



2017 ASTRO Minority Summer Fellowship Award

PURPOSE

The purpose of the ASTRO Minority Summer Fellowship Award is to introduce medical students from backgrounds that are [under-represented](#) in medicine to the discipline of radiation oncology early in their medical education. Medical students in all years are encouraged to apply; preference will be given to first- and second-year students. In an effort to promote radiation oncology as a career choice, the fellowship will provide medical students with an experience designed to expose students to clinical, basic and translational research questions in radiation oncology.

ELIGIBILITY REQUIREMENTS

The following requirements must be met for a trainee to be considered for the grant:

- Applicant must be enrolled in a U.S. medical school and be in good standing at the time the application is submitted.
- Applicant must identify a mentor with a successful record of research productivity (more information is below).
- Either the primary mentor or co-mentor must be an ASTRO member.
- Research must be initiated at a North American institution during the summer of 2017.
- The selected institution must have an established research and clinical program and an ACGME-accredited radiation oncology residency program with clinical faculty available to serve as mentors.
- Letters of commitment from both the mentor and the department chair at the selected institution must accompany the application. The letter of commitment from the mentor should ensure the institution is able to fund the project.

APPLICATION DEADLINE

Applications must be received by ASTRO (emailed to natalie.cain@astro.org) no later than **FRIDAY, FEBRUARY 10, 2017**. Applications received after the deadline will not be considered.

STIPEND AND PAYMENT SCHEDULE

The ASTRO Minority Summer Fellowship Grant will offer two students a \$4,500 package that includes a \$3,500 stipend for the eight-week training program (exceptions can be made for a longer program but will need to be approved by ASTRO's Committee on Health Equity, Diversity and Inclusion) and \$1,000 toward the cost of travel to the 2018 Annual Meeting.

June 2017: The awardee will receive a direct payment of \$2,500 paid at the beginning of the fellowship upon receipt of a confirmation letter, project timeline and completed W-9 form (awardees will be given more detailed instructions in their notification letters). ASTRO does not pay indirect costs, overhead costs or salary support for the principal or co-principal investigator and has no responsibility for support beyond that stated in this application. This support is not for the mentor.

January 2018:

- After ASTRO's Committee on Health Equity, Diversity and Inclusion reviews and approves the awardee's final report, the awardee will receive an additional \$1,000. Final reports must be received by **Friday, December 1, 2017** (more details are provided later in the application). Awardees who submit reports later than the deadline (unless pre-approved by ASTRO's Committee on Health Equity, Diversity and Inclusion) will not receive this additional \$1,000.
- The awardee must submit an abstract to the 2018 ASTRO Annual Meeting before the abstract submission site closes. Regardless of whether or not the abstract is accepted for presentation, the awardee is expected to attend the 2018 Annual Meeting; complimentary registration will be provided whether or not the abstract is accepted for presentation/inclusion.

Fall 2018: An additional \$1,000 will be granted to help offset travel expenses to and from the 2018 Annual Meeting. Specifically, the awardee will submit travel expenditures with a completed expense form and itemized receipts after attending the meeting and will be reimbursed for up to \$1,000 (any additional costs are the responsibility of the awardee). ASTRO will waive the Annual Meeting registration fee for an awardee only if the awardee provides the name and control number of the abstract he or she submitted, regardless of whether or not the abstract is actually accepted for presentation/inclusion).

NATURE OF PROJECTS

The fellowship is designed to develop a mentoring relationship that can help cultivate an interest in radiation oncology. Attending the ASTRO Annual Meeting will provide candidates with additional opportunities for professional growth after their fellowship ends.

The fellowship project should be designed so that the awardee is involved in a clinical or basic science (biology, molecular science, etc.) research project **and** also gains clinical exposure (for at least one day weekly the fellow should have clinical exposure). The mentor needs to outline in his/her letter of recommendation how the awardee would gain clinical exposure.

Two different research tracks are described below:

- The **Clinical Research Fellowship** is designed to expose medical students to the discipline of radiation oncology and to enhance skills in clinical research in radiation therapy. The fellow will work in clinical services, participating in all aspects of clinical decision-making, treatment planning, delivery and follow-up. The fellow will be encouraged to attend lectures, seminars, symposia and conferences held at the host university. At least one clinical research project will be identified in advance with the help of the mentor. Consideration should be made for potential delays created by IRB review of the project application.
- The **Basic Science Research Fellowship** is designed to further the candidate's knowledge in radiation biology and molecular science as they relate to radiation oncology. The candidate will spend one day a week in the clinical setting; the remaining four days will be dedicated to lab research. The research project must be identified in advance with the help of the mentor. The project's topic may be physics, radiation or tumor biology.

