



## ROI 2018 Request for Proposals

### Innovative Projects in Radiation Oncology

*Deadline for Project Proposals: March 1, 2018*

#### **Purpose and Background**

Through this Request for Proposals (RFP), the Radiation Oncology Institute (ROI) will provide seed funding for the most innovative proposals for research to heighten the critical role of radiation therapy in the treatment of cancer.

We asked attendees of the 2017 ASTRO Annual Meeting to answer the question: “**How do we improve our ability to get radiation to the patients who need it?**” From the responses, the following topics emerged as important areas of need, and for this RFP, research project proposals that address these areas will be given priority.

- **Financial toxicity and cost** – investigations of the financial toxicity associated with radiation therapy and the development of interventions to mitigate its effects and lower costs.
- **Access to treatment and support services** – studies to understand disparities in access to radiation therapy and the development of solutions to address them.
- **Awareness, education and marketing** – novel methods to inform patients and referring physicians about the benefits of radiation therapy.
- **Hypofractionation and SBRT** – generation of evidence or development of programs that support their use.

Although this RFP will give priority to proposals addressing the bulleted topics above, other high-quality proposals falling within ROI's 5 general areas of research need will also be given consideration.

- **Communication** – identifying and developing communication strategies to improve awareness and understanding of radiotherapy by referring physicians, patients and others.
- **Quality and safety** – establishing general quality indicators for radiation oncology treatment.
- **Comparative effectiveness** – conducting comparative effectiveness outcomes studies.
- **Toxicity management** – identifying best practices for management of radiation toxicity and survivorship
- **Value** – assessing the value of radiotherapy/radiation oncology relative to other treatment modalities.

An executive summary of the *National Radiation Oncology Research Needs Assessment* is available at [www.roinstitute.org](http://www.roinstitute.org), or see the following publication: *Int J Radiat Oncol Biol Phys.* 2012;84(2):318-322.

## Intent

This RFP seeks innovative ideas for high-risk, high-reward projects and/or seed funding necessary to demonstrate proof of concept before applying for larger grants. Projects could address any aspect of radiation oncology that falls within the scope of the priority research topic areas identified in the *National Radiation Oncology Research Needs Assessment*. Proposals should address the highest impact research questions for the field of radiation oncology. Knowledge derived from these studies should inform policy development or aim to improve outcomes in cancer treatment. The ROI seeks proposals that would lead to important research with practical applications for radiation oncology professionals and their patients. Special consideration will be given to proposals that are not otherwise fundable through traditional sources.

## Award Amount

Up to \$200,000 in grants will be awarded. A typical budget for a project supported by this mechanism is expected to be limited to \$50,000. However, larger budgets will be considered with the firm limit that costs may not exceed \$100,000. A maximum of 7% of the requested amount can be attributed to indirect costs. Multiple projects will be selected for funding. With the goal of making awards to as many of the highest rated proposals as possible, special attention will be given to projects that demonstrate efficiency and economy of resources to pursue the research proposed.

Projects must be completed no later than **July 2019**.

## Eligibility

1. Qualified individuals from institutions and organizations in the radiation oncology (RO) community.
2. Applicants enrolled in residency programs or post-doctoral fellowships require a faculty mentor.
3. Vendors with required expertise to conduct specified ROI research.
4. Individuals from institutions and organizations of the non-RO community who possess necessary qualifications for specified research.
5. Applications from research consortia (the same maximum overhead rate will apply to both the primary award and all subcontracts).

## General Selection Criteria

Proposals for research projects reviewed by ROI will be judged on several criteria based on scientific and technical merit. An application does not need to be equally strong in all categories to be judged likely to have major scientific impact.

1. **Overall Impact:** Likelihood for the project to lead to significant follow-on funding or initiate a new research direction that will eventually have a powerful influence on the field of radiation oncology.
2. **Significance/Importance:** Does the project address an important problem or a critical barrier to progress in the field? If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved? How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventive interventions that drive this field?

The application MUST address clearly what the expected end-product is and how the product will be used for follow-on funding or initiate a new research direction that will benefit the broader radiation oncology community.

3. **Topic and Practical Application:** How well does the project address 1 or more of the ROI's priority research areas identified in the *National Radiation Oncology Research Needs Assessment*? Does the project focus on an area of need identified from the responses to the question, "How do we improve our ability to get radiation to the patients who need it?" Are the outcomes from the project designed to have an impact on practice in the near future? Are the outcomes scalable?

4. **Approach:** Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project? Are potential problems, alternative strategies, and benchmarks for success presented?

If the project involves clinical research, are the plans for 1) protection of human subjects from research risks, and 2) inclusion of minorities and members of both sexes/genders, as well as the inclusion of children, justified in terms of the scientific goals and research strategy proposed?

