AMERICAN ASSOCIATION OF ORTHODONTISTS FOUNDATION

2021 AWARDS MATERIALS (ANNOUNCEMENTS) TABLE OF CONTENTS

I.	General Announcement and Application Procedures	2021-02
II.	Support for Junior Faculty	
	A. Orthodontic Faculty Development Fellowship Awards (OFDFA)	2021-11
	B. Postdoctoral Fellowship (PFA)	2021-16
III.	Support for Mid-Career/Senior Faculty	
	A. Biomedical Research Award (BRA)	2021-20
	B. Center Award	2021-23
IV.	Research Aid Award (RAA)	2021-29
V.	Application Cover Sheet	
	A. OFDFA/PFA	2021-31
	B. All Other	2021-32
VI.	Required Forms:	
	Table of Contents and Checklist	2021-33
	Documentation of Eligibility	2021-34
	Previous AAOF Awards and Outcomes	2021-35
	Biosketch Form & Sample	2021-36
VII.	Letter of Agreement & Promissory Note – OFDFA/PFA ***	2021-40
VIII.	Letter of Agreement – All Others	2021-47
IX.	Final Report Form	2021-52
X.	Progress Report	2021-54
XI.	No Cost Extension Request	2021-56
XII.	Instructions for Rebudgeting Request	2021-58
XIII.	Named Awards Listing	2021-60
XIV.	Review Template	2021-61
XV.	Scoring Criteria	2021-62
XVI.	2021 Call for Proposals to Study the Business of Orthodontic Practice	2021-63
XVII.	2021 Call for Proposals to Study COVID-19 related Outcomes	2021-65

Note:

• For 2021 Awards Program, the <u>firm</u> deadline for receipt of proposals is Friday, November 13, 2020 at 5:00 p.m. CST. Any proposals received after that date and time, will be returned without consideration or exception.

*** The Letter of Agreement (either/both versions) and the Promissory Note (PFA only) are NOT required when submitting a proposal and should not be completed at this time. The LOA/PN are only required from those proposals approved for funding, and those approved for funding will be informed of this at a later date, typically around the first of April or earlier. These forms are included in the 2021 Awards Materials for informational purposes only.

I. General Announcement and Application Procedure (Revised 5/30/2020)

A. General Announcement

The Mission of the AAOF is to advance the orthodontic specialty by supporting quality education and research that leads to excellence in patient care. Foundation funding ensures the future viability of the specialty by investing in the next generation of educators and researchers.

Financial awards from the AAOF are available on a competitive basis to aid projects and programs whose intentions are to support the professional development of future educators and researchers in orthodontics and to promote the maintenance, dissemination, and development of new knowledge, materials, and techniques intending to improve the ability of the specialty of orthodontics to deliver quality care. The primary focus of Foundation funding remains in support of junior faculty.

B. AAOF Award Categories

The AAOF has defined funding priorities as follows, some of which may not be available every year:

- 1. Fellowship Awards
 - a. Orthodontic Faculty Development Fellowships (OFDFA)
 - i. Applicant Defined
 - ii. Call for Proposals
 - b. Postdoctoral Fellowships (PFA)
 - i. Applicant Defined
 - ii. Call for Proposals
- 2. Biomedical Research Awards (BRA)
 - a. Applicant Defined
 - b. Call for Proposals
- 3. Center Awards (CA)
 - a. Applicant Defined
 - b. Call for Proposals
- 4. Educational Innovation Awards (EIA)
- 5. Program Awards (PA)
- 6. Research Aid Awards (RAA)
 - a. Applicant Defined
 - b. Call for Proposals
- 7. Gifts in Support of Orthodontic Education (GSOE)

2021 Funding Priorities are as noted below:

- 1. OFDFA Applicant Defined and Call for Proposals to study: i) the Business of Orthodontic Practice, and ii) COVID-19 related Outcomes. (One-year funding option only)
- 2. PFA Applicant Defined and Call for Proposals to study: i) the Business of Orthodontic Practice, and ii) COVID-19 related Outcomes.
- 3. BRA Applicant Defined and Call for Proposals to study: i) the Business of Orthodontic Practice, and ii) COVID-19 related Outcomes.
- 4. CA Applicant Defined and Call for Proposals to study: i) the Business of Orthodontic Practice, and ii) COVID-19 related Outcomes.
- 5. RAA Applicant Defined and Call for Proposals to study: i) the Business of Orthodontic Practice, and ii) COVID-19 related Outcomes.

Proposal Deadline is Friday, November 13, 2020, 5:00 pm CST

Applicants should understand that the award category descriptions are broadly stated to provide guidance to the applicant while allowing freedom in developing proposals. This collection of awards is also intended to encourage and support the development of orthodontic educators and inspire excellence in orthodontic education.

A detailed description for the OFDFA, PFA, BRA, CA and RAA, the only ones available for 2021, can be found on the application pages pertinent to each award category.

C. General Award Stipulations for Proposals

- 1. The number of awards made in any award category each year will vary, depending on the quality of the applications submitted and the level of support available and allocated to a category as follows for 2021:
 - a. OFDFA maximum of \$20,000 per year for one year/maximum of 2 proposals per year per program
 - b. PFA maximum of \$50,000 per year for a maximum of two years; only one such proposal per year per program. Reapplication for a third year is permissible.
 - c. BRA maximum of \$30,000 for one year
 - d. CA maximum of \$25,000 per year for a maximum of three years. (However, Type 4 CA, maximum funding is \$50,000 see Center Award General Description.)
 - e. RAA maximum of \$5,000 for one year/maximum of 2 proposals per year per program
- 2. No funds to cover "indirect costs" will be provided by the AAOF for any project in any award category; the AAOF provides financial support in the form of awards or gifts (not grants or contracts) which are to be used in the actual conduct of the approved project. If the applicant's institution will not accept this requirement, the application will be considered canceled and the award withdrawn.
- 3. Except where noted, each successful project, in any award category, will be supported on a one-time basis. Except where noted, no additional funds will be allocated for continuation of a funded project regardless of how long it takes to complete the project; applicants may not reapply for funding a project which has already been supported. The general exception to this rule involves the Orthodontic Faculty Development Fellowship Awards (OFDFA) and Postdoctoral Fellowship Awards (PFA). OFDFA fellows may reapply for additional support and PFA fellows may also apply for a third year.
- 4. There is no restriction as to the duration of the project in any award category (i.e., projects may take less than a year, a year, or multiple years to complete), except where noted.
- 5. Progress Reports are required six months after support (i.e., no later than December 31, 2021) for the following:
 - a. Multi-year Postdoctoral Fellowship Award
 - b. BRA
 - c. Multi-year Center Award

The Progress Report form is included within the 2021 Awards Materials (2021-54). A Progress Report is not required for the single-year OFDFA, a single-year CA, a single-year PFA, and the

- RAA. However, a Progress Report is required by December 31, 2021 for a multi-year PFA.
- 6. A Final Report is required at the end of the funding period for all award categories unless an extension has been granted. Failure to provide the AAOF with an acceptable Final Report within 6 months after the stated deadline will result in the Principal Investigator(s) (PI) not being eligible for funding until a Final Report is submitted to the AAOF and approved by the Foundation's Planning and Awards Review Committee (PARC). A delinquent Final Report may also disqualify the PI's current institution for one (1) year as well. The Final Report form is included herein at page (2021-52).
- 7. An applicant may not apply for awards in two different categories during any one year at the level of PI or Co-PI (i.e., as a person who has/shares ultimate responsibility for the conduct of two projects), except as noted below in italics; and a maximum of two OFDFA proposals and only one PFA proposal will be accepted per school in any year. In the case of a three-year OFDFA and the two-year PFA, the school may not reapply until the funded Fellowship has been completed. However, PFA applicants are allowed to submit two applications, i.e., one for the PFA and another for an award offering less funding (either OFDFA or BRA), so that, in the event that the PFA is denied, the applicant would still have the possibility of other funding.
- 8. Resubmission of a previous application is permissible if the following requirements are met:
 - The applicant/s must make appropriate and major changes to the re-submitted application compared to the previous application.
 - The AAOF PARC Review for the previous application should be appended following "Page 5" form(s)
 - The applicant must include an Introduction at the beginning of section (9-2) Project Plan(s) of the Proposed Plan which
 - o Summarizes the substantial additions, deletions, and changes to the application
 - Includes a response to all the "weaknesses" provided in the six sections (1. Significance through 6. Success and Productivity, and not limited to the Approach only) in the AAOF PARC Review for the previous application
 - May not exceed one page
 - o Information on resubmissions can be found at
 - https://grants.nih.gov/grants/policy/amendedapps.htm
 - This Introduction is not included in the specific page limits for the Project Plan(s).

D. General Application Guidelines

A number of required components and instructions apply to all applications submitted to the AAOF. In addition, applicants should follow the explicit directions given for each specific award category in Sections II to V.

Required Components

All applications must provide the following components in the order described, with all pages numbered, and with specified page numbers for particular components as indicated below:

(1) Page 1: <u>Application Cover Sheet</u> (see form template on p. 2021-31 or 2021-32, as appropriate) – This page must be filled out, signed, and returned as the cover page for the application.

- (2) Page 2: <u>Table of Contents & Checklist</u> (see form template on p. 2021-33)
 - a. All listed sections require correct page numbers to be entered in the Table of Contents for the application to be considered complete
 - b. All the Checklist items must be confirmed with a checkmark and by signing and dating the bottom of this page to attest that the application is complete and ready for AAOF review.
- (3) Page 3: <u>Title Page</u> [not to exceed one page]
- For OFDFA and PFA categories provide the following:
 - a. Category of award
 - b. Name of fellowship applicant
 - c. Names of principal advisor(s) / mentor(s), co-investigator(s) and consultant(s)
 - d. Developmental Plan (give relative % to be devoted to each plan so total is 100%):
 - i. Educational ____%
 ii. Research ____%
 - 1. Specify proposal type: General (i.e., Applicant Defined) or Call for Proposals
 - 2. Title of the project
 - 3. A brief statement (one-three sentences) using non-technical language describing the relevance of the proposal to clinical orthodontics and/or orthodontic education
 - iii. Teaching ____% iv. Clinical skills ____%
- For BRA, CA and RAA categories provide the following:
 - a. Specify proposal type: General (i.e., Applicant Defined) or Call for Proposals
 - b. Title of the project
 - c. Name of principal investigator (for awards where this is more than one person, name all)
 - d. Names of all co-investigator(s) and consultant(s)
 - e. A brief statement (one-three sentences) using non-technical language describing the relevance of the proposal to clinical orthodontics and/or orthodontic education
- (4) Page 4: <u>Documentation of Eligibility</u> (see form template on p. 2021-34) All applicants must complete this form to demonstrate specified award eligibility by providing:
 - a. Citizenship (Does not apply to RAA applicants)
 - b. Foreign national status (if not a US or Canadian citizen) (Does not apply to RAA applicants)
 - c. Current academic rank (for BRA, CA, EIA) or status (for OFDFA, PFA, RAA)
 - d. Years as faculty (full-time or part-time, as appropriate)
 - e. Start date of academic career for the purposes of verifying eligibility for the award (month, year)
 - f. Location(s) where award activities will take place
 - g. Name, position, signature of Institutional Official (Department Chair, Program Director, or Dean) to verify the information provided as correct, plus date signed.
- (5) Page 5: <u>Previous AAOF Awards and Outcomes</u> (see form template on p. 2021-35) Provide the information requested for each principal investigator or fellowship applicant including:
 - a. Award type (use defined abbreviations: OFDFA, PFA, BRA, CA, EIA, RAA)
 - b. Title of project
 - c. Role in project

- d. Period of support (month/day/year to month/day/year)
- e. Outcomes cite/describe any:
 - i. Publications (cite complete references)
 - ii. Presentations (title, presenter, organization, location, date)
 - iii. Follow-up grants or awards
- f. Is the current application a resubmission? If yes, attach previous critique immediately following form Page 5

(6) **<u>Budget and Budget Justification</u>** [not to exceed 2 pages]

- a. An itemized list of all expenses
- b. Justification for the expenses Please note that
 - i. non-student technical or laboratory personnel can be supported, but justification must clearly equate the amount of work with the amount of support requested
 - ii. itemized list and justification should be complete and detailed enough to demonstrate the feasibility of the proposed project
- iii. if the application is successful, the approved budget must be followed. Re-budgeting requests will be considered only in justifiable extenuating circumstances.
- c. If AAOF funds will only be used to support a portion of the proposed work/activities, clearly identify:
 - i. Specific portion(s) of the proposed work/activities for which AAOF support is (are) requested
 - ii. How the remainder of the proposed work/activities will be funded, including other agency/agencies and the amount and nature of support from each agency
 - iii. Fellowships only: If the entire or a large portion of AAOF support is sought for faculty stipend, then alternative source(s) of funding for research and/or faculty development activities must be identified and described.
- d. Funds will not be available from the AAOF to support:
 - i. Travel except for attendance at professional meetings to present findings for supported projects, and/or conduct research projects and/or participation in career development workshop and/or as an invited speaker to a Type 4 CA supported symposium/workshop. The maximum allowable for travel expenses per award is \$2,000. The exception to this is the RAA; see specific RAA application instructions.
 - ii. Faculty salaries (Institutional Percent effort), stipends or tuition except for the Fellow in OFDFA, PFA or CA (Type 4)
 - iii. Supplemental salaries that are in addition to Institutional salary
- (7) <u>Biosketch(es)</u> [not to exceed 4 pages each] (see form template and example provided on pp. 2021-3 to 2021-39 in these guidelines)

A biographical sketch using the format shown in template and example (note: this is the NIH Form 0925-0001 and 0925-0002) should be provided for each applicant and other participant named on the Title Page.

- For OFDFA, PFA categories provide biosketches for:
 the applicant and principal advisor(s)/mentor(s), co-investigator(s) and consultant(s)
- For BRA, CA, RAA categories provide biosketches for:
 the applicant and each investigator and consultant(s)
- (8) Roles of Applicant(s) and Other Participant(s) [not to exceed one page]

The role, responsibilities, and % effort devoted to the proposed project/activities of each applicant and other participant named on the Title Page should be clearly described.

- For OFDFA and PFA categories also describe:
 - o How each advisor/mentor will support and guide the applicant
 - o Plans for meetings between advisor/mentor and applicant
 - o Advisor/mentor's skills, background, and history of success in providing the needed guidance and expertise.

(9) Proposed Plan (4 Required Components)

- (9-1) Abstract [not to exceed 1 page] See directions given for each specific award category
- (9-2) Project Plan(s) See page limits and directions given for each specific award category
 - Resubmission applications only: Include an Introduction (maximum 1 page) at the beginning of the Project Plan(s) section according to the instructions in I.C.8 above.
- (9-3) <u>Timetable</u> [not to exceed 1 page] A proposed timetable for the Project Plan must be included
- (9-4) <u>References</u> [no page limits] All material referred to in the application must be referenced.
- (10) <u>Letters of Support</u> [no page limits] See directions given for each specific award category for required letters. *All categories require letters of support, however, general letters of support from persons not named as referees or not directly involved in the project proposed are not required, are strongly discouraged, and will not be considered during the review process; such extraneous letters should not be solicited by an applicant and should not be sent to the AAOF.*

(11) Appendix Materials [no page limits]

- a. **Human Research:** If applicable, status of human research approval must be stated. If approval has already been obtained, copies of the approval notice should be included. (Indicate N/A if not applicable.)
- b. **Animal Research:** If applicable, status of animal research approval must be stated. If approval has already been obtained, copies of the approval notice should be included. (Indicate N/A if not applicable.)
- c. **Manuscripts and Publications:** A maximum of 3 manuscripts, either published papers or those accepted for publication, that are written by the applicant(s) and are directly relevant to the proposed project may be appended. *Do not include the publications of non-applicants or other participants such as advisors or consultants.*

General Instructions

- 1. Standard page layout for 8½ by 11-inch paper must be used with margins of no less than 1 inch. Line spacing can be no less than single line spaced, and an easy-to-read font of at least 12 pt. should be used. Proposals are to be clipped, i.e., no binders or covers.
- 2. <u>Prior to submission, applicants are strongly encouraged to present their proposal, for evaluation and critique, to colleagues who are knowledgeable in the area of proposed project and/or who are experienced in proposal preparation.</u>
- 3. In order to continue to enhance the quality of future applications, a summary critique will be provided for both funded and unfunded applications. The General Review Criteria (Section E. below) and sample critique form (see 2021-61) are provided to guide you in the optimal preparation of your proposal.

4. <u>Submissions are to</u> consist of one (1) paper copy AND one electronic copy via CD or Thumb Drive (i.e., *NOT as an email attachment*) sent to:

The American Association of Orthodontists Foundation Attention: Foundation Senior Vice President 401 North Lindbergh St. Louis, MO 63141-7816

(We are **NOT** using an online submission website this funding cycle.)

- 5. Applications for 2021 AAOF Awards will be received through **Friday, November 13, 2020**. It is the applicant's responsibility to ensure that the application is received before the deadline.

 Applications received after 5:00 p.m. St. Louis time (CST) on Friday, November 13th will be returned without consideration and without exception. Also returned will be any proposal received from an individual where there has not been submitted the Final Report for a previously funded project by the approved due date, and any proposal from that individual's current institution, unless a No Cost Extension (NCE) has been granted.
- 6. Incomplete applications, or those whose format is not consistent with the prescribed application guidelines, will be returned without evaluation or comment.

E. General Criteria for Evaluating Applications

The scoring system and review criteria to judge the scientific merit of applications have been changed this year and do not reflect those utilized by the NIH which was used in previous years.

- 1. <u>Significance</u>: 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 preventative interventions that drive this field? In the case of OFDFA or PFA, will the funding enhance the applicant's success as an academic orthodontist, teacher, scholar, clinician or the appropriate combination of these in the selected track?
- 2. <u>Investigator</u>: Are investigators and collaborators well suited to carry out the project? If early stage investigators, 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-PI, do the investigators have complementary and integrated expertise? Is the work proposed appropriate to the experience level of the principal investigator and other researchers (if any)? For OFDFA and PFA, are appropriate and optimal teaching, clinical and career development plans provided?
- 3. <u>Innovation</u>: 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 one 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? For OFDFA and PFA, how innovative are the plans provided for teaching, clinical and career development?

- 4. <u>Approach</u>: 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 is in the early stages of development, will the strategy establish feasibility, and will particularly risky aspects be managed? If the project involves clinical research, are the plans for i) protection of human subjects from research risks, and ii) 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? For OFDFA and PFA, are the approaches described likely to enhance success in teaching, clinical and career development?
- 5. Environment: Will the scientific environment in which the work will be done contribute to the probability of success? Are the institutional support, equipment and other physical resources available to the investigators adequate for the project proposed? Will the project benefit from unique features of the scientific environment, subject populations, or collaborative arrangements? Is there evidence of institutional support? For OFDFA and PFA applications, do the principal advisor(s)/mentor(s), co-investigator(s) and consultant(s) selected for research, teaching, clinical and career development have the needed background and required expertise? Similarly, for BRA, CA and RAA, do the co-investigator(s) and consultant(s) have the needed background and required expertise?

6. Success and Productivity of Previous AAOF Funding Provided

F. Notification

After the application deadline is past (November 13, 2020), the applications will be distributed for review and consideration by the AAOF. Applicants will usually be notified of the status of their application in April or May. The funding cycle is from July to June. Funds awarded for a one-year Orthodontic Faculty Development Fellowship Award, the first-year of a multi-year Postdoctoral Fellowship Award, the first year of a multi-year Center Award, and the Research Aid Award are paid in one lump sum (i.e., not in half payments) on or before July 1, assuming the Award Agreement (all category of awards) and Promissory Note (for Postdoctoral Fellowship Awards) have been satisfactorily completed and submitted. For Biomedical Research Awards, the initial funding will consist of one-half of the monetary award; the second one-half of the award will be sent no later than January 31, of the following year, contingent upon receipt of a satisfactory Progress Report from the applicant prior to that time (due on or before December 31 of year of award). All approved proposals must also include a Synopsis and Photo before funding will be sent.

G. General Requirements for Successful Applicants

- 1. Careful adherence to the eligibility criteria for a given award, particularly the years of the applicant's academic career, e.g., OFDFA, years one through five.
- 2. Complete but concise proposal, following the criteria for application review listed on the previous pages.
- 3. Completion of documents required by the AAOF, i.e., Letter of Agreement (all categories of funding) and Promissory Note (Postdoctoral Fellowship Award).
- 4. If human subjects (IRB) or vertebrate animals (IACUC) are involved in the proposed project(s), copy/copies of appropriate review board approval is required before funding is issued; and the

- status of this process must be referenced in the proposal.
- 5. Project successfully started within 12 months of the initial funding. Applicants who cannot begin their projects within 12 months (beginning July 1 of the year of the award) will lose their award and the funds must be returned to the AAOF.
- 6. Submission of required Progress Reports, where applicable. Successful applicants are obligated to submit a Progress Report by December 31, 2021. Progress Reports should be constructed using the recommended form, which is attached (see 2021-54); additional attachments are discouraged. However, Progress Reports are not required for the one-year OFDFA, the one-year option of the Center Award, the one-year option for the PFA, and the RAA; Progress Reports are required for the multi-year option for the PFA, the multi-year CA, and the BRA.
- 7. A Final Report is due at the conclusion of the project for all categories of funding. Final Reports should be prepared as an abstract that summarizes the outcomes of the award using a format similar to the IADR/AADR or that used for the AAO Annual Session Abstracts. These abstracts must be suitable for publication. A Final Report form is attached (see 2021-52). As these Final Reports will be placed on the Foundation's web page, they are to be submitted electronically to aaof@aaortho.org. Once again, failure to provide the AAOF with an acceptable Final Report will result in the principal investigator(s), and perhaps also the PI's current institution, not being eligible for funding the next funding round until a Final Report is submitted to the AAOF and approved by the Foundation's Planning and Awards Review Committee.
- 8. As a condition of accepting an AAOF award, recipients (upon notification of approval for funding and prior to funding being sent) will provide the AAOF with the following, sent via e-mail to aaof@aaortho.org:
 - a. Photograph of Principal Investigator/primary award recipient
 - b. A synopsis (500 words) of their project/research/use of funds, with this synopsis in Word format, (not a PDF file) to include:
 - i. A short biography
 - ii. A brief description of their project and its clinical relevance
 - iii. How orthodontic education will benefit from their award
 - iv. Why the Foundation is important to their project
 - v. How Foundation funding might help advance your career and/or the specialty, and how it has helped advance your career and/or the specialty, if you have received AAOF funding in the past.
- 9. In addition, the AAOF reserves the right to submit (or request that the successful applicant submit) information about the study and results of the study to the <u>American Journal of Orthodontics and Dentofacial Orthopedics</u>, the <u>AAO Bulletin</u>, <u>AAOF News</u>, or Constituent Society newsletters for possible publication. Successful applicants may also be invited to present their research at an annual meeting of the American Association of Orthodontists or at Constituent meetings. The AAOF reserves the right to participate in profits, in proportion to the AAOF contribution of financial assistance, that result from an AAOF supported project.

Specific Application Guidelines

II. SUPPORT FOR JUNIOR FACULTY

Fellowship Awards

Fellowship Awards offered in 2021 are as follows:

- Orthodontic Faculty Development Fellowship Awards One-Year Funding Option only, i.e., three-Year Option is NOT offered in 2021.
- Postdoctoral Fellowship Award

A. ORTHODONTIC FACULTY DEVELOPMENT FELLOWSHIP AWARDS (OFDFA)

General Description

The OFDFA is designed to encourage orthodontic students and graduates to pursue careers in orthodontic education and support the development of junior faculty. It is felt that the clinical investigator and scientist must be supported to encourage and enable them to develop their teaching, patient care, and research activities to their highest potential; this, in great measure, will enable excellence in orthodontic education and progress for the specialty.

The OFDFA provides this support to individuals engaged in orthodontic training leading to a Master of Science, Ph.D. or other higher degree, an orthodontic graduate involved in postdoctoral research projects, and junior full-time faculty serving in an orthodontic department. Fellowship Awards are intended only for those committed to a career in orthodontic teaching and/or research.

Funding for the OFDFA is available for those within the first five years of their initial full-time academic careers and is allowed for a maximum of three years. For the purposes of determining when full-time academic appointments began, this only includes full-time appointments at U.S. or Canadian institutions. *Past recipients of the PFA are not eligible for the OFDFA*.

Note: The overlap in eligibility between the BRA (years three to retirement) and OFDFA (years one to five) is by design to allow for a certain amount of flexibility between junior and mid-career faculty transition.

The Call for Proposals (CFP) within this and all other 2021 funding mechanisms is as follows:

- The Study of the Business of Orthodontic Practice See section XVI for more information
- The Study of COVID-19 related Outcomes See section XVII for more information.

If a proposal is sent in response to the CFP, this must be clearly evident.

Maximum funding amount for 2021 is \$20,000/maximum of 2 proposals per year per program.

Eligibility

OFDFA are intended for those individuals who are preparing for beginning a career in orthodontic education in the U.S. and Canada, i.e., students or junior faculty. Consequently, Fellowship Awards

are available to:

- 1. U.S. and Canadian citizens
- 2. Foreign nationals who possess a U.S. "green card" or its Canadian equivalent
- 3. Those foreign nationals not yet in possession of a U.S. "green card" or its Canadian equivalent, as long as the applicant and the institution will stipulate that obtaining such status is the applicant's intention and where there is demonstrable evidence of this intent.

Note: The actual term is 'resident alien' which carries an I-151 status (passport stamp) or a "resident alien card", known as green card.

Individuals Preparing for a Career in Orthodontic Education

Individuals are eligible for an OFDFA if they are enrolled in an accredited orthodontic program in the U.S. or Canada, or if they have graduated from an accredited orthodontic program in the U.S. or Canada. Such individuals must be pursuing a Master of Science degree, Ph.D. or higher degree (in an area relevant to orthodontics), or a formal postdoctoral program. However, funding is only available to such individuals if they have a letter of commitment from their institution, as of July 1 of their funding year, stating that there is a full-time faculty position being held for them; otherwise Fellowship Awards are not currently available to residents.

Individuals Starting a Career in Orthodontic Education

A faculty member employed in an orthodontic department will be eligible for an OFDFA during the first five years of his or her initial teaching career; however, a commitment to full-time education is essential for an equal number of years the award was active. Applicants must be orthodontists and considered full-time faculty members by their institution. Normally, such awards will be restricted to faculty who hold the Assistant Professor academic rank (i.e., "junior" faculty).

The OFDFA is not available to support sabbaticals or visiting faculty programs and not available to past PFA recipients. Institutions may not have more than two faculty members supported by an AAOF OFDFA at any one time.

An applicant may not apply for awards in two different categories during any one year at the level of PI or Co-PI (i.e., as a person who has/shares ultimate responsibility for the conduct of two projects), except as noted below in italics; and a maximum of two OFDFA proposals will be accepted per school in any year. In the case of a three-year OFDFA and the two-year PFA, the school may not reapply until the funded Fellowship has been completed. However, PFA applicants are allowed to submit two applications, i.e., one for the PFA and another for an award offering less funding (either OFDFA or BRA), so that, in the event that the PFA is denied, the applicant would still have the possibility of other funding.

Specific Instructions for the OFDFA Application

See ITEM D in Section I. General Application Guidelines for Required Components (1-11) and

General Instructions; specific instructions for Required Components (9-1), (9-2) of the Proposed Plan and (10) Letters of Support are as follows:

- (9-1) <u>Abstract</u> [not to exceed 1 page] Include Overall Objectives and Specific Aims for the proposed developmental plans to meet career goals: The applicant must provide a statement of career goals as an educator or researcher or both. The development plans must include activities in four main categories (educational, research, teaching and clinical).
- (9-2) <u>Project Plans</u> [not to exceed 6 pages in total] A synopsis of the proposed faculty development plan should be provided in four main categories (educational, research, teaching and clinical). The activities and responsibilities of the Fellow should be clearly described. It is anticipated that the descriptions provided in this section will vary depending on the status of the applicant (e.g., student in training, junior faculty member). Greater detail should be provided for any one or more of the above four categories that represent an area of emphasis for the Fellow (i.e. a research-focused applicant will describe the research plan in detail). Principal Advisors should be identified for key development areas and their involvement in the Fellow's development demonstrated through a letter of support and review of the grant prior to submission. This section must include descriptions of the following sufficient to evaluate the proposal:
 - i. **Educational Plan** [not to exceed 1 page]: Describe any educational program in which the Fellow will be engaged. This should include a list of specific courses/seminars to be taken, the credit hours anticipated and if this will result in a degree or certificate being awarded. Specifics of how these didactic activities will enhance the applicant's career as an academic orthodontist should be provided.
 - ii. **Research Plan** [not to exceed 3 pages]: Describe any planned or on-going research projects. If research is a significant component of the applicant's career development plan, the research description should include a hypothesis-driven or hypothesis-generating proposal with background, specific aims, preliminary studies (if any have been completed), experimental design and methods, anticipated data and statistical analyses, and alternative approaches if outcomes are not as expected.
- iii. **Teaching Skills Plan** [not to exceed 1 page]: Describe the plan for development of teaching abilities. This plan should include a description of any formal teaching coursework or mentorship, peer-review activities, participation in workshops, etc.
- iv. Clinical Skills Plan [not to exceed 1 page]: Describe the plan for development regarding clinical skills and patient care. This plan should include, for example, coursework specific to clinical competencies, completion of board certification, etc.

(10) <u>Letters of Support</u> [no page limits]

- a. At least three letters of support, which address the candidate's present abilities, future potential, and the candidate's qualifications to satisfy the goals of the OFDFA, including the statement that the applicant is within years one-five of his/her full-time academic career as the beginning of the funding period, i.e., July 1, 2021.
- b. Principal advisor(s)/mentor(s), co-investigator(s), and consultant(s) a letter acknowledging proposed participation and plans for support is required from each individual named on title page other than applicant
- c. Evidence of institutional commitment to the developmental plan (e.g., in the form of a letter of support from an appropriate institutional official/officials) is required.
- d. If the applicant is/will be affiliated with a department, a letter from the chairman of the applicant's department must be included that offers support for the applicant, specifies that the time necessary to conduct the Plan will be made available to the applicant, and confirms that

the applicant is/will be considered to be a full-time faculty member by their institution as of July 1, 2021.

Award-specific Considerations for the OFDFA

Besides following ITEM D in Section I (General Application Guidelines) and Specific Instructions provided above, the format, organization and content of the application should incorporate specific elements indicated below

- 1. Quality of the plan presented for training and development of the applicant including
 - a. Educational goals and how these will be accomplished
 - b. Research goals and methodology
 - c. Enhancement of teaching and clinical skills
 - d. Advisor(s) or Mentor(s) as described in the required component (Section I.D.8) Roles of Applicant(s) and Other Participant(s):
 - How each advisor/mentor will support and guide the applicant
 - o Plans for meetings between advisor/mentor and applicant
 - o Advisor/mentor's skills, background, and history of success in providing the needed guidance and expertise
- 2. Description of facilities and equipment available that allows for fulfillment of goals outlined
- 3. Realistic timeline for completion of goals (the timeline does not need to match the funding period but should be estimated in advance)
- 4. Potential of the applicant to become a productive educator
- 5. Needs of the institution
- 6. Level of institutional support, including
 - a. Resources such as space and equipment that will facilitate the project and professional development
 - b. A mentor or mentors with appropriate credentials, adequate time and stated commitment to nurture the fellow's development
 - c. Protected time for professional development

Applicants must understand that the mere circumstance of being a faculty member is considered of far less importance than are the plans for further development. Departmental involvement in the applicant's development plans is strongly encouraged. Furthermore, evidence of institutional support in implementing the development plans (e.g., in the form of a letter of support from the appropriate Institutional Officials), is required.

Specific Requirements for Successful OFDFA Applicants

If the successful applicant's development plan includes being hired as full-time faculty in an orthodontic program as part of the plan (or remaining in such a program), and the applicant fails to be hired or leaves the institution, the applicant must notify the AAOF in writing immediately, and the OFDFA will be withdrawn.

OFDFA funds supplied by the AAOF will be considered an Award, Gift, or a combination of the two (Gift = Salaried portion and award = non salaried portion). If the recipient fails to complete the fellowship program outlined in the application documents (Project Plans) or fails to be subsequently and continuously employed for one (1) year as a full-time orthodontic educator for each one (1) year period that the recipient was supported by the AAOF, then the applicant/university is responsible for the return of the non-salaried (Award) amount of the funds back to AAOF.

The determination of tax liability regarding funds provided as a Fellowship will be the responsibility of the Fellow. The AAOF will not participate in determination of tax liability and will bear no responsibility for payment of appropriate taxes. The AAOF will follow available law regarding the reporting of funds distributed. Where the provision of funds might be considered a violation of state/province or federal law, the award is canceled and must be returned.

B. POSTDOCTORAL FELLOWSHIP AWARD (PFA)

General Description

Recognizing the shortage of orthodontic research scientists and the attendant shortage of postdoctoral funding to adequately support the development of persons attempting to pursue this career path, the AAOF has proposed this award. The purpose of the mentored postdoctoral orthodontic development award is to support the development of outstanding orthodontic research scientists. This mechanism provides specialized study for dentists holding an orthodontic certificate from an ADA-accredited or CDA-accredited program and a doctorate (PhD, DMSc or equivalent) committed to pursuing postdoctoral training in laboratory or clinical research. Candidates must demonstrate strong potential to develop into externally funded independent investigators (e.g. by NIH). This award supports a two to three-year period of supervised research experience beyond graduate school that may integrate laboratory or clinically based research with limited clinical practice. The proposed research must have intrinsic research importance as well as serve as a suitable vehicle for learning the methodology, theories, and conceptualizations necessary for a well-trained independent researcher.

The Call for Proposals (CFP) within this and all other 2021 funding mechanisms is as follows:

- The Study of the Business of Orthodontic Practice See section XVI for more information
- The Study of COVID-19 related Outcomes See section XVII for more information.

If a proposal is sent in response to the CFP, this must be clearly evident. Maximum of \$50,000 per year for a maximum of two years; only one such proposal per year per program. Reapplication for a third year is permissible to extend a successful two-year PFA, but past recipients of the PFA are not eligible to reapply for a second PFA.

Eligibility

PFA are intended for those individuals who are preparing for beginning a research-intensive career in orthodontics in the U.S. or Canada, i.e., students or junior faculty, respectively. Consequently, Fellowship Awards are available to:

- 1. U.S. and Canadian citizens
- 2. Foreign nationals who possess a U.S. "green card" or its Canadian equivalent
- 3. Those foreign nationals not yet in possession of a U.S. "green card" or its Canadian equivalent, as long as the applicant and the institution will stipulate that obtaining such status is the applicant's intention and where there is demonstrable evidence of this intent.

Note: The actual term is 'resident alien' which carries an I-151 status (passport stamp) or a "resident alien card", known as green card.

Specific Instructions for the PFA Application

Applications for this Category should follow D in Section I. General Application Guidelines for Required Components and General Instructions and the specific instructions for OFDFA applicants as

described above (Section II.A) except for the following page limits:

(9-2) Project Plans [not to exceed 10 pages in total]

Educational Plan [not to exceed 1 page]

Research Plan [not to exceed 7 pages]

Teaching Skills Plan [not to exceed 1 page]

Clinical Skills Plan [not to exceed 1 page]

In addition, PFA applicants should address the following specific guidelines that should be incorporated into one or more of the sections of the Project Plans:

- 1. <u>Fellow</u>: Applicants must be dentists with specialty training in orthodontics obtained in an ADA or CDA accredited program <u>and</u> hold a doctorate (PhD, DMSc or equivalent) degree. Candidates must have strong potential to develop into independent investigators.
- 2. <u>Environment</u>: The institution must have a well-established research and clinical career development program and qualified faculty in clinical or basic research to serve as mentors. The institution must be able to demonstrate a commitment to the development of the candidate as a productive, independent investigator.
- 3. <u>Program</u>: The award provides money for a two-year period. In exceptional circumstances, the award may be extended for a third year. At least 75 percent of the recipient's full-time professional effort must be devoted to the goals of this award. The remainder of the applicant's time may be devoted to clinical, teaching, or other research pursuits consistent with the development of a full-time orthodontic faculty member.
- 4. Mentor: Fellows must name a primary mentor, who together with the applicant is responsible for the planning, direction, and execution of the program. The mentor should be recognized as an accomplished investigator in the proposed research area and have a track record of success in extramural funding and training independent investigators. The mentor should have sufficient independent research support to cover the costs of the proposed research project in excess of the allowable costs of this award. The mentor must write a strong letter of support outlining the expectations of progress and indicating the likelihood of additional support once the AAOF-funded fellowship ends. Candidates may also nominate co-mentors as appropriate to the goals of the program.
- 5. Funding: A total of \$50,000 will be awarded for the first year at the beginning of the budget period. A detailed budget is required (see Required Components). Funds for the second year will be awarded on a non-competitive basis pending adequate progress as demonstrated by Progress Reports submitted to AAOF for review. Funding for a possible third year will be awarded on a competitive basis and will require a new application submitted to AAOF, which is to include detailed evidence of the fellow's productivity resulting from the previous PFA (e.g. publications, presentations, grant applications submitted and awarded) and a letter from the fellow's primary mentor verifying the productivity resulting from the previous award.
- 6. An applicant may not apply for awards in two different categories during any one year at the level of PI or Co-PI (i.e., as a person who has/shares ultimate responsibility for the conduct of two projects). Only one PFA proposal will be accepted per school in any year. In the case of a three-year OFDFA and the two-year PFA, the school may not reapply until the funded Fellowship has been completed. *However*, *PFA applicants are allowed to submit two applications, i.e., one for the PFA and another for an award offering less funding (either OFDFA or BRA), so that, in the event*