FINDING A MENTOR

Applicants must have an identified mentor as part of the application. ASTRO's Committee on Health Equity, Diversity and Inclusion have identified a few mentors throughout the United States who are interested in working with students applying for the fellowship program. For a list of potential mentors, please visit www.astro.org/MSFMentors. If you are still unable to locate a mentor, please email natalie.cain@astro.org for assistance in finding a radiation oncology program.

MENTOR REQUIREMENTS

Candidates must identify a primary mentor who, together with the applicant, is responsible for the planning, direction and execution of the project. The primary mentor must hold the rank of assistant professor or greater and commit to meeting with the candidate at least once weekly. Either the primary mentor or co-mentor must be an active ASTRO member and an accomplished investigator in the proposed research area with a track record of success in training independent investigators. A two-page curriculum vitae/biographical sketch of the mentor(s) must be included with the application. A list or description of the mentor's prior trainees including trainees' names, dates of mentored training, type of research and current positions should be provided within the mentor's letter of support/recommendation. If the mentor is a junior attending, then the applicant should have a co-mentor. The reviewers will want to see a successful track record of mentoring other trainees at the same level as the candidate. If the mentor does not have a track record, then consideration should be given to including a co-mentor with experience. Co-mentors with complementary experience are encouraged, but one person should be identified as having primary responsibility for the candidate's mentoring.

ENVIRONMENT – INSTITUTIONAL COMMITMENT

Letters from the mentor and chair of the mentor's department should describe the facilities and resources that are available to the candidate and also include a clear statement of commitment assuring that the mentor will devote needed time to the recipient to help achieve the goals of this award.

The chair of the host department will be responsible for providing resources for implementation of the lab experience as well as support for the analysis and publication of the clinical research experience. The chair and the mentor of the host department should meet together with the fellow at the completion of the program to discuss and evaluate the experience from the perspective of the department and the fellow.

METHOD OF APPLICATION/FORMAT

Applications should fulfill the following criteria:

- Materials must be prepared in English, single-spaced with normal spacing between letters and words, using a font size and style that is easy to read (such as 11-12 pt. Calibri, Arial or Times New Roman).
- Materials can be prepared in Microsoft Word or another word processing program, but the final submission should be in PDF format. All sections and subsections that are compiled into the master PDF should be labeled clearly for the reviewers.
- Carefully review your application to ensure that everything is included and clearly labeled. Incomplete applications will not be considered.

This application can be downloaded from the ASTRO website at www.astro.org/minoritysummerfellowship. Applicants should get approval from their own department chair before submitting an application. Inquiries and completed applications should be sent to natalie.cain@astro.org.

Applications that are incomplete, are submitted past the deadline, or do not comply with the application requirements will not be reviewed. Likewise, applications that do not have properly executed signatures or do not present sufficient information will not be reviewed.

SELECTION REVIEW CRITERIA

ASTRO's Committee on Health Equity, Diversity and Inclusion will review and score applications for funding. The review process will evaluate applications based on the following factors:

1. General qualifications of the applicant. Priority will be given to first- and second-year medical students; however, third- and fourth-year students are still allowed to apply.
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.

Applicants will be notified of the outcome of their applications by email in May, 2017.

FINAL REPORT

A final report must be submitted to ASTRO, for potential distribution to the Board of Directors, no later than **Friday, December 1, 2017**. Reports are used to determine the effectiveness and success of the program. If the project has not been completed, the report can address the progress and current status of the project at that time (as well as an expected date of completion); a follow-up report once the project has been completed should also be submitted.

Final reports must begin with a summary statement not to exceed one page. Reports are to be submitted electronically (in a Microsoft Word document or PDF) and accompanied by a printed, signed copy endorsed by the awardee's department chair.

Complete reports must address each of the items listed below:

- Restate specific aims/goals of your research plan and show the results of your work for each goal/aim. Include all supporting data.
- Indicate any deviations you have made from your research plan and justify these changes. If you did not reach one or more of your specific goals, explain why.
- Indicate any problems or delays you have encountered in performing the research.
- Indicate if the results from your studies are being prepared for publication or will be prepared for publication within the next six months.
- Indicate the clinical significance and future clinical impact of the results of your study.
- Indicate the strengths and weaknesses of the Minority Summer Fellowship program in which you participated.
- Indicate the influence or role the grant from ASTRO had on your career or will likely have in the future or on your choice of radiation oncology as a specialty.

PUBLICATIONS

All scientific posters, publications and oral presentations resulting from the ASTRO-funded projects must acknowledge ASTRO by including a statement similar to: "This work was supported by the American Society for Radiation Oncology." One reprint of each publication produced as a result of this grant should be sent to natalie.cain@astro.org for potential distribution to the Board of Directors.