Applicants proposing observational studies are specifically referred to the following methods overview published in the *International Journal of Radiation Oncology Biology and Physics*:

Jagsi R, Bekelman JE, Chen A, Chen RC, Hoffman K, Tina Shih YC, Smith BD, Yu JB.

Considerations for observational research using large data sets in radiation oncology. *Int J Radiat Oncol Biol Phys.* 2014;90(1):11-24.

5. **Innovation:** Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions? Are the concepts, approaches or methodologies, instrumentation, or interventions novel to 1 field of research or novel in a broad sense? Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?
6. **Investigator:** Are the PD/PIs, collaborators, and other researchers well suited to the project? If Early Stage Investigators or New Investigators, or in the early stages of independent careers, do they have appropriate experience and training? If established, have they demonstrated an ongoing record of accomplishments that have advanced their field(s)? If the project is collaborative or multi-PD/PI, do the investigators have complementary and integrated expertise; are their leadership approach, governance and organizational structure appropriate for the project?
7. **Research Environment:** Would the scientific environment in which the work would be done contribute to the probability of success? Would there likely be institutional support for this project? Would the project benefit from unique features of the scientific environment, or subject populations, or require useful collaborative arrangements?
8. **Overall Research Plan:** Does the proposal demonstrate understanding of the project's goals? Does the proposal identify appropriate research questions to be answered? Does the proposal describe a sound technical approach, including description of any process elements? Is the project design and methodology feasible?
9. **Budget:** Does the budget reflect appropriate use of resources to complete the project in a timeline consistent with what has been outlined in the proposal?

## How to Apply

1. **Project Proposal:** Submit a Proposal by **March 1, 2018 at 5:00 p.m. EST** through proposalCENTRAL. Proposals should contain the following items:
- A brief project description (up to 2 pages, single-spaced, including figures) which contains the following information:
    - o A synopsis of the proposed project
    - o A statement of the project's principal objectives, significance and impact, and innovation
    - o A description of the research plan and methodologies to be employed
    - o A clear discussion of how data will be collected
    - o A clear discussion of next steps
    - o A dissemination strategy
    - o A timetable

- Project budget justifying specific items requested and assigning a priority to each item (not to exceed 1 page)
- References cited (not to exceed 1 page)
- Principal Investigator’s biosketch with selected relevant publications (following NIH format and not to exceed 5 pages)
- Mentor’s biosketch if Principal Investigator is a resident or post-doctoral fellow (following NIH format and not to exceed 5 pages)

2. **Other Requirements:** All investigators receiving funds must submit to the ROI an interim report after 6 months and a final report at the end of the 1-year funding period. Investigators are expected to submit an abstract to present their results at an ASTRO meeting. Manuscripts should be submitted to journals with a large U.S. audience. Investigators must acknowledge ROI support on all publications and products of the project and send copies of all products to ROI.

ROI will review all submissions and make a determination as to whether to release the funds to the selected participant as 1) a grant pursuant to standard terms related to grants and ownership of all work product related thereto or 2) to offer the funds through a services contract which would provide the ROI with ownership and/or a broad license to the work product created through the services and contract. A participant whose project has been selected will be notified of ROI’s choice under the above 2 scenarios and upon agreement enter into either of the appropriate relationships with ROI.

3. **Use of Grant Funds:** Funds may be used to support project staff salaries and benefits, consultant fees, data management, supplies and other direct expenses. Equipment purchases are allowed with sufficient justification. A maximum of 7% of the total budget can be used for indirect expenses.

4. **Proposal Formatting:**

- Font: Use an *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.
- Proposals are not to exceed the 2-page maximum (excludes budget, references and biosketches).

**Evaluation of Proposals**

1. **Scoring Proposals:**

- No individual who is designated as the mentor of an applicant or who submits an application in response to this RFP may score applications for this RFP.
- Applications from the same institution or organization will not be scored by members of the ROI Research Committee, subcommittee or work group from that institution or organization.

2. **Feedback:**

- Each proposal will be scored by at least 2 qualified reviewers.
- Individuals submitting an application will receive a score for that application.

3. **Timeline:**

**Proposal due**.....March 1, 2018 at 5:00 p.m. EST  
**Award announcement**..... April 2018

## **Submission**

Applications should be submitted electronically at: <https://proposalcentral.altum.com>. After logging-in, click on the "Grant Opportunities" tab and select "Radiation Oncology Institute" in the "Filter List by GrantMaker" drop-down menu. Customer support with online submissions will be provided by proposalCENTRAL by email at [pcsupport@altum.com](mailto:pcsupport@altum.com), or phone at 800-875-2562 (toll free) or 703-964-5840. Customer support specialists are available Monday through Friday from 8:30 AM to 5:00 p.m. EST. For questions regarding the ROI award program, please contact Emily Connelly, Governance and Research Administrator, by email at [emily.connelly@astro.org](mailto:emily.connelly@astro.org) or by phone at 703-839-7356.