Award-specific Considerations for the PFA

Besides following the instructions in Section I.D. General Application Guidelines and Specific Instructions provided above, the format, organization and content of the application should incorporate specific elements indicated below

- 1. Quality of the plan presented for training and development of the applicant including
 - b. Educational goals and how these will be accomplished
 - c. Research goals and methodology
 - d. Enhancement of teaching and clinical skills
 - e. Advisor(s) or Mentor(s) in the required component (as described in Section 1.D.8) Roles of Applicant(s) and Other Participant(s) describe:
 - O How each advisor/mentor will support and guide the applicant
 - o Plans for meetings between advisor/mentor and applicant
 - o Advisor/mentor's skills, background, and history of success in providing mentorship and career guidance.
- 2. Description of facilities and equipment available that allow for fulfillment of goals outlined
- 3. Realistic timeline for completion of goals (the timeline does not need to match the funding period but should be estimated in advance)
- 4. Potential of the applicant to become an independent investigator
- 5. Needs of the institution
- 6. Level of institutional support, including
 - a. Resources such as space and equipment that will facilitate the project and professional development
 - b. A mentor or mentors with appropriate credentials, adequate time and stated commitment to nurture the fellow's development
 - c. Protected time for professional development

Specific Requirements for Successful PFA Applicants

PFA funds supplied by the AAOF will be considered an "Award" if the recipient successfully completes the fellowship program outlined in the application documents (Project Plans) and is subsequently employed continuously for one (1) year (i.e., 12 months) as a full-time orthodontic educator for each one (1) year period (i.e., 12 months) that the recipient was supported by the AAOF ("full-time" will be defined by the employing institution). In this situation, the funds received from the AAOF will be considered an "Award" in that the recipient is absolved of all responsibility to repay the funds provided by the AAOF. However, if the recipient fails to complete the fellowship program outlined in the application documents (Project Plans) or fails to be subsequently and continuously employed for one (1) year as a full-time orthodontic educator for each one (1) year period that the recipient was supported by the AAOF, then the recipient shall be liable for up to the total amount of the funds provided by the AAOF, plus interest (not to exceed the St. Louis prime rate). In this latter instance, the funds provided by the AAOF are considered a "Loan."

The determination of tax liability regarding funds provided as a Fellowship will be the responsibility of the Fellow. The AAOF will not participate in determination of tax liability and will bear no responsibility for payment of appropriate taxes. The AAOF will follow available law regarding the reporting of funds distributed. Where the provision of funds might be considered a violation of state/province or federal law, the award is canceled and must be returned.

III. SUPPORT FOR MID-CAREER/SENIOR FACULTY

A. BIOMEDICAL RESEARCH AWARDS (BRA)

General Description

The AAOF solicits investigator-initiated applications on a wide range of research topics pertaining to orthodontics and/or craniofacial biology. The BRA is designed to assist mid-career and senior faculty in the U.S. and Canada to conduct independent research activities. Such activities are critical for academic and faculty development in orthodontic graduate programs. BRA proposals are generally expected to be either (i) small, well-defined and self-contained studies leading to publications in professional or scientific journals or (ii) pilot and feasibility studies to generate preliminary data in preparation of larger grant proposals to NIH or other research funding organizations. The decision to fund any given BRA application is based on scientific merit and available funds. The subject of investigation may be determined by the applicant for 2021. The maximum award for this type of project is \$30,000.00.

The Call for Proposals (CFP) within this and all other 2021 funding mechanisms is as follows:

- The Study of the Business of Orthodontic Practice See section XVI for more information
- The Study of COVID-19 related Outcomes See section XVII for more information.

If a proposal is sent in response to the CFP, this must be clearly evident.

Eligibility

The BRA is available to full-time orthodontic faculty who are in years three and above of their academic careers. (Beginning in 2021, the previous ceilings of "up to 14 years" in academics and academic rank have been removed.) Applicants are required to produce evidence for institutional commitment to the project in the form of a letter of support from appropriate institutional official/officials.

Applicants who are AAO members who serve as a member of an American Cleft Palate-Craniofacial Association (ACPA) accredited Cleft/Craniofacial Team affiliated with an Academic Institution or Hospital are also eligible to apply. These applicants must be engaged in teaching activities at their institution/hospital and this must be verified in the letter/letters of support from an institutional official and/or chair or supervisor (see (10)b. and c. below).

Those who are in the early stages of their academic careers are strongly encouraged to have more senior faculty who are established investigators as designated research advisors/mentors.

Residents interested in an academic career or faculty in years one-three of their teaching careers are encouraged to apply for the RAA (see 2021-29) and/or OFDFA (see 2021-11) rather than the BRA.

In addition, BRA applicants must be:

- 1. U.S. or Canadian citizens
- 2. Permanent residents (also known as "resident aliens") who possess a U.S. "green card" or its Canadian equivalent

3. Those foreign nationals not yet in possession of a U.S. "green card" or its Canadian equivalent, as long as the applicant and the institution will stipulate that obtaining such status is the applicant's intention and where there is demonstrable evidence of this intent.

An applicant may not apply for awards in two different categories during any one year at the level of PI or Co-PI (i.e., as a person who has/shares ultimate responsibility for the conduct of two projects), except as noted below in italics; and there is no limit to the number of BRA proposals per program. However, PFA applicants are allowed to submit two applications, i.e., one for the PFA and another for an award offering less funding (either OFDFA or BRA), so that, in the event that the PFA is denied, the applicant would still have the possibility of other funding. The overlap in eligibility between the BRA (years three and above) and OFDFA (years one to five) is by design to allow for a certain amount of flexibility between junior and mid-career faculty transition.

Specific Instructions for the BRA Application

See Section I.D. General Application Guidelines for Required Components and General Instructions; Specific instructions for Required Components (9-1), (9-2) of the Proposed Plan and (10) Letters of Support are as follows:

- (9-1) <u>Abstract</u> [not to exceed 1 page]: Include Overall Objectives and Specific Aims plus state the broad, long-term objectives of the project and describe concisely what the specific research project is intended to accomplish. Applicants must state precisely and clearly the questions that the research will attempt to answer and any hypotheses to be tested. A summary of the clinical implications or significance should be provided
- (9-2) <u>Project Plan</u> [not to exceed 10 pages]: This section must include descriptions of the following sufficient to evaluate the proposal:
- a. Background and significance, including an explanation of potential relevance to the clinical practice of orthodontics
- b. Preliminary studies
- c. Experimental design, methods, and statistical analyses planned
- d. Expected outcomes
- e. Alternative approaches if outcomes are not as expected

(10) Letters of Support [no page limits]

- a. Co-investigator(s) and consultant(s) a letter acknowledging proposed participation and plans for support is required from each individual named on title page other than applicant
- b. Evidence of institutional commitment to the project (e.g., in the form of a letter of support from an appropriate institutional official/officials) is required.
- c. If the applicant is affiliated with a department, a letter from the chairman of the applicant's department must be included that offers support for the applicant, specifies that the time necessary to conduct the project will be made available to the applicant, and confirms that the applicant will be in years three or above of his/her full-time teaching career as of July 1, 2021.

Award-specific considerations for the BRA

- 1. Significance and originality of the project or approach, which is justified in the introduction and supported with references where appropriate
- 2. Specific aims

- 3. Methods that include validated techniques or procedures for validation
- 4. Adequacy of study design that includes detailed methods, outcome measures and statistics to be used
- 5. Realistic timeline for completion (the timeline does not need to match the funding period but should be estimated in advance)
- 6. Experience and competence of the applicants
- 7. Adequacy of facilities, including equipment
- 8. Value of the project to the clinician, educator, or the profession of orthodontics
- 9. Evidence of institutional support

B. CENTER AWARDS (CA)

General Description

Unlike support directed at individuals, CAs are available to support groups of individuals who will collaborate in the conduct of related research projects which share a common focus. The potential value of such collaborations is high as they provide opportunity for interaction among investigators, integration of abilities, and efficiency in the utilization of resources.

Four types of CA support will be considered by the AAOF:

- 1. Type 1: At some institutions, talented individuals exist who wish to initiate collaborative investigations but lack the necessary resources, e.g., general support or "seed" funds, funds to acquire specialized equipment, etc. In such instances, a CA could be requested to enable the creation of a "center" of investigation and the initiation of collaborative research.
- 2. Type 2: At other institutions, various institutes, centers, or research groups are already formed that focus their efforts on specific problem areas in orthodontics. In support of such established "centers" of investigation, funds could be requested to support ongoing research or enable new initiatives.
- 3. Type 3: CA may also be used to support the establishment, maintenance, and development of special collections of materials and databases pertinent to orthodontics. In this type of "center," priority will be given to plans that place emphasis on the development, dissemination, and use of information derived from collections and databases. Efforts that effect the conversion of information to formats that can be easily and widely distributed, and readily used by investigators at other locations, will be considered particularly important (e.g., conversion of images from an analogue to a digital format and availability over the Internet).
- 4. Type 4: Given the interest from several groups in this mechanism of funding, the AAOF is issuing a call for applications to the Type 4 Center Award Planning Grant funding mechanism. Through this mechanism the AAOF aspires to support activities or projects that are designed to advance the specialty of orthodontics via innovative discoveries and dissemination of knowledge. These projects will involve collaboration among orthodontic academicians from different institutions, with or without the participation of orthodontic industry. The purpose of the projects will be the discussion, critique and dissemination of novel discoveries and ideas. Collaborative approaches, rather than a collection of discrete independent applications, will be given priority.

While recognizing the difficulty in preparing a proposal that would address all these criteria, the AAOF is interested in funding an application for a Type 4/Center Award Planning Grant which includes the following to the greatest extent possible:

- 1. Collaboration between orthodontic faculty, departments, and where appropriate industry.
- 2. Organizational efforts (e.g., conferences, seminars, workshops) to share the available information that has the potential to advance the field.
- 3. Subsequent dissemination of shared information and discoveries accessible to orthodontic scholars and practitioners worldwide in a usable and practical manner.

Experience shows organized conferences are attended by only a select handful of people. Additionally, the impact factor of any journal where proceedings are published does not automatically imply dissemination. Accordingly, the AAOF supports collaboration between interested parties towards the delivery of presentations and discussions of innovations and novel discoveries at conferences, seminars or workshops that are combined with creative means of disseminating the generated information to as broad an audience of stake holders as possible. It is expected that orthodontic scientists, clinicians and possibly publishing establishments shall collaborate with the aid of this award.

Background to Type 4:

Since the introduction and subsequent success of the AAO Foundation Craniofacial Growth Legacy Collection Project ("Collections Project"), requests to fund organized activities to advance the field of orthodontics through innovation, discovery and dissemination of such knowledge have increased. Accordingly, the purpose of this CA type is to try to consolidate similar events between different entities and institutions to minimize duplication of effort and expenses, and to maximize participation. The AAOF has applied this approach (i.e., the Planning Grant mechanism) previously to good effect in the Collections Project and, most recently, in the Educational Innovation Award (EIA), among others. Indeed, it is expected that the Type 4 Planning Grant will nucleate collaboration and sharing of core resources to create a community of orthodontic scholars and clinicians where discoveries, innovations, and advances are more coordinated and focused. Supporting such a community is a strong benefit to the specialty and a most desirable activity for the AAOF.

