Principal Investigator understands that this obligation survives the Award Term and that they have an ongoing reasonable obligation to provide this information.

(F) Site Visits: ASTRO and/or its authorized representatives reserves the right, with reasonable advance written notice and at a mutually agreed upon time, to conduct site visits, meet with Recipient personnel, and view any materials, equipment, or supplies purchased under the Award, as well as any financial records relating to performance of the Research Plan, including without limitation, any records regarding the receipt and disbursement of the Award funds, to review and verify Recipient's compliance with the terms of the Award (including these Terms and Conditions). Recipient shall fully cooperate in any such audit or visit, and failure to provide such access shall constitute a material breach of Recipient's obligations.

(G) 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: This Award may be terminated for any reason by either Party with thirty (30) days prior written notice to the other party. In the event of early termination, and in accordance with Section 1(D) the Recipient shall submit a modified progress report covering the expenditures and progress to date of termination.

(B) 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 Plan; (iii) materially alters the Research Proposal; or (iv) violates applicable laws or standards, as determined in ASTRO's discretion. 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. 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.

The ASTRO Board of Directors reserves the right to modify or terminate the amount of funds granted under the terms of the ASTRO Award Program upon advance written notice.

(C) 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.

(D) Transition Assistance: In the event of an Investigator Departure, the Institution agrees to assist ASTRO and/or its designee (which may include the Principal Investigator), with the orderly transfer of any of its obligations under the Award to ASTRO's designee as expeditiously as possible, and to render all assistance reasonably requested by ASTRO and its designees in connection therewith.

(E) 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 8-10 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 OR THE RESEARCH PLAN.

UNDER NO CIRCUMSTANCE SHALL ASTRO BE LIABLE FOR, AND RECIPIENT WAIVES 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 or the performance of the Research Plan, including without limitation, any claims brought by or on behalf of a third party such as subjects participating in any Research Plan.

ASTRO and Institution each shall maintain insurance in adequate amounts and coverage to fulfill its obligations hereunder. This provision shall survive the expiration or earlier termination, for any reason, of the Award Term.

10. **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. ASTRO may, at its sole discretion and with written notice to 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 terms and conditions of the Program Announcement, and the Research Plan, which are incorporated by reference into these Terms and Conditions, 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.

(I) 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 reflect the original intentions of the parties.

ASTRO Staff Contacts

Scientific Affairs Email: science@astro.org	Assistant General Counsel Email: ...

Please confirm acceptance of these terms by signing below.

_____
[INSTITUTION TO INSERT APPROPRIATE NAME AND TITLE FOR SIGNING OFFICIAL]
Signing Official
[INSTITUTION TO INSERT INSTITUTION'S NAME] (Institution)
Date:

I, the Principal Investigator, acknowledge that I have read and understood the terms and conditions of this ASTRO Emerging Investigator Award and understand my obligations to comply therewith. I authorize ASTRO's use 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.

_____
(Principal Investigator)
Date: