

# Foundation for Endodontics

## Research Fellowship Guidelines

### Purpose

The Foundation for Endodontics Research Fellowship Award is a mentored training fellowship award created in recognition of the key role junior investigators play in the specialty of endodontics. The Foundation recognizes a need to recruit and cultivate the next generation of endodontic clinician-scientists who will advance the specialty with formal and rigorous research training, and who will contribute to the scholarship of endodontics and harness the extramural resources to advance the specialty even further.

The goal of this fellowship is to develop a pipeline for junior faculty in endodontics who will become impactful, independent investigators in the field, and be competitive in extramural funding including those of the National Institute of Health (NIH), National Science Foundation (NSF), Department of Defense (DoD) or other federal or private granting agencies and/or funding opportunities. Submission of extramural grant proposal is a requirement for this award and must occur by the end of funding year three (of five). The fellowship supports research and career development in basic science, translational science, clinical research or behavioral science with relevance to clinical problems in endodontics.

The recipient's institution will receive \$50,000 a year, for up to five years, to support the recipient's research program/project directly and/or to protect the recipient's time for research. The funds are disbursed annually in the spring. Up to \$250,000 is available per recipient.



**Dentsply Sirona generously donated the funding to support the 2019 fellow.**  
Therefore, the 2019 recipient will be termed the "2019 Dentsply Sirona Research Fellow."

### Eligibility

- Eligible candidates are incoming (with contract secured) or existing full-time\* junior faculty in a department of endodontics with formal research training (e.g. M.S., M.P.H., or Ph.D.) and/or demonstrated research productivity.
- Individuals may apply during the first five years that they are employed full-time as a faculty member, up to the end of their fifth year of employment. The award is not retroactive.
- All candidates must be conducting research in an endodontic department at an institution that is accredited by the commission on dental accreditation (CODA) in the United States or Canada.
- Candidate must be a permanent resident of the United States or Canada.
- Award recipient must commit at least 40% effort for research, as stated in the submitted employment contract and appropriate letter of recommendation.
- Candidate must have a degree of D.D.S. or equivalent in dentistry and formal training in endodontics.
- Candidate must identify a well-qualified mentor who will provide oversight on the fellow's career development and research plans. A mentor must be an established faculty with strong track record of research training and productivity.

Fellowship payments are made in arrears, after completion of each academic year of employment and commitment to the requirements of this award. Any active fellow who leaves his/her full-time position before the completion of an academic year, will not receive the \$50,000 award for that academic year, or any year thereafter, unless he/she has secured another full-time position to continue research which has been approved for continuation of funding by the committee.

*\*Full time as defined by the employer institution.*

## Timeline

The deadline for applications is September 15, 2019. The committee will meet to interview applicants following the deadline. Applicants will be notified of their status shortly thereafter. The first installment of the grant will be paid in the spring, and then each spring thereafter for the next four years.

## Selection Criteria

Applications will be reviewed based on the following criteria:

### QUALIFICATIONS OF THE CANDIDATE

- Does the applicant demonstrate a strong training background and research productivity?
- Does the applicant present promise and potential to become an impactful scholar in endodontics?
- What is the probability of the candidate to successfully compete for the extramural research grants to elevate the level of science in endodontics?
- Is the candidate poised to become a major academic leader and scholar in endodontics in the next 10 – 20 years?

### QUALIFICATIONS OF THE MENTOR AND COMMITMENT

- Does the mentor provide evidence of a successful track record of cultivating students and junior investigators for a research career?
- Can the mentor provide effective guidance for the candidate for the successful completion of the proposal and submission of successful extramural grant?
- Is there evidence of institutional support and commitment for the candidate's career development plan?

### CAREER DEVELOPMENT AND MENTORING PLAN

- Do the candidate and mentor provide a feasible ancillary plan to support the overall academic growth of the candidate into an independent scientist?
- Are there any didactic and/or hands-on training essential for the candidate's research career development?
- How will the candidate's career development process be measured to ensure on-course trajectory within this fellowship period?

### RESEARCH PLAN

- How relevant is the question being addressed by the project?
- Will the project lead to discoveries that will have a broad scientific impact in dentistry beyond the boundaries of endodontics?
- How likely is it that the project will lead to the next grant proposals for successful extramural funding to benefit the specialty?
- Are the experimental approaches justified and feasible?
- Are there any pitfalls in the hypothesis, aims, or approaches?
- What are the contingency plans to ensure successful completion of the project?
- How will the study contribute to enhancing our understanding of questions related to endodontics?

In addition to the above review criteria for the proposal, select candidates will be invited for an in-person interview by the selection committee, who will recommend the finalist to the Foundation for Endodontics Board of Trustees for the final determination.

# Application Guidelines

To complete the application, the following items must be submitted online in addition to some basic demographic information. **The application deadline is September 15, 2019.**

## 1. PERSONAL STATEMENT (TWO PAGE LIMIT)

Personal statement should outline the applicant's interest in a research career and the reasons they are applying for the fellowship, including a career development plan.

## 2. THREE LETTERS OF RECOMMENDATION (MINIMUM)

### 1. From the Department Chair (or dean of the school)

This letter should highlight the academic goals of the candidate. Also, the award will require at least 40% protected research effort during the award period. Thus, the letter should include confirmation from the Chair or the dean that the candidate will be given at least 40% protected research time upon commencement of the award. This letter should demonstrate the institutional support for the candidate to successfully complete the goals of the award.