Applicants interested in submitting a proposal for this Planning Grant are encouraged to thoroughly investigate what may already be in existence, *e.g.*, through the NIH/NIDCR, AAOF, other foundations, any other governmental or private funding institutions, similar recent conferences or workshops, and the like to ensure lack of duplication or redundancy. Applicants should note in their proposals what sources have been reviewed and considered as part of the overall plan to demonstrate the uniqueness of the approach and proposal. Additionally, where complementary or supporting resources are already in place, they are encouraged to indicate how these resources may be integrated into the current application to enhance its outcomes.

For Types 1, 2 & 3 Center Awards, (see above), \$25,000 is the maximum amount of support available per year; one-three years of support may be requested, for a total maximum of \$75,000 per proposal. Recipients must provide a progress report at the end of six months of support, and then yearly for each year of support, if the proposal is for more than one year's funding. Decisions to continue funding for multiple years will be based on assessments of the progress reports, rather than formal reapplication. Funding will be discontinued if progress and accomplishment is not demonstrated at the specified intervals. A genuinely cooperative and collaborative undertaking as noted in the description of this offering is required and not merely an expanded BRA proposal.

The Call for Proposals (CFP) within this and all other 2021 funding mechanisms is as follows:

- The Study of the Business of Orthodontic Practice See section XVI for more information
- The Study of COVID-19 related Outcomes See section XVII for more information.

If a proposal is sent in response to the CFP, this must be clearly evident.

As with the Applicant Defined Types 1, 2 & 3 CA proposals, \$25,000 is the maximum amount of

support available per year for a CFP application; one-three years of support may be requested.

For Type 4/Center Award, this is a Call for Proposals for a Planning Grant, with a maximum of \$50,000 available for a maximum of 24 months. Successful delivery of the goals of this Center Award by successful application(s) during the Planning Grant phase will determine ongoing future funding of this CA type to sustain long-term viability of this endeavor.

Eligibility

For Types 1, and 2 CA noted above, only accredited orthodontic programs in the U.S. and Canada will be considered.

For Type 3, collections, databases, etc. need not be affiliated with a graduate orthodontic residency program, but they must still be located/housed/operated from the U.S or Canada. An applicant may not apply for awards in two different categories during any one year (e.g., an applicant may not apply for a BRA and a CA during the same year).

For Type 4, Individuals with the proven experience and expertise necessary to lead the proposed Planning Grant project(s) may apply with the ambition and focus on discussion, critique and dissemination of information to advance the specialty. A plan of collaboration amongst orthodontic scholars, institutions and related entities, and possibly publishers must be the core of the application. At least one of the collaborators must be from an U.S. or Canadian graduate orthodontic residency program. (Note: Full-time faculty status is not a requirement, as long as there is an affiliation, and publishing houses may be society journals, websites, and the like, or independent/private).

Several collaborators or Principal Investigators (PIs), if appropriate, may be designated on the application for projects that require a team approach to effectively implement the program. For administrative purposes, however, a primary contact PI should be identified for each such application. The decision of whether to apply for an award with a single or multiple PIs is the responsibility of the applicants and their collaborators. The number and background of PIs should support the goals stated in the application package. In the multiple PI option, applicants must be specific about the structure and governance of the PI leadership team. The AAOF shall understand multiple PIs on a project share the responsibility for leading and directing the project. Each PI is responsible and accountable for the proper conduct of the program, including the submission of required reports.

Specific Instructions for the CA Application

See Section I.D. General Application Guidelines for Required Components and General Instructions; specific instructions for Required Components (9-1), (9-2) of the Proposed Plan and (10) Letters of Support are as follows:

For CA Types 1 and 2:

(9-1) <u>Abstract</u> [not to exceed 1 page]: Include Overall Objectives and Specific Aims plus state the broad, long-term objectives of the project and describe concisely what the specific research project is intended to accomplish. Applicants must state precisely and clearly the questions that the research will attempt to answer and any hypotheses to be tested. A summary of the clinical implications or significance should be provided.

- (9-2) <u>Project Plan</u> [not to exceed 10 pages]: This section must include descriptions of the following sufficient to evaluate the proposal:
- a. Background and significance, including an explanation of potential relevance to the clinical practice of orthodontics
- b. Preliminary studies
- c. Experimental design, methods, and statistical analyses planned
- d. Expected outcomes
- e. Alternative approaches if outcomes are not as expected

For CA Type 3:

- (9-1) <u>Abstract</u> [not to exceed 1 page]: Include Overall Objectives and Specific Aims plus state the broad, long-term objectives of the project and describe concisely what the specific collection project is intended to accomplish. Applicants must state precisely and clearly the significance and future worth of the collection to the specialty. A summary of the clinical implications or significance of the collection should be provided.
- (9-2) <u>Project Plan</u> [not to exceed 10 pages]: This section must include descriptions of the following sufficient to evaluate the proposal:
- a. Background and significance, including an explanation of potential relevance to the clinical practice of orthodontics
- b. Preliminary activities
- c. Description of what the collection entails and what is needed to develop and preserve it
- d. Description of how the collection will be made available, accessed and shared in future. Project plans that request support for mere storage of a collection will be considered with low enthusiasm. Project Plans that place emphasis on the development, distribution, and use of information derived from collections and databases will be considered with much greater enthusiasm. Efforts that effect the conversion of information to formats that can be easily and widely distributed, and readily used by investigators at other locations, will be considered particularly important (e.g., conversion of images and material from analogue to a digital format and availability over the Internet).

For CA Type 4:

- (9-1) Abstract [not to exceed 1 page]: A synopsis of the proposed project(s) should include the goals of the Planning Grant. It must be a description of how goals could be achieved (effective dissemination) over time, and specific aims of the proposal, along with a concise description of the approach for achieving the goals desired. The abstract should also include a statement of expected outcomes. Also desirable is how these will be measured and applied to any future more comprehensive subsequent projects, keeping in mind that the Planning Grant might be considered Stage One of a much larger, Stage Two project, using, again, the models of the Collections Project and the EIA. (See further discussion below.) A statement about the significance and likely impact of this application should be included. The abstract is meant to stand independently and serve as a succinct and accurate description of the proposed project(s), and vision of the PIs.
- (9-2) <u>Project Plan</u> [not to exceed 10 pages]: This section must include descriptions of the following sufficient to evaluate the proposal:
 - a. Overall Objectives and Specific Aims (not to exceed 1 page): Applicant(s) must state the goals of the Planning Grant, describe concisely what the specific planning project is intended to accomplish, and how the dissemination will be carried-out. Also include a

- statement about the expected long-term objectives and the next step(s) of the endeavor. The focus areas of the Type 4 Award should be clearly identified.
- b. This section will consist of the following three topics: detailed description of the planning period activities, a plan for outcome assessment, and long-term future plan.
- c. Planning Period Activities:
 - i. Planning Activities Specify how the planning period, which the AAOF expects to take no more than 18-24 months, will be spent. The application should include the specific aims for the planning period, and descriptions of the gathering of specific innovation and discovery, and how the dissemination activities shall be carried out.
 - ii. Rationale/Significance Provide the rationale for the proposed program under each aim, documenting the significance and potential impact of the programs to advance the specialty.
 - iii. Approach Under each specific aim, provide the detailed plans for each activity to achieve the aim, including logistical arrangements and/or the format for the specific programs. Describe the composition and role of the key participants, committee, and organizations, including their credentials and the basis for their inclusion. Sufficient information should be provided to allow reviewers to evaluate how the specific programs/activities would be conducted during the planning periods.
 - iv. The application must address the availability of the novel innovations and discoveries to orthodontic specialty and how disseminated information might benefit the advancing of orthodontics.
 - v. Investigators and organizers The application must include a description of the leadership and proposed organization of the project. This includes the ability of the PI(s) to bring together the necessary co-participants, scientists, clinicians and needed expertise, and to organize appropriate gatherings, symposia, etc., where planned. The application should describe the participants in the planning process, their roles in the development of the plan, and their prior experiences that make them suitable for their roles in the implementation of the proposed program or activities.

d. Outcome Assessment:

i. Describe how the outcomes of the Type 4 Award will be measured for each specific aim. Also, indicate potential problems/challenges anticipated and how they will be addressed during the project or in any subsequent expansion of the project beyond the Planning Grant phase.

e. Future Plan:

i. The future plan is a critical component of the Type 4 planning grant. Thus, the proposal must include the future plan for the subsequent year(s). Provide a plausible vision for the three to five years following the initial planning period in as much detail as possible. Examples include expansion of the project, potential changes in key participants, potential budgetary changes, and contingency plans for future programs dependent on the outcome of the initial planning project. Approval of the planning grant application does not constitute automatic approval for the future years. Funding for the future years will require full review by the Foundation.

Type 4 only - Special Budget Guidelines:

Allowable Costs: Salaries in proportion to the time or effort spent directly on the project; travel and per diem or subsistence allowances; supplies needed for administration of the program, only if received for use during the budget period; support of publication costs.

Non-allowable Costs: Purchase of equipment; transportation costs exceeding coach class fares; entertainment; tips; bar charges; personal charges; organization dues; production of illustrations for publication; faculty salaries; student stipends; honoraria or other payments for the purpose of conferring distinction or communicating respect, esteem or admiration; and patient care. While budgeting support of publication costs <u>is</u> an allowable expense, applicants are reminded that these costs, if proposed must be explained and justified with a strong rationale and demonstration of what other lower-cost alternatives have been considered.

Budget for the Subsequent Period - The Type 4/Center Award Planning Grant is an important part of the process of determining if even more substantial funding is indicated for a further expansion of this project, long-term, and this same model was followed for both the Collections Project and the recent EIA; while the AAOF does not wish to make a firm commitment at this time, after successful completion of their Planning Grant stages, the aforementioned EIA was approved, conditionally, for \$250,000, and the Collections Project for \$1.5 Million. Reviewers would welcome seeing some indication of what each Planning Grant proposal conceives of the total project's ultimate cost, using the EIA and the Collections Project as examples, i.e., the Planning Grant might be considered Stage One of a larger project, with the Stage Two component perhaps being budgeted at, for example, \$250,000 or more, if justified.

For all CA Types

(10) Letters of Support (no page limitations)

- a. Co-investigator(s) and consultant(s) a letter acknowledging proposed participation and plans for support is required from each individual named on title page other than applicant(s)
- b. Evidence of institutional commitment to the project (e.g., in the form of a letter of support from an appropriate institutional official/officials) is required.
- c. If the applicant is affiliated with a department, a letter from the chairman of the applicant's department must be included that offers support for the applicant, specifies that the time necessary to conduct the project will be made available to the applicant, and confirms additional funding sources if any (consistent with Budget & Budget Justification).

IV. RESEARCH AID AWARDS (RAA)

General Description

RAA were originally intended so that the AAOF might arrange or provide the necessary resources so that a practitioner might be supplied with appropriate expertise in designing, conducting and analyzing studies carried out in private practice as noted immediately below:

Institutions generally have considerable resources (i.e. materials, laboratories, and people with specialized expertise) from which researchers may draw in order to conduct investigations. Individuals in clinical practice seldom have the same level of access to resources. Thus, while good ideas and appropriate materials for study may be available in practice, it is somewhat difficult for a private practitioner to carry out well-designed research projects. In order to strongly encourage orthodontists in private practice to consider the initiation of a research project, the AAOF created this award category so that resources could be directed toward establishing a productive relationship between interested clinicians and cooperating research collaborators (e.g., orthodontic faculty, researchers, statisticians).

However, beginning in 2013, the RAA was expanded to include proposals submitted by orthodontic residents interested in an academic career and part-time faculty, including part-time clinical faculty, neither of whom might otherwise be eligible for Foundation funding. Proposals of this nature <u>may</u> involve the resources of a private, clinical practice, as noted immediately above, but that is no longer a requirement.

The Call for Proposals (CFP) within this and all other 2021 funding mechanisms is as follows:

- The Study of the Business of Orthodontic Practice See section XVI for more information
- The Study of COVID-19 related Outcomes See section XVII for more information.

If a proposal is sent in response to the CFP, this must be clearly evident.

This award may not be available each year; however, this award is available in 2021 and the maximum funding is \$5,000/maximum of 2 proposals per year per program.

Eligibility

- 1. Part-time (PT) orthodontic faculty of any academic rank at accredited U.S. or Canadian institutions are eligible.
- 2. Orthodontic residents at accredited U.S. or Canadian institutions who demonstrate a strong interest in an academic career are eligible for up to one RAA while a resident. Letters of support should specifically indicate and describe the resident's progression to entry into an academic career. In addition, Orthodontic residents must apply while in their 1st or 2nd year and must have one year from the start of the award (on July 1 of the award cycle year) to complete the project prior to graduation.

