

HHMI



MEDICAL RESEARCH FELLOWS PROGRAM

HOWARD HUGHES MEDICAL INSTITUTE

A YEAR OF
FUNDED RESEARCH
FOR MEDICAL,
DENTAL, AND
VETERINARY
STUDENTS

APPLICATION TIPS

ONLINE APPLICATION

- ★ Visit www.hhmi.org/medfellowships for program information and to apply online.
- ★ Observe the January 11 submission deadline.
- ★ Read and follow the instructions.
- ★ Follow the guidelines for word limits and proofread carefully.
- ★ Before submitting your application online, save a copy for your records.

RESEARCH EXPERIENCE

- ★ Present the topic of your research in a way that makes it clear why it is of interest. Be sure to place your work in the context of the relevant scientific field.
- ★ Emphasize the scientific question you addressed, the general approach you took, and your findings and conclusions rather than the techniques you learned.
- ★ Clearly describe the contributions you made in the laboratory.

SELECTING A MENTOR

- ★ Your choice in mentors can significantly affect the outcome of your application.
- ★ Your mentor should be well-funded and have recent publications in your proposed research area. Use PubMed (www.pubmed.gov) to look up a potential mentor's publication record.
- ★ Deans, chairpersons, and course directors are excellent resources for identifying potential mentors. They can help guide you to productive laboratories with interest and experience in training medical students.
- ★ You are encouraged to consider an HHMI investigator as your mentor.
- ★ Talk with several possible mentors. Confirm that the mentors have experience training medical students.

- ★ Confer with other medical, dental, or veterinary students, graduate students, and postdoctoral researchers who have been in the laboratory you are considering, to assess the amount of interaction and guidance they received from the proposed mentor.

RESEARCH PLAN

- ★ Your project should be hypothesis-driven— that is, you should ask a specific and substantive question about biological processes or disease mechanisms that can be tested experimentally.
- ★ Avoid a plan that is too descriptive, one that confirms a hypothesis rather than testing a hypothesis. Is it an intellectually challenging project?
- ★ Emphasize the scientific and, if possible, the medical importance of the question.
- ★ Include details on data analysis, quantitation methods, if applicable, and overall design of experiments. A proposed timeline for the experiments would be helpful.
- ★ Make sure reagents or equipment that is vital to the research are readily available and accessible.
- ★ Anticipate potential problems in the research and present alternative strategies.
- ★ It is beneficial to include a discussion on data analysis and interpretation of results. Discuss the underlying mechanisms of proposed models, if applicable.
- ★ It is expected that some of your mentor's ideas will be in your plan, but restate them in your own words. Do not borrow extensively from your mentor's grant proposal text. Reviewers want to read your presentation of the issues and approaches.
- ★ Allow time for discussion with your mentor and for feedback on your drafts. Ask the mentor to consider the feasibility of the project. Is it suitable for a one year experience? What is the training value? Make sure it's not just a technical exercise.
- ★ Be sure to specify your role and that of your mentor (and others) in the development of the plan.

PERSONAL STATEMENT

- ★ It is understood that you may not yet have definite career goals. Explain the options you are considering at this point.
- ★ If you have limited research experience, explain what prompted you to apply for the fellowship program and what you hope to gain from the research experience.
- ★ If you have had extensive research experience, explain how you would further benefit from the proposed year of research.
- ★ Explain your intellectual, and personal motivations (e.g., inspiration by a key mentor) for the year of research training.
- ★ Note extenuating circumstances that resulted in atypical test scores or grades or to explain why a previous research mentor did not provide a reference letter.

REFERENCE LETTERS

- ★ Select individuals who have a good understanding of your intellectual research abilities. Often this can be someone with whom you have previously done research.
- ★ Provide your references with a résumé of your education and research experience. It may also be helpful to provide a copy of your research plan.
- ★ Describe the program to the referee and explain how this fellowship will affect your career goals.
- ★ Some applicants request letters from prominent scientists who do not know them well. General letters of this type are not effective.

IF YOU HAVE ANY QUESTIONS,
E-MAIL MEDFELLOWS@HHMI.ORG OR CALL 800-424-9924.