2018 ASTRO Residents/Fellows in Radiation Oncology Seed Grant

<table>
<thead>
<tr>
<th>Grant Amount</th>
<th>$25,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant Term</td>
<td>1 Year</td>
</tr>
<tr>
<td>Start of Grant Term</td>
<td>7/30/2018</td>
</tr>
<tr>
<td>Application Deadline</td>
<td>4/8/2018 11:59 PM EST</td>
</tr>
<tr>
<td>Expected Number of Funded Grants</td>
<td>2</td>
</tr>
</tbody>
</table>

Purpose:
The ASTRO Resident/Fellows in Radiation Oncology Seed Grant (Seed) is an effort to advance the field of radiation oncology in novel ways through the support of talented early-career scientists performing radiation oncology-related research. The aim of the Seed grant is to support the next generation of researchers who are planning a career in basic science or clinical research.

The award will provide up to $25,000 for 1 year. ASTRO will NOT pay indirect costs as part of this award.

Two awards will be funded.

Eligibility Criteria

The applicant must be enrolled in a U.S. residency or fellowship at the time the application is submitted.

- The applicant must show a commitment to a career that focuses primarily on academic radiation oncology.
- Applicants must be employed by a recognized US research institution at the time the application is submitted.
- The applicant must be an ASTRO member in good standing.
- Applicants 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.
- Applicants must not have previously served as a principal investigator or co-principal investigator on grants totaling $50,000 or more in a single calendar year.
- At least 75 percent of the recipient’s full-time professional effort must be devoted to the goals of this award. The remainder may be devoted to clinical or other research pursuits consistent with the objectives of the award.
- The applicant is required to contact ASTRO immediately if any problems are encountered that would prevent them from successfully completing the project.
- Applicants must attend at least one ASTRO Annual Meeting and present the findings of this research study at the meeting.
Commitment from Applicant’s mentor
- The mentor should be an accomplished investigator in the proposed research area and have a track record of success in training independent investigators.
- The mentor should have sufficient independent research support to cover the costs of the proposed research project in excess of the allowable costs of this award.
- Applicants may also nominate co-mentors as appropriate to the goals of the program.
- It is expected that the mentor will meet with the applicant at least weekly.
- At least one mentor must be active members of ASTRO. This includes active, affiliate, international, associate, emeritus and honorary ASTRO members.

Commitment from the Applicant’s Institution
- The institution must be recognized as providing a rich environment for trainee career development.
- A responsible figure from the institution/department and the mentor must demonstrate, in writing, a commitment to the development of the applicant as a productive, independent investigator.
- A responsible figure from the institution/department and the mentor must demonstrate, in writing, intent for 75 percent of the recipient’s full time professional effort to be devoted to the goals of the award.
- The host department will act as the fiscal intermediary. The institution will pay the stipend to the winner and be responsible for satisfying tax withholding, deposit and/or reporting requirements applicable to the payment of the award. The winner will be responsible for individual income tax purposes.
  - **ASTRO will not cover Facilities and Administration (F&A) costs.**
- The institution will be required to provide sufficient additional funds to supplement salaries or supplies as needed for the research.
- Any change in institution, mentor and chair, or in the applicant’s position 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. The letter must also document that the specific aims of the research program will remain within the scope of the original peer reviewed research program.

Research Scope
Any area of research related to radiation oncology is eligible for Residents/Fellows in Radiation Oncology Research Seed Grant.

Specific areas of interest may include but are not limited to:
1. Basic and clinical research in the radiation therapy sciences.
2. Projects in which innovative techniques, new methods or special equipment leading to better patient care are developed.
3. Aspects of health care planning and delivery, including outcome evaluation studies (i.e., health services research-related activities).
4. Development of programs in health education relevant to the radiation therapy sciences.

**Application Submission Information**

Applications will only be accepted through the ASTRO page in proposalCENTRAL: [https://proposalcentral.altum.com](https://proposalcentral.altum.com). Paper applications will not be accepted.

All materials must be prepared in English, single spaced with normal spacing between letters and words, using a font style (size 10-12) that is easy to read such as Arial or Times New Roman. A minimum of one-half inch margins must be used on all page borders.

ASTRO will only cover direct costs, no facilities and administration (F&A) costs will be covered.

Applicants may not submit more than one research or educational grant application per year. Acceptance of a research award from another source for the same project at the same time is prohibited.

**General timeline**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 15, 2018</td>
<td>Release of RFA</td>
</tr>
<tr>
<td>April 8, 2018</td>
<td>Applications due at 11:59pm Eastern Standard time (GMT -5). ProposalCENTRAL application site closes</td>
</tr>
<tr>
<td>April 9 – May 31</td>
<td>Review of application</td>
</tr>
<tr>
<td>June 30, 2018</td>
<td>Notification of award status</td>
</tr>
<tr>
<td>July 30, 2018</td>
<td>Awards begin</td>
</tr>
</tbody>
</table>

**Application Deadline:** 11:59 PM Eastern Time, **Sunday, April 8th, 2018.**

**Submission Content**

All applications must contain the following:

1. **Title Page:** Complete the grant application face page including the title, principal investigator name and contact information, human subject status, proposed dates of support, project costs, organization name and type, DUNS number, administrative official and signing official. Sign and date the application face page.

2. **Technical Abstract:** Brief abstract (<750 words) that concisely describes the background, rationale, specific aims, experimental approach including model system and statistical approach, anticipated outcomes and impact of the project is required.