A resident applicant may not apply for awards in two different categories such as RAA and OFDFA during any one year at the level of PI or Co-PI (i.e., as a person who has/shares ultimate responsibility for the conduct of two projects), and a maximum of two RAA proposals will be accepted per school in any year.

Specific Instructions for the RAA Application

See Section I.D. General Application Guidelines for Required Components and General Instructions; specific instructions for Required Components (6), (9-1), (9-2) of the Proposed Plan and (10) Letters of Support are as follows:

(6) **Budget and Budget Justification**

- a. Travel for presentation of RAA results at a meeting will be limited to \$1,000.
- b. Travel for performing research should be carefully justified in the budget and is not limited but cannot exceed the RAA budget (\$5,000).
- (9-1) <u>Abstract</u> [not to exceed 1 page]: Include Overall Objectives and Specific Aims plus state the broad, long-term objectives of the project and describe concisely what the specific research project is intended to accomplish. Applicants must state precisely and clearly the questions that the research will attempt to answer and any hypotheses to be tested. A summary of the clinical implications or significance should be provided.
- (9-2) <u>Project Plan</u> [not to exceed 5 pages]: This section must include descriptions of the following sufficient to evaluate the proposal:
- a. Background and significance, including an explanation of potential relevance to the clinical practice of orthodontics
- b. Preliminary studies (not mandatory)
- c. Experimental design, methods, and statistical analyses planned
- d. Expected outcomes
- e. Alternative approaches if outcomes are not as expected

(10) <u>Letters of Support</u> [no page limitations]

- a. Co-investigator(s) and consultant(s) a letter acknowledging proposed participation and plans for support is required from each individual named on title page other than applicant.
- b. Letter from Department/Division Chair outlining evidence of strong interest of the applicant in an academic career.
- c. Evidence of institutional commitment to the project (e.g., in the form of a letter of support from an appropriate institutional official/officials) is required.
- d. If the applicant is affiliated with a department, a letter from the chairman of the applicant's department must be included that offers support for the applicant, specifies that the time necessary to conduct the project will be made available to the applicant.

Award-specific Considerations for the RAA

- 1. Proposals are welcome from current orthodontic residents interested in an academic career and part-time orthodontic faculty (including clinical faculty), neither of whom might otherwise be eligible for Foundation funding. For residents, a letter from the applicant's Department Chair is required that attests that the applicant shows interest in and talents for an academic career.
- 2. Proposals <u>may</u> involve the collaboration and resources of a private, clinical practice, but this is not a requirement.

Orthodontic Faculty Development Fellowship Award

Postdoctoral Fellowship Award

Application Cover Sheet

Name/Institution of Applicant						
Dates of the Proposed Project Period						
General Budget						
Total Amount Requested from AAOF	\$					
Funds from Other Sources	\$					
Total Project Cost	\$					
Budget Categories for AAOF Funds						
Salary or Stipend Supplement	\$					
Research Equipment and Supplies	<u>\$</u>					
Research Personnel	\$					
Training or Other Educational Co	\$					
Other Expense		\$				
<u>Total</u>		\$				
Applicant's Address						
City	State	Zip Code				
Telephone	Fax					
E-mail						
Institution						
Signature of Applicant						
Date of Submission						
Signature of Responsible Institution Office						

General Application Cover Sheet (All Funding Categories, Except Fellowship Awards)

Name/Institution of Applicant:				
Title of Project				
Award Category				
Dates of the Proposed Project Period				
General Budget				
Total Amount Requested from AAOF	1	\$		
Funds from Other Sources				
Total Project Cost		\$		
De la de Catalancia for AAOF Francis				
Budget Categories for AAOF Funds		ø		
Personnel				
Supplies				
Equipment Other Expanse				
Other Expense Total				
<u>10tar</u>		Φ		
Applicant's Address				
City	State		Zip Code	
Telephone	Fax			
E-mail				
Institution				
Signature of Applicant				
Date of Submission				
Signature of Responsible Institution Office				
SIGNATURE OF ICOMPOSITION HIBRITATION OF THE	1271			

AMERICAN ASSOCIATION OF ORTHODONTISTS FOUNDATION AWARD APPLICATION

TABLE OF CONTENTS

	Page
Application Cover Sheet – completed and signed	numbers 1
Table of Contents	2
Title Page	3
Documentation of Eligibility	4
Previous AAOF Awards and Outcomes	5
Previous AAOF PARC Review (resubmission applications only)	3
Budget and Budget Justification (2 pages maximum)	
Biosketch(es) (4 pages maximum for each biosketch)	
Role(s) of Applicant(s) (1 page maximum)	
Proposed Plan	
Introduction (1 page maximum) for resubmission application only	
Abstract (1 page maximum)	
Project Plan (see specific instructions for page limits & required contents)	
Timetable (1 page maximum)	
References	
Status of Human and/or Animal Research explaining status of request	
Approval Letter attached	
Approval Pending – append statement explaining status of request	
Other – append statement explaining status of request	
Letters of Support	
Co-investigators/consultants/advisors	
Institutional Official	
Department Chair	
Appendix Materials	
Institutional Approval of Proposed Human Research	
Institutional Approval of Proposed Animal Research	
CHECKLIST	
Please check (✓) each item to confirm and sign the bottom of the pag	j e
All required components are listed in Table of Contents and page number(s) provi	ded
Application is formatted according to the General Application Guidelines	
Copies of application provided: 1 paper copy and 1 electronic	
Completed final application review for readability/errors by an experienced facult	y member
I have read the criteria for AAOF funding, both general and for applicable award	-
I am eligible for this award, if approved	.

Date

Applicant's Signature

Applicant Name (Last, First):

DOCUMENTATION OF ELIGIBILITY						
☐ US Citizen ☐ Canadian Citizen	Foreign National Status: (Not applicable for RAA applicants) US Green Card Canadian Permanent Resident Status					
(Not applicable for RAA applicants)	☐ Applying for Green card or Permanent Resident Status (Attach appropriate documentation)					
		_	Verified by Institution	onal Signature		
Current Academic	C	urrent Acad	emic Status: (For G	OFDFA/PFA/RAA)		
Rank: (For OFDFA, BRA,		eck all that	Name of Program or	Year in	Anticipated	
CA, EIA)	app		Institution	Program	completion date	
		Resident				
		MS candidate				
		PhD candidate				
		Post-doc*				
Years as Faculty: Full-time Part-time	me					
			Month	Yea	r	
Location(s) where award activities will take place (name and address of each Institution / Program participating)						
Institutional Official	wh() verifies the	e above informati	on as correct		
Name						
Position						
		Signature	Date			
*PFA applicants must clea	rly i	ndicate in the I	Biosketch that they an	e dentists with s	specialty	

*PFA applicants must clearly indicate in the Biosketch that they are dentists with specialty training in orthodontics obtained in an ADA or CDA accredited program and hold a doctorate (PhD, DMSc or equivalent) degree.

Applicant Name (Last, First):

PREVIOUS AAOF AWARDS AND OUTCOMES					
Award Type:	(Use abbreviations defined in guidelines: OFDFA, PFA, BRA, CA, EIA, RAA, etc.)				
Title of Project:	(Use aboreviations defined in guidelines. Of B171, 1171, B101, C11, B171, R111, etc.)				
Role in Project:	Amount of Funding: \$				
Period of Support:	to Month-day-year) (Month-day-year)				
Outcomes: - Cite/describe any: 1. Publications (cite references) 2. Presentations (title, presenter, organization, location, date) 3. Follow-up grants or awards					
Progress Report (Required for multi-year OFDFA, PFA, CA and BRA)	Date due orN/A Submitted NoYes, on date Date revisions submitted (if necessary) Date accepted				
Final Report	Date due orN/A				
(All funded projects)	Submitted NoYes, on date Date revisions submitted (if necessary) Date accepted				
Scheduled Completion Date of Project	No Cost Extension requiredYes NoN/A Anticipated/Actual completion date				
Report on Previous Funding Repeat the above as a	ProvidedYes NoN/A appropriate to provide a complete history of AAOF award funding				
-	If the application is a resubmission, please attach the AAOF PARC				

for all key personnel. If the application is a resubmission, please attach the AAOF PARC Review for the previous application following this "Page 5" form.

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

eRA COMMONS USERNAME (credential, e.g., agency login):						
POSITION TITLE:			·			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)						
INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY			

A. Personal Statement

NAME:

- B. Positions and Honors
- C. Contributions to Science
- D. Additional Information: Research Support and/or Scholastic Performance

BIOGRAPHICAL SKETCH DO NOT EXCEED FOUR PAGES

NAME: Hunt, Morgan Casey

eRA COMMONS USERNAME (credential, e.g., agency login): huntmc

POSITION TITLE: Associate Professor of Psychology

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of California, Berkeley	B.S.	05/1990	Psychology
University of Vermont	Ph.D.	05/1996	Experimental Psychology
University of California, Berkeley	Postdoctoral	08/1998	Public Health and Epidemiology

A. Personal Statement

I have the expertise, leadership, training, expertise and motivation necessary to successfully carry out the proposed research project. I have a broad background in psychology, with specific training and expertise in ethnographic and survey research and secondary data analysis on psychological aspects of drug addiction. My research includes neuropsychological changes associated with addiction. As PI or co-Investigator on several university- and NIH-funded grants, I laid the groundwork for the proposed research by developing effective measures of disability, depression, and other psychosocial factors relevant to the aging substance abuser, and by establishing strong ties with community providers that will make it possible to recruit and track participants over time as documented in the following publications. In addition, I successfully administered the projects (e.g. staffing, research protections, budget), collaborated with other researchers, and produced several peer-reviewed publications from each project. As a result of these previous experiences, I am aware of the importance of frequent communication among project members and of constructing a realistic research plan, timeline, and budget. The current application builds logically on my prior work. During 2005-2006 my career was disrupted due to family obligations. However, upon returning to the field I immediately resumed my research projects and collaborations and successfully competed for NIH support.

- 1. Merryle, R.J. & Hunt, M.C. (2004). Independent living, physical disability and substance abuse among the elderly. Psychology and Aging, 23(4), 10-22.
- 2. Hunt, M.C., Jensen, J.L. & Crenshaw, W. (2007). Substance abuse and mental health among community-dwelling elderly. International Journal of Geriatric Psychiatry, 24(9), 1124-1135.
- 3. Hunt, M.C., Wiechelt, S.A. & Merryle, R. (2008). Predicting the substance-abuse treatment needs of an aging population. American Journal of Public Health, 45(2), 236-245. PMCID: PMC9162292 Hunt, M.C., Newlin, D.B. & Fishbein, D. (2009). Brain imaging in methamphetamine abusers across the lifespan. Gerontology, 46(3), 122-145.

