

NIBIB Guidance for Research Education Programs for Residents and Clinical Fellows Applications (R25)

Strategic Goals:

- Promote collaborations between Radiology residency programs and other NIBIB-relevant residency/fellowship programs.
- Provide mentored research training to residents/clinical fellows in NIBIB-relevant residency/fellowship programs.
- Increase the number of clinical career development awardees and clinician-scientists working in clinical and translational research.

Program Elements:

Parent Grant

Parent grant supports overall program and first-year candidates.

- One application per institution.
- PD/PI must have a Radiology or Nuclear Medicine appointment.
- Candidates may be from any NIBIB-relevant residency/fellowship program, including, but not limited to, Cardiology, Dermatology, Nuclear Medicine, Neurology, Orthopaedics, Ophthalmology, Pathology, Radiology, and Surgery.

Out-year administrative supplements

Out-year candidates must submit administrative supplements which are internally reviewed by NIBIB program staff.

- Approved candidates are supported for one year, with the option to apply for a second year of support.
- Candidate support is capped at \$70,000/candidate/year, including:
 - Salary and fringe benefits (minimum 75% effort)
 - Research-related expenses (up to \$10,000/candidate/year)
 - Travel (up to \$1,000/candidate/year)
- Training in the Responsible Conduct of Research is required.
- PD/PI and candidates are required to attend the biennial NIBIB Training Grantees Meeting in the greater Washington area.

Application Organization

Describe the objectives of the research education program, including the program theme and objectives; Program Directors and administrative structure; faculty mentors; program coursework, community-building, and professional development activities; applicant pool; and institutional environment and commitment.

Describe the institutional impact of the research education program, detailing the need for the program and explaining any overlaps with other training or research education programs at the institution.

Program Directors and Administrative Organization

Describe the Program Director(s), administrative support staff, and organizational structure of the research education program. At least one Program Director must have an appointment in a Radiology or Nuclear Medicine department. A multiple PD approach is often the best way to establish educational and scientific linkages between Radiology and other institutional residency/fellowship programs.

Indicate the percentage effort for the Program Director(s) – NIBIB expects Program Director(s) to spend at least 10% of their time on the research education program.

If the Program Director(s) have extensive administrative, clinical, or research responsibilities, indicate how they will manage these responsibilities and effectively run the research education program.

Program Faculty

Include biosketches for the Program Director(s) and all program faculty mentors. In the personal statement section, each faculty mentor should, in addition to their research experience and current external support, highlight their mentoring and training history.

Describe the mentoring model (i.e., single, dual, or team mentoring) used by the program, indicating the program's expectations and the scientific and training role of all faculty mentors.

Indicate the existing research collaborations among faculty mentors and indicate if you expect the research education program and program candidates to initiate new research collaborations among program faculty mentors.

Indicate the inclusion and participation of women and underrepresented minority faculty in your program and use summary statistics to describe the diversity of your mentoring faculty.

Program Coursework and Other Activities

Describe all program coursework, community-building activities (e.g., rotations, journal clubs, seminars), and professional development activities (e.g., grant writing, oral and written presentation, leadership, laboratory and project management), indicating which activities are **required** and which

are ***optional***, along with their duration and frequency. If your program will admit candidates from diverse scientific backgrounds, explain how you will provide, as needed, remedial training to ensure that all candidates are able to take full advantage of the program coursework and other activities.

Program and Candidate Evaluation

Describe a plan to review and determine the quality and effectiveness of the research education program in transitioning candidates to mentored career development and research awards. Include input from all stakeholders, including faculty mentors and program candidates. ***For renewal applications***, indicate how the research education program has been altered based upon the most recent program evaluation.

If an Advisory Committee is proposed, describe the composition, roles, responsibilities, and expertise of committee members; the frequency of committee meetings; and how the committee will evaluate the research education program. ***For renewal applications***, include the names of all committee members during the past project period.

Describe how you monitor and evaluate the performance of all candidates in your research education program and, if necessary, what steps are taken to address unsatisfactory performance.

Program Candidates

Describe how your research education program recruits and selects candidates from its participating departments and residency/fellowship programs.

Describe how your research education program matches candidates with faculty mentors and how, if necessary, changes are made to these assignments.

Candidates must submit a research plan, mentoring plan, and career development plan for the year of support. ***If applying for continuing support***, provide a progress report, including a mentor's report, productivity report, and updated research, mentoring, and career development plans.

NIH encourages research education programs to assist postdoctoral researchers to achieve their career goals through the use of Individual Development Plans (IDPs) ([NIH Guide Notice NOT-OD-13-093](#)).

Institutional Commitment

Define the nature of **ALL** institutional or departmental commitments to the research education program and explain the form that this support takes

(e.g., additional candidate support, dedicated or shared space, access to core facilities, equipment, faculty mentor release time).

Diversity Recruitment and Retention Plan

In addition to any institutional or departmental diversity recruitment and retention policies, emphasize the research education's plan to recruit and retain individuals from underrepresented groups. ***For renewal applications***, describe the research education program's performance in recruiting and retaining diverse individuals during the previous project period.

Training in the Responsible Conduct of Research Plan (RCR)

Describe the format, subject matter, duration, and frequency of RCR instruction. RCR instruction must include the active participation of a broad subset of program faculty and must take place at least once per career stage and be repeated at least once every four years. A RCR plan involving only on-line instruction is no longer acceptable. ***For renewal applications***, provide a list of all RCR-participating faculty and describe any changes in RCR instruction over the past project period.

Letters of Support

Include supporting letters from **ALL** stakeholders, including senior administrators, participating department chairs and residency/fellowship program directors. Letters of support are not needed from faculty mentors. ***For resubmission and renewal applications***, submit new or updated letters of support – never resubmit the letters from the original application.