COMMITTEE ON HEALTH EQUITY, DIVERSITY AND INCLUSION

ASTRO's Committee on Health Equity, Diversity and Inclusion is responsible for reviewing applications and selecting awardees. A member of the subcommittee will be assigned to communicate with each awardee on a continual basis to receive updates and keep the awardee connected to the subcommittee. It is the expectation of the subcommittee that awardees stay in touch with their assigned subcommittee members and provide continual updates regarding their training, residency, abstracts, publications, etc. This process will help the subcommittee evaluate the fellowship and justify funding for the program to the ASTRO Board of Directors.

The official application follows.

2017 ASTRO Minority Summer Fellowship Grant Application

SUBMISSION FORMAT

Submit one (1) PDF with clear labels for each section and subsection. Microsoft Word documents should be converted to PDFs and all PDFs should be compiled into one final document. Use the overview below to ensure you have all sections and subsections and that they are clearly labeled. **A head shot (photo in digital form) is required with your application; ASTRO posts awardees' photos and basic project information on the ASTRO website.**

OVERVIEW

More detailed descriptions are included in the subsequent pages; be sure to follow instructions carefully.

Section I. Applicant Data

- a. Contact Information
- b. Race/Ethnicity
- c. Medical School Information
- d. Curriculum Vitae/Biographical Sketch

Section II. Statement of Interest

Section III. Summary of Proposed Research Plan

- a. Research Type
- b. Discipline
- c. Title
- d. Place of Research
- e. Abstract

Section IV. Mentor

- a. Contact Information
- b. Curriculum Vitae/Biographical Sketch

Section V. Detailed Research Plan

- a. Specific Aims
- b. Background and Significance
- c. Preliminary Data
- d. Research Design and Methods
- e. Resources and Environment
- f. Capacities and Capabilities
- g. Major Equipment
- h. Additional Information

Section VI. Research Assurances

- a. Human Subjects
- b. Vertebrate Animals
- c. Ionizing Radiation/Radioactive Isotopes
- d. Other Assurances

Section VII. Letters of Support/Recommendation

- a. Mentor
- b. Department Chair
- c. Institution (Dean)
- d. Letter of Good Standing (Bursar's Office)

Section VIII. Signatures

- a. Mentor
- b. Department Chair
- c. Applicant

SECTION I. APPLICANT DATA

a. Contact Information

Name (Last, First, Middle)
Date of Birth (mm/dd/yyyy)
Country of Citizenship
Prior Degree(s)
Mailing Address (Street, City, State, Zip)
Telephone (Area code, number and extension)
Fax (Area code and number)
Email Address

b. Race/Ethnicity

Are you of Hispanic, Latino, or Spanish origin?

- No.
- Yes: Mexican, Mexican American, Chicano.
- Yes: Puerto Rican.
- Yes: Cuban.
- Yes: Other (for example, Argentinian, Colombian, Dominican, etc.) – please indicate.

What is your race? Indicate all that apply.

- White
- Black or African-American.
- American Indian or Alaska Native (please indicate name of enrolled or principal tribe).
- Asian Indian.
- Chinese.
- Japanese.
- Korean.
- Vietnamese.
- Filipino.
- Other Asian (for example, Laotian, Thai, Pakistani, Cambodian, etc.) – please indicate.
- Native Hawaiian.
- Guamanian or Chamorro.
- Samoan.
- Other Pacific Islander (for example, Fijian, Tongan, etc.) – please indicate.

c. Medical School Information

Current Medical School Year
Medical School Name
Medical School Address (Street, City, State, Zip)
Type of Medical School: Public or Private

d. Curriculum Vitae/Biographical Sketch

Attach your complete curriculum vitae (including all past and current funding from any source) in this section. Limited to two pages only.

SECTION II. STATEMENT OF INTEREST

This section should include a statement of interest addressing the applicant's interest in the field of radiation oncology and the ASTRO Minority Summer Fellowship program. Limited to 150 words only.

SECTION III. SUMMARY OF PROPOSED RESEARCH PLAN

This should serve as a succinct and accurate description of the proposed research plan. The investigator's name and/or the institution's name must not appear anywhere in this description. The summary should include the long-term goals of the proposed work and the methods to be used. Data collection and analysis should be summarized along with the potential significance of this work in the radiation therapy sciences. The summary should follow the format shown below and should not exceed one page:

- a. **Research type (indicate one)**
 - Clinical Research Fellowship
 - Basic Science Research Fellowship
- b. **Discipline (indicate the one that closely matches your proposal's subject matter)**
 - Radiation Oncology
 - Medical Physics
 - Radiation Biology
- c. **Title of Project**
- d. **Place of Research (where will you conduct your project?)**
- e. **Abstract of Proposed Research Plan**

SECTION IV. MENTOR

- a. **Contact Information**
 - Name (Last, First, Middle)
 - Institution Name
 - Mailing Address (Street, City, State, Zip)
 - Telephone (Area code, number and extension)
 - Fax (Area code and number)
 - Email Address
- b. **Curriculum Vitae/Biographical Sketch**

Attach the selected Mentor's complete curriculum vitae (including all past and current funding from any source) in this section. Limited to two pages only.

SECTION V. DETAILED RESEARCH PLAN

Provide a concise (thorough but focused) description of your research proposal, making it as brief as possible. This total section should not exceed five pages (if necessary, additional pages may be included for the bibliography).

- a. **Specific Aims**
- b. **Background and Significance**
- c. **Preliminary Data**
- d. **Research Design and Methods**
- e. **Resources and Environment: Mark the facilities to be used at the institution where the research will be undertaken.**
- f. **Briefly indicate their capacities, pertinent capabilities, relative proximity and extent of availability.**
- g. **Major Equipment: List the most important items available for this project, noting the location and pertinent capabilities of each.**
- h. **Additional Information: Provide any other information describing the environment for the project. Identify support services and the extent to which they will be available.**

SECTION VI. RESEARCH ASSURANCES

Documentation of approval for the following items, where applicable, must be included with the application. Documentation from the institute(s) where the study will be conducted should include the principal investigator's name, title of the proposed research project, dates of approval and signatures. If prior approval from the Institutional Review Board (IRB) or other review committee(s) has not been obtained by the date of submission of the proposal, provide evidence that the proposal has been submitted for review; including the date of submission and appropriate signatures. Final IRB approval must be documented before final fellowship approval. Documentation may be submitted as attachments and do not count toward the five-page limit.

- a. **Human Subjects:** If human subjects will be used in the proposed research project, provide documentation of IRB approval for use of human subjects.
- b. **Vertebrate Animals:** If vertebrate animals will be used in the proposed research project, provide documentation of approval by the institute's Animal Use Committee or equivalent. Animals must be used in compliance with the Guide for the Care and Use of Laboratory Animals or similar guidelines.
- c. **Ionizing Radiation/Radioactive Isotopes:** If ionizing radiation or radioactive isotopes will be used in these studies, include documentation of approval from the Radiation Safety Committee or equivalent.
- d. **Other Assurances:** Include documentation of other required assurances such as those that apply to recombinant DNA research or the use of biohazardous materials.

SECTION VII. LETTERS OF SUPPORT/RECOMMENDATION

In addition to letters of support/recommendation, each applicant must also submit a letter of good standing from their medical school stating that the student is in good academic and financial standing. Limited to one page per letter. If the mentor is also the department chair of the host institution, then one letter (and one signature in the following section) will be sufficient.

- a. **Mentor (the mentor MUST describe in his/her letter how the applicant will gain clinical exposure)**
- b. **Department Chair of the Host Institution (the Mentor's Department Chair)**
- c. **Institution of Applicant (i.e., Dean)**
- d. **Letter of Good Standing from Applicant's Institution (i.e., Bursar's Office)**

SECTION VIII. SIGNATURES (Signatures by proxy are not acceptable.)

- a. **Mentor:**

I affirm that arrangements for the outlined program have been made, the funds and support services described are available and that the program will be in compliance with all terms and conditions of the ASTRO Minority Summer Fellowship Award Program.

Name (degrees, title/faculty rank)

Institution, Department

Office Address

Phone/Fax/Email

Signature of Mentor

Date

b. Department Chair (of mentor/host institution):

I affirm that arrangements for the outlined program have been made, the funds and support services described are available and that the program will be in compliance with all terms and conditions of the ASTRO Minority Summer Fellowship Award Program.

Name (degrees, title/faculty rank)
Institution, Department
Office Address
Phone/Fax/Email
Signature of Department Chair
Date

c. Applicant:

I affirm that the information submitted in this application is accurate and true. If awarded an ASTRO fellowship, I agree to accept responsibility for the scientific conduct of the project and to provide the required progress reports if a grant is awarded as a result of this application.

Signature of Investigator/Applicant
Date

Send one electronic copy of the completed application in PDF format with sections and subsections clearly labeled to the ASTRO no later than February 10, 2017.

American Society for Radiation Oncology (ASTRO)
ASTRO Minority Summer Fellowship Award
Email: natalie.cain@astro.org