B. Positions and Honors

Positions and Employment

Fellow, Division of Intramural Research, National Institute of Drug Abuse, Bethesda, MD Lecturer, Department of Psychology, Middlebury College, Middlebury, VT

2001- Consultant, Coastal Psychological Services, San Francisco, CA

2002-2005 Assistant Professor, Department of Psychology, Washington University, St. Louis, MO Associate Professor, Department of Psychology, Washington University, St. Louis, MO

Other Experience and Professional Memberships

1995- Member, American Psychological Association
 1998- Member, Gerontological Society of America
 1998- Member, American Geriatrics Society

2000- Associate Editor, Psychology and Aging
2003- Board of Advisors, Senior Services of Eastern Missouri

2003-05 NIH Peer Review Committee: Psychobiology of Aging, ad hoc reviewer

2007-11 NIH Risk, Adult Addictions Study Section, members

Honors

2003 Outstanding Young Faculty Award, Washington University, St. Louis, MO

2004 Excellence in Teaching, Washington University, St. Louis, MO

2009 Award for Best in Interdisciplinary Ethnography, International Ethnographic Society

C. Contribution to Science

- 1. My early publications directly addressed the fact that substance abuse is often overlooked in older adults. However, because many older adults were raised during an era of increased drug and alcohol use, there are reasons to believe that this will become an increasing issue as the population ages. These publications found that older adults appear in a variety of primary care settings or seek mental health providers to deal with emerging addiction problems. These publications document this emerging problem but guide primary care providers and geriatric mental health providers to recognize symptoms, assess the nature of the problem and apply the necessary interventions. By providing evidence and simple clinical approaches, this body of work has changed the standards of care for addicted older adults and will continue to provide assistance in relevant medical settings well into the future. I served as the primary investigator or co-investigator in all these studies.
 - a. Gryczynski, J., Shaft, B.M., Merryle, R., & Hunt, M.C. (2002). Community based participatory research with late-life addicts. American Journal of Alcohol and Drug Abuse, 15(3), 222-238.
 - b. Shaft, B.M., Hunt, M.C., Merryle, R., & Venturi, R. (2003). Policy implications of genetic transmission of alcohol and drug abuse in female nonusers. International Journal of Drug Policy, 30(5), 46-58.
 - c. Hunt, M.C., Marks, A.E., Shaft, B.M., Merryle, R., & Jensen, J.L. (2004). Early-life family and community characteristics and late-life substance abuse. Journal of Applied Gerontology, 28(2),26-37.
 - d. Hunt, M.C., Marks, A.E., Venturi, R., Crenshaw, W. & Ratonian, A. (2007). Community-based intervention strategies for reducing alcohol and drug abuse in the elderly. Addiction, 104(9), 1436-1606. PMCID: PMC9000292
- 2. In addition to the contributions described above, with a team of collaborators, I directly documented the effectiveness of various intervention models for older substance abusers and demonstrated the importance of social support networks. These studies emphasized contextual factors in the etiology and maintenance of addictive disorders and the disruptive potential of networks in substance abuse treatment. This body of work also discusses the prevalence of alcohol, amphetamine, and opioid abuse in older adults and how networking approaches can be used to mitigate the effects of these disorders.
 - a. Hunt, M.C., Merryle, R. & Jensen, J.L. (2005). The effect of social support networks on morbidity among elderly substance abusers. Journal of the American Geriatrics Society, 57(4), 15-23.
 - b. Hunt, M.C., Pour, B., Marks, A.E., Merryle, R. & Jensen, J.L. (2005). Aging out of methadone treatment. American Journal of Alcohol and Drug Abuse, 15(6), 134-149.
 - c. Merryle, R. & Hunt, M.C. (2007). Randomized clinical trial of cotinine in older nicotine addicts. Age and Ageing, 38(2), 9-23. PMCID: PMC9002364

- 3. Methadone maintenance has been used to treat narcotics addicts for many years but I led research that has shown that over the long-term, those in methadone treatment view themselves negatively and they gradually begin to view treatment as an intrusion into normal life. Elderly narcotics users were shown in carefully constructed ethnographic studies to be especially responsive to tailored social support networks that allow them to eventually reduce their maintenance doses and move into other forms of therapy. These studies also demonstrate the policy and commercial implications associated with these findings.
 - a. Hunt, M.C. & Jensen, J.L. (2003). Morbidity among elderly substance abusers. Journal of the Geriatrics, 60(4), 45-61.
 - b. Hunt, M.C. & Pour, B. (2004). Methadone treatment and personal assessment. Journal Drug Abuse, 45(5), 15-26.
 - c. Merryle, R. & Hunt, M.C. (2005). The use of various nicotine delivery systems by older nicotine addicts. Journal of Ageing, 54(1), 24-41. PMCID: PMC9112304
 - d. Hunt, M.C., Jensen, J.L. & Merryle, R. (2008). The aging addict: ethnographic profiles of the elderly drug user. NY, NY: W. W. Norton & Company.

Complete List of Published Work in My Bibliography:

 $\underline{http://www.ncbi.nlm.nih.gov/sites/myncbi/collections/public/1PgT7IEFIAJBtGMRDdWFmjWAO/?sort=date\&direction=ascending$

D. Additional Information: Research Support and/or Scholastic Performance

Ongoing Research Support

R01 DA942367 Hunt (PI)

09/01/08-08/31/16

Health trajectories and behavioral interventions among older substance abusers

The goal of this study is to compare the effects of two substance abuse interventions on health outcomes in an urban population of older opiate addicts.

Role: PI

R01 MH922731 Merryle (PI)

12/15/07-11/30/15

Physical disability, depression and substance abuse in the elderly

The goal of this study is to identify disability and depression trajectories and demographic factors associated with substance abuse in an independently living elderly population.

Role: Co-Investigator

Faculty Resources Grant, Washington University

08/15/09-08/14/15

Opiate Addiction Database

The goal of this project is to create an integrated database of demographic, social and biomedical information for homeless opiate abusers in two urban Missouri locations, using a number of state and local data sources. Role: PI

Completed Research Support

R21 AA998075 Hunt (PI)

01/01/11-

12/31/13

Community-based intervention for alcohol abuse

The goal of this project was to assess a community-based strategy for reducing alcohol abuse among older individuals.

Role: PI

AMERICAN ASSOCIATION OF ORTHODONTISTS FOUNDATION

Letter of Agreement - Fellowship Awards

Orthodontic Faculty Development Fellowship Award (OFDFA) and Postdoctoral Fellowship Award (PFA)

Basic Agreement

Thi	s Letter of Agreement is between the AAO Fou		
AA	ount of \$OF OF OR OF OR OF OF OR OF	(Dollar Amount of Award) for an wship Award for the period of July 1, 2021 through ard for the period of July 1, 2021 through June 30,	
Bot	th the AAOF and the Recipient agree to the following	owing:	
Tit	le of the Project:		
1.	The funding provided by the AAOF is solely as follows:	for the project approved. The title of the project is	
Fui	nding Period:		
2.	The period of the project may be extended, by and the Recipient must request such an exten	FA and for the period stipulated above for the PFA ut only with the written permission of the AAOF, sion in writing. Any funds not disbursed on the ny approved extension, must be returned to the	
Bu	dget Considerations		
3.	Funding is provided solely for the OFDFA/PFA as titled above, according to the budget originally submitted with the project proposal, which is duplicated below:		
	Salary or Stipend Supplement	\$	
	Research Equipment and Supplies	\$	
	Research Personnel	\$	
	Training or Other Educational Costs	\$	
	Other Expense	\$	
	Total Award	\$	

- 4. The total award will be provided by July 1, 2021 for the OFDFA, the one-year PFA and the first year of a two/three year PFA, upon the return of the completed Letter of Agreement Fellowship Awards, Promissory Note (PFA only), and any other necessary exhibits.
- 5. The Recipient may transfer funds from one category to another during the project period, but only with the written permission of the AAOF; the Recipient must request such permission in writing prior to transfer. In addition to the Recipient, the Department Chair or Program Director must also sign the request.
- 6. The AAOF does not provide funds to support institutional overhead or any other "indirect costs." If this is not acceptable to the Recipient or the Recipient's institution, then the funding must be immediately returned to the AAOF.

Failure to Initiate the Project

7. The recipient should begin the fellowship as soon as practical. If Recipient cannot begin the fellowship within the 12-month period beginning July 1, 2021, the Award will be canceled, and any funds disbursed by the AAOF for this project must be immediately returned. In such a situation, once the impediments to conducting the project have been overcome, Recipient may reapply for a new award; however, the AAOF shall be under no obligation to make an award on such subsequent application.

Progress and Final Reports

- 8. Progress Reports are not required for Orthodontic Faculty Development Fellowship Awards under the one-year funding option, nor are they required for the one-year PFA. However, a Progress Report is required by December 31, 2021 for a two/three-year PFA.
- 9. A Final Report is due at the end of the funding period for all awards made by the AAOF.
- 10. The deadline for receipt of all Final Reports is the end of the funding period (e.g., June 30, 2022 for a one-year award). An exception to this deadline may be granted in the case that the recipient has received, in writing, a no-cost extension (NCE) of the funding period. Extensions must be requested in writing, in advance of the deadline, and are subject to the approval of a reviewer.
- 11. Unless an extension has been granted, if a recipient fails to submit a Final Report six months after the stated deadline, the recipient and the individual's institution may not be eligible to apply for any awards provided by the AAOF for a period of one (1) year.
- 12. Both the Final Report and the Progress Report forms are included in the "2021 Awards Materials." A final itemized accounting of the use of the Award may also be requested at the discretion of the AAOF.
- 13. By accepting the Award, the AAOF receives permission from the recipient to distribute the Progress Report and/or Final Report, as well as any attachments, in whatever manner the AAOF deems appropriate. If the Recipient has any reservations in this regard (e.g., copyright concerns, etc.) the Recipient should prepare these reports in such a way as to address those concerns.

Acknowledgment of AAOF Support

14. It is understood that the recipient will make a good faith effort to publish or otherwise disseminate the findings of the project. Publications or presentations made by Recipient relating to the project must contain appropriate reference to support provided by the Foundation. Likewise, the recipient is expected to note to what extent Foundation support is or has been helpful in his/her academic career.

Terms of Payment

- 15. Except in unusual instances, determined in the sole discretion of the AAOF, payment will be made only to accredited universities, schools, colleges, institutes, foundations, centers, departments or the like; provided, that the Award is personal to Recipient (regardless of the institution with which Recipient is affiliated), and nothing contained herein is intended to create any third-party beneficiary rights as to the Institution. Notwithstanding the foregoing, Recipient shall notify the AAOF of any change in Recipient's employment or affiliation status with the Institution, and the Foundation may, in its sole discretion, terminate the Award as a result of such change in status. Before the first payment is made, the AAOF must have the Federal Employer Identification Number of the Institution or, if funds are to be distributed to Recipient, the Social Security Number (or equivalent for non-U.S. citizens) of Recipient. The Foundation makes no representation regarding the taxation of funds distributed and will follow applicable law regarding the reporting of funds distributed.
- 16. The Award check(s) are to be made payable as follows:

Fellowship Stipulations

- 17. For an OFDFA and the PFA, Recipient agrees to a career in orthodontic education as a full-time faculty member for the duration of the Fellowship Period in the academic program specified in his/her Fellowship application.
- 18. Following the Recipient's fulfillment of his/her responsibilities as outlined above, Recipient agrees to actively pursue or continue full-time employment as an orthodontic educator at an orthodontic program accredited by the Commission on Dental Accreditation of the American Dental Association or the Canadian Dental Association.
- 19. Recipient understands that in order to secure or continue employment, it may be necessary to relocate. Recipient also understands that the Foundation may, at any time, in its sole and absolute discretion, request evidence of compliance with this provision from Recipient, and Recipient agrees to provide such evidence.
- 20. If Recipient is a student, Recipient understands and agrees that:

- a. The Fellowship will be deemed an award not requiring repayment provided that he/she
 - i. Successfully completes the Fellowship Program, and
 - ii. Secures full-time employment as an orthodontic educator at an orthodontic program accredited by the Commission on Dental Accreditation of the American Dental Association or the Canadian Dental Association immediately following completion of the Program, and
 - iii. Continues in such employment for a period of time equal to the Fellowship Period (i.e., one year of teaching for each year of the Fellowship Period).
- b. In the event that Recipient fails to successfully complete the Program, the entire amount of the Fellowship Award shall become immediately due and payable to the Foundation, together with interest thereon, as evidenced by the promissory note signed by Recipient in the form of Exhibit A to this Agreement (the "Promissory Note").
- c. In the event that Recipient fails to secure full-time employment as an orthodontic educator as provided above, a pro rata portion of the Fellowship shall become immediately due and payable to the Foundation, together with interest thereon, as evidenced by the Promissory Note. Full-time employment shall be defined by the institution.
- 21. If Recipient is a faculty member, Recipient understands and agrees that:
 - a. The Fellowship will be treated as an award not requiring repayment provided that he/she continues full-time employment as an orthodontic educator at an orthodontic program accredited by the Commission on Dental Accreditation of the American Dental Association or the Canadian Dental Association following completion of the Fellowship Period for a period of time equal to the Fellowship Period (i.e., one year of commitment to continue teaching for each year of the Fellowship Period). Full-time employment shall be defined by the institution.
 - b. In the event that Recipient fails to continue full-time employment as a orthodontic educator in accordance with the foregoing provision, a pro rata portion of the Fellowship shall become immediately due and payable to the Foundation, together with interest thereon, as evidenced by the Promissory Note signed by Recipient in the form of Exhibit A to this Agreement.