### 2. From the candidate's mentor

This letter should highlight the mentoring plan for the candidate to help transition into a successful independent investigator. The mentoring plan should include a description of the oversight for the research progress so that the current project will lead to submission of the competitive research grant to extramural funding agencies. Discussion of the specifics of the grant preparation and submission process is essential. If the mentor is same as the chair or the dean, the mentoring plan can be included in the chair's (or dean's) letter.

### 3. From a faculty colleague within the candidate's department

This letter should be provided by a full-time faculty member at the candidate's institution who can attest to the candidate's potential to mature into an impactful scholar in endodontics.

## 3. OFFICIAL TRANSCRIPTS

All transcripts for undergraduate and graduate programs must be translated to English using credentialing agencies, World Education Service (WES), Education system Exchange (ESE) or other services are recommended.

## 4. EMPLOYMENT CONTRACT

Applicant must provide a copy of their employment contract

## 5. RESEARCH PLAN

### 1. Abstract (250 words)

Must include hypothesis, aims and brief outline of the experimental design.

### 2. Biographical Sketch

Following the [NIH format for biographic sketches](#), submit biographical sketch of the candidate as the principal investigator and key personnel, including co-investigators and mentors.

### 3. Specific Aims (one page)

Highlight the major goal of the proposal, statement of the problem, preliminary data or literature reviews, statement of the hypothesis and the specific aims; include a brief statement of how the current project will lead to further grant proposals to compete for the extramural funding opportunities.

### 4. Statement of Relevance to Endodontics (150 words)

Explain how the current proposal directly relates to the [research priorities of the American Association of Endodontics](#).



## 5. Research Strategy (six pages)

This should include the following sub-sections:

### *Significance and Scientific Impact*

Highlight the rationale for the studies, gap in knowledge to be filled by the proposed study, and how the outcome of the study will contribute to enhance our knowledge in endodontics.

### *Background and Preliminary Studies*

Explain the relevant literature that justifies the goal of the proposed study and illustrate the preliminary data that support the central hypothesis of the study and/or demonstrates the feasibility of the proposed experiments.

### *Experimental Design*

Describe the scientific methodology to be utilized to execute the specific aims. Justify the rationale of the chosen scientific approach, rather than describing the minute details of the experimental protocols.

### *Data Analyses*

Provide detailed statistical methodology, including data collection, power analyses and statistical tests for each experiment.

### *Pitfalls and Alternative Approaches*

Identify the major limitations of the study (if any) and provide alternative approaches that may aid in circumventing the potential limitations in execution of the project.

## 6. Future Direction (one page)

Describe the anticipated outcome of the project and specific plans to further develop the current project, to develop a grant proposal to be submitted to an extramural funding agency. Explain how the current project will help accomplish the career development plan of the candidate to become an independent investigator. Explain the scientific questions that may arise from the current project that will lead to future research projects. Also provide the approximate timeline of the project's duration and explain how the outcome of the project will be measured and documented to ensure successful submission of competitive extramural grants within four years of the award. Explain the anticipated timeline by which the next grant submission will occur.

## 7. Resources and Environment (one page)

Describe the facilities and other resources available for successful completion of the project.

## 8. Equipment (one page)

List major equipment that are available in the institution for the candidate

## 9. Bibliography

References must follow the format required by the *Journal of Endodontics*: The reference style follows Index Medicus and can be easily learned from reading past issues of the JOE. The JOE uses the Vancouver reference style, which can be found in most citation management software products. Citations are placed in parentheses at the end of a sentence or at the end of a clause that requires a literature citation. Do not use superscript for references. Original reports are limited to 35 references. There are no limits to the number of references for review articles.

## 10. Budget

The annual fund for this award is \$50,000, which may be budgeted to secure protected research time for the candidate and/or direct cost for the proposed research project. The award will require commitment of 40% effort or greater of research time. Therefore, the funds may be budgeted to cover the additional research time needed to secure the 40% effort, while the remaining funds may be used to cover the research expenses. If the candidate already has minimal 40% protected research time, the fund may be budgeted to secure additional time for research or to support the direct cost for the proposed research project in its entirety. Direct cost for research may include salary support for co-investigators or research associate, supplies, cost for animal care or human subjects and publication. Funds may not be used to support salary of the mentor, tuition, travel or alterations and/or renovation of facility. Please utilize [this budget template](#) to provide an itemized budget that includes personnel justification, expendable supplies with justification, costs for animal care and human subjects and data analysis. Small equipment may be allowed if the equipment is essential for completion of the proposed project and is not available in the laboratory. For any equipment that costs \$1,000 or more, the budget justification should include a signed statement from the institution to confirm the need and itemized price quote.

## Post-Award Reporting Requirements

**Annually**, fellow must submit:

- Mentor assessment on timely progress toward development of new research project that will lead to submission of extramural research grant to funding agencies;
- An annual progress report on the proposed research project, including research and career development plan for the subsequent funding cycle.

**By the end of third-year funding cycle**, fellow must demonstrate:

- Submission of a competitive grant proposal to an extramural funding source. The remaining two funding cycles may be utilized for either resubmission, if needed, and/or new submission of grant proposal and/or completion of the proposed research.

### PUBLISHING

Manuscripts based on research supported by the Research Fellowship should first be submitted to the Journal of Endodontics. If the fellow believes that another scientific journal is better suited for initial submission, then a letter must be sent to the Foundation headquarters, [foundation@aae.org](mailto:foundation@aae.org) justifying this decision to the selection committee.

The following statement must be included in any written or oral presentation of research supported by the Research Fellowship:

*This research was supported in part by a Research Fellowship from the Foundation for Endodontics and Dentsply-Sirona.*