3. **Public Abstract** (will be posted on the ASTRO webpage): A brief abstract (<500 words) aimed at a lay audience that concisely describes the project and impact is required. A clear statement of the study’s aim(s) (not to exceed one page).

4. **Research Proposal:** Proposal to include a narrative text and any preliminary data to justify a 1 year proposal, **limited to 6 pages maximum**, is required. Proposal should include within the 6 page limit: background, preliminary data and figures (if applicable, but not required), specific aims, experimental design/methods, anticipated outcomes, potential pitfalls and alternatives,
significance, and future directions. References must be included but will not count toward the 6 page limit.

5. **NIH Biosketch**: Submit a 4 page NIH biosketch including a list of relevant publications and currently funded research projects.

6. **Budget pages**: Submit a budget using the NIH Standard Budget Template. The budget should include the following:
   a. Salary support (with benefits) if laboratory or other assistants will be paid by this grant.
   b. Supplies
   c. Animal purchase and animal housing (if applicable)
   d. Other (specify)

7. **Letters of support (2)**: Upload 2 letters of support. One must be from your mentor and must outline the mentorship plan. See below for more details.

8. **Animal and human subject approvals** from Institutional Review Board.

9. Mentor biosketches are not required for submission, but can be added to further support the application

**Letters of Support**

Applicants are required to submit two (2) letters of support/recommendation within the application from the applicant’s mentor and department chair. The letter should detail the department’s reasons for supporting the proposed research, how this activity relates to the overall research activities of the department, a description of departmental support for the project and any other pertinent information that would be useful in evaluating the applicant and proposed research project.

**Mentor Letter**

The applicant mentor letter should include the following:

1. Acknowledgment that the mentor has already spent time with the applicant in developing this application.
2. A statement from the mentor estimating the time that will be spent with the applicant to accomplish the goals of the program.
3. The suitability of the applicant, both strengths and weaknesses, for the program and the proposed work.
4. The applicant’s potential to develop into an independent researcher.
5. Plans to correct deficiencies in the candidate’s training so far using didactic courses, laboratory meetings, guidance in writing clinical protocols, grants, papers, etc.
6. Plans for career guidance.
7. The research environment in the mentor’s lab/clinic, including current staffing (technicians, post-doctoral fellows, research nurses/data managers, etc).
8. Identification of non-mentor assistance: If the mentor will not be providing day-to-day guidance for the applicant, the person providing such guidance must be identified and their CV included in the application.
9. A description of how the applicant’s proposed research fits with the ongoing projects, how the applicant’s work differs from currently funded projects and the source(s) of support for research needs beyond this application.
Department Chair Letter

The department chair letter should demonstrate the following:

1. The suitability of the applicant, both strengths and weaknesses, for the program and the proposed work.
2. A guarantee that the applicant will have 75 percent protected time to perform research and how the applicant’s time will be structured.
3. A clear statement of the additional departmental and other support that will be provided to the applicant to supplement the award.
4. The chair’s goals for the applicant.

Applications lacking the required materials or in the incorrect format will be considered ineligible for review.

Application Review Information

All grant applications are subject to peer review. Reviewers are members of the ASTRO Research Grants Evaluation Committee.

Members of this committee:

1. provide high-quality and fair reviews for all submitted applications,
2. guide and evaluate progress and direction of each research project and
3. govern all decisions and actions related to this award.

A study section consisting of researchers with expertise in the areas and topics of each grant will review the application for scientific merit and appropriateness for funding. Final decisions will be subject to the approval of the ASTRO Board of Directors. Each grant is scored according to seven individual criteria scores. In addition to the seven criteria scores, throughout the review process, the study section will concentrate on the following factors:

1. The commitment of the applicant to a career in academic radiation oncology.
2. The quality of the research plan.
3. Opportunities for the development of the applicant such as working conditions, institutional and departmental support and facilities.

Scoring Criteria

All applications are scored based on the NIH 9-Point Rating Scoring System (1= exceptional; 9= poor). This score is based on the overall impact and strength of the application, as well as 7 individual criteria scores: Proposal worthiness, environment, budget, research relevance, background knowledge, experimental design and probability of aims.
1. Proposal Worthiness: Does the proposed project seem worthy of being funded? Does the project challenge existing patterns of clinical practice, or does it address an original theory or critical barrier to progress in the field?

2. Environment: Are the facilities, equipment and staff support adequate? Does the institution support the research being conducted?

3. Budget: Is the budget appropriate and justified? Research Relevance: Does this project address an important problem in the radiation oncology field? If the aims of the application are achieved, how will scientific knowledge or clinical practice advance?

4. Background Knowledge: Does the researcher demonstrate significant background knowledge in relation to their topic?

5. Experimental Design: Are the clinical framework, design, methods and analyses sufficiently developed and appropriate to the aims of the project?

6. Probability of Aims: What are the probabilities that the researcher will achieve the specific aims of the project? Do the specific aims seem feasible in the amount of time allotted?

**Anticipated Announcement and Award Dates**

After committee scoring of the application is complete, chosen recipients’ applications are sent to the June Board of Directors meeting for approval. Applicants are notified prior to July 30, 2018, through email regardless of selection.

**ASTRO Staff Contact**

Judy Keen, PhD, Director of Scientific Affairs

American Society for Radiation Oncology (ASTRO)

email: research@astro.org