Communication

If to the Foundation:

22. All communications regarding this Agreement shall be deemed effective given five business days after being sent by registered or certified mail, postage prepaid, return receipt requested, or one business day after being sent by commercial courier, if addressed as follows:

American Association of Orthodontists Foundation

	Attention: Senior Vice President 401 North Lindbergh Boulevard
	St. Louis, MO 63141
If to Recipient:	Name_
•	Street Address_
	City
	State/Zip Code
If to the Institution:	Name_
	Street Address_
	City_
	State/Zip Code

23. Recipient agrees to keep the Foundation informed of any change in Recipient's name or address.

Other

- 24. This Agreement constitutes the entire understanding between the parties with respect to the subject matter hereof and supersedes and replaces all prior agreements, understandings, writings, and discussions between the parties relating to said subject matter, whether written or oral.
- 25. This Agreement shall not be assignable by Recipient or the Institution without the consent of the Foundation, which consent shall not be unreasonably withheld.
- 26. If any provisions of this Agreement are or become invalid or are ruled illegal or unenforceable by any court of competent jurisdiction under then current applicable law, it is the intention of the parties that the remainder of this Agreement shall not be affected thereby provided that a party's rights under this Agreement are not materially affected. It is further the intention of the parties that in lieu of each such provision which is invalid, illegal, or unenforceable, there be substituted or added as part of this Agreement a valid, legal and enforceable provision whose effect shall be as similar as possible to the effect intended by the parties in the original invalid, illegal or unenforceable provision.
- 27. This Agreement may be executed in two or more counterparts, each of which shall be an original but all of which taken together shall constitute one and the same instrument.
- 28. Recipient acknowledges that separately there has been sent electronically to the AAOF (aaof@aaortho.org)
 - a. A black and white photograph of Recipient
 - b. A Word document synopsis (500 words) of their project/research/use of funds, which is to include
 - i. A short biography
 - ii. A brief description of the project
 - iii. Statement how orthodontic education will benefit from their award
 - iv. Why the Foundation is important to their project, and
 - v. How Foundation funding is expected to or has benefitted Recipient's career
- 29. Furthermore, Recipient(s) acknowledge(s) that a hard copy of the aforementioned photograph and synopsis is attached herein.
- 30. Recipient agrees that the AAOF may utilize the name and likeness of the recipient in any advertising, publications, and/or promotional materials.

IN WITNESS WHEREOF the parties hereto have caused this Fellowship Award Agreement to be executed as of the latest date written below:

for the AMERICAN ASSOCIATION OF ORTHODONTISTS FOUNDATION:

	Signature
	Name_
	Title
	Date
for the RECIP	PIENT:
	Signature_
	Name
	Title
	Date
for the INSTI	ΓUTION:
	Signature
	Name
	Title
	Date

Exhibit A Form of Promissory Note

Postdoctoral Fellowship Award

\$	Date:
of AMERICAN ASSOCIA	O, the undersigned (the "Maker"), hereby promises to pay to the order ATION OF ORTHODONTISTS FOUNDATION (the "Foundation"), tion at 401 North Lindbergh Boulevard, St. Louis, Missouri 63141, the
Dollars (\$), or such lesser amount as shall be due from the Maker to the in accordance with the terms of that certain Award Agreement dated as
of the date hereof between the United States of Ameri unpaid principal amount the commencing on the date of	the Maker and the Foundation (the "Agreement"), in lawful money of ica and in immediately available funds, and to pay interest on the hereof, at such office, in like money and funds, for the period in which the Maker received the Fellowship described in the unt shall be paid in full, at the rate of eight per cent (8%) per annum.
	lation must pursue collection of the amounts provided in this Note, the lation all costs and attorneys' fees incurred by the Foundation in ection.
•	ed by and construed in accordance with the laws of the State of the principles thereof regarding the choice of law.
	Maker

AMERICAN ASSOCIATION OF ORTHODONTISTS FOUNDATION

Letter of Agreement – General Award Agreement

(All Funding Categories, Except Fellowship Awards)

Basic Agreement

4.

	s Letter of Agreement is between the	1 - 1 - 1 - 1 - 1 - 1 - 1	
of	\$	(Dallan Amount of Arrend) for an AAOE	
the	period of July 1, 2021, through June	(Dollar Amount of Award) for an AAOF Award (Award Category) for 30, 20	
	th the AAOF and the Recipient agree		
Tit	le of the Project		
1.	The funding provided by the AAO project is as follows:	F is solely for the project approved. The title of the	
Fui	nding Period		
2.	noted above. The period of the propermission of the AAOF, and the F	I in the original proposal, which must match the period oject may be extended, but only with the written Recipient must request such an extension in writing. Any roject within the funding period, or any approved AAOF.	
Bu	dget Considerations		
3.	Funding is provided solely for the Project as titled above, according to the budget submitted with the project proposal, which is duplicated below:		
	Research Personnel	\$	
	Supplies	\$	
	Equipment	\$	
	Other Expense	\$	
	Total Award	\$	

2021, (upon the return of the completed Award Agreement and any necessary exhibits), and the second half funding will be provided by January 31, 2022, assuming acceptable

For Biomedical Research Awards one half of the total award will be provided by July 1,

progress is made (see Progress Report below). For Center Awards, the total award, if a one-year funding period, or the first year's funding, if a multiple-year funding period, will be provided by July 1, 2021, upon the return of the completed Award Agreement and any necessary exhibits; subsequent funding, for multiple-year projects, will be sent in annual amounts, upon a Progress Report being submitted and approved. For Research Aid Awards the total funding will be provided by July 1, 2021, upon the return of the completed Award Agreement and any necessary exhibits.

- 5. The recipient may transfer funds from one category to another during the project period, but only with the written permission of the AAOF; the Recipient must request such permission in writing prior to transfer.
- 6. The AAOF does not provide funds to support institutional overhead or any other "indirect costs." If this is not acceptable to the Recipient or the Recipient's institution, then the funding must be immediately returned to the AAOF.

Failure to Initiate the Project

7. The recipient should begin work on the project as soon as practical. If Recipient cannot begin the Project within the 12-month period beginning July 1, 2021, the Award will be canceled, and any funds disbursed by the AAOF for this project must be immediately returned. In such a situation, once the impediments to conducting the project have been overcome, Recipient may reapply for a new award; however, the AAOF shall be under no obligation to make an award on such subsequent application.

Progress and Final Reports

- 8. Progress Reports are required and due by December 31, 2021. (The requirement for a Progress Report may be waived for the Research Aid Award and the one-year Center Award at the discretion of the AAOF.)
- 9. All Progress Reports will be evaluated to determine whether the recipient is making acceptable progress on the project as proposed. If, in the case of a BRA or a multi-year CA, the recipient fails to submit a Progress Report by the stated deadline, or if the AAOF determines that progress is unacceptable, the recipient will be notified that the Award is terminated. The AAOF will have the sole discretion as to whether a Progress Report is acceptable.
- 10. A Final Report is due at the end of the funding period for all AAOF Awards.
- 11. The deadline for receipt of all Final Reports is June 30, 2022. An exception to this deadline may be granted in the case that the recipient has received, in writing, an extension of the funding period and/or the funding period is longer than 12 months.
- 12. Unless an extension has been granted, if a recipient fails to submit a Final Report by December 31, 2022, the recipient will not be eligible to apply for any awards provided by the AAOF for a period of one year.

- 13. Both the Final Report and the Progress Report forms are included within the "2021 Awards Materials." A final itemized accounting of the use of the Award may also be requested at the discretion of the AAOF.
- 14. By accepting the Award, the AAOF receives permission from the Recipient to distribute Progress and Final Reports, as well as any attachments to either or both, in whatever manner the AAOF deems appropriate; if the Recipient has any reservations in this regard (e.g., copyright concerns, etc.) the Recipient should prepare these reports in such a way as to address his/her concerns.

Acknowledgment of AAOF Support

15. It is understood that the recipient will make a good faith effort to publish or otherwise disseminate the findings of the project. Publications or presentations made by Recipient relating to the project must contain appropriate reference to support provided by the Foundation. Likewise, the recipient is expected to note to what extent Foundation support is or has been helpful in his/her academic career.

Terms of Payment

- 16. Except in unusual instances, determined in the sole discretion of the AAOF, payment will be made only to accredited universities, schools, colleges, institutes, foundations, centers, departments or the like; provided, that the Award is personal to Recipient (regardless of the institution with which Recipient is affiliated), and nothing contained herein is intended to create any third-party beneficiary rights as to the Institution. Notwithstanding the foregoing, Recipient shall notify the AAOF of any change in Recipient's employment or affiliation status with the Institution, and the Foundation may, in its sole discretion, terminate the Award as a result of such change in status. Before the first payment is made, the AAOF must have the Federal Employer Identification Number of the Institution or, if funds are to be distributed to Recipient, the Social Security Number (or equivalent for non-U.S. citizens) of Recipient. The Foundation makes no representation regarding the taxation of funds distributed and will follow applicable law regarding the reporting of funds distributed.
- 17. The Award check(s) are to be made payable as follows:

Name of Payee	
Institution_	
Tax Identification Number or Social Security Number	
Street Address	
City	
State/Zip Code	

Communication

18. All communications regarding this Agreement shall be deemed effective given five business days after being sent by registered or certified mail, postage prepaid, return receipt

requested, or one business day after being sent by commercial courier, if addressed as follows:

If to the Foundation:	American Association of Orthodontists Foundation
	Attention: Senior Vice President

401 North Lindbergh Boulevard

St. Louis, MO 63141

If to Recipient:	Name

Street Address_____

State/Zip Code

If to the Institution: Name____

Street Address

City______State/Zip Code______

19. Recipient agrees to keep the Foundation informed of any change in Recipient's name or address.

Other

- This Agreement constitutes the entire understanding between the parties with respect to the subject matter hereof and supersedes and replaces all prior agreements, understandings, writings, and discussions between the parties relating to said subject matter, whether written or oral.
- This Agreement shall not be assignable by Recipient or the Institution without the consent of the Foundation, which consent shall not be unreasonably withheld.
- If any provisions of this Agreement are or become invalid or are ruled illegal or unenforceable by any court of competent jurisdiction under then current applicable law, it is the intention of the parties that the remainder of this Agreement shall not be affected thereby provided that a party's rights under this Agreement are not materially affected. It is further the intention of the parties that in lieu of each such provision which is invalid, illegal, or unenforceable, there be substituted or added as part of this Agreement a valid, legal and enforceable provision whose effect shall be as similar as possible to the effect intended by the parties in the original invalid, illegal or unenforceable provision.
- 23. This Agreement may be executed in two or more counterparts, each of which shall be an original but all of which taken together shall constitute one and the same instrument.
- 24. Recipient(s) acknowledges that separately there has been sent electronically to the AAOF (aaof@aaortho.org)
 - a. A photograph of recipient(s)
 - b. A synopsis (500 words) of their project/research/use of funds, which is to include:
 - i. A short biography
 - ii. A brief description of the project
 - iii. A statement how orthodontic education will benefit from their award

- iv. Why the Foundation is important to their projectv. How Foundation funding is expected to or has benefitted Recipient's career
- 25. Furthermore, Recipient(s) acknowledge(s) that a hard copy of the aforementioned photograph and synopsis is attached herein.

IN WITNESS WHEREOF the parties hereto have caused this Award Agreement to be executed as of the latest date written below:

for the AMERICAN ASSOCIATION OF ORTHODONTISTS FOUNDATION:

	Signature
	Name_
	Title_
for the RECIP	Date
ioi die Recii	ILIVI.
	Signature
	Name_
	Title_
	Date
for the INSTIT	
	Signature_
	Name_
	Title
	Date



401 N. Lindbergh Blvd. St. Louis, MO 63141 Tel.: 314.993.1700, #546 Toll Free: 800.424.2841, #546

Fax: 800.708.1364

Send via email to: <u>jbode@aaortho.org</u> and <u>cyoung@aaortho.org</u>

AAO Foundation Final Report Form (a/o 5/30/2020)

In an attempt to make things a little easier for the reviewer who will read this report, please consider these two questions before this is sent for review:

- Is this an example of your very best work, in that it provides sufficient explanation and justification, and is something otherwise worthy of publication? (We do publish the Final Report on our website, so this does need to be complete and polished.)
- Does this Final Report provide the level of detail, etc. that you would expect, if you were the reviewer?

Please prepare a report that addresses the following:

<u>Type of Award</u>, e.g., Orthodontic Faculty Development Fellowship Award, Postdoctoral Fellowship Award, Biomedical Research Award, Center Award, Educational Innovation Award, Program Award, Research Aid Award

Name(s) of Principal Investigator(s)

Institution

Title of Project

Period of AAOF Support (e.g. 07-01-2021 to 06-30-2022):

Amount of Funding

Summary/Abstract

Detailed results and inferences:

- 1. If the work has been published please attach a pdf of manuscript OR
- 2. Describe in detail the results of your study. The intent is to share the knowledge you have generated with the AAOF and orthodontic community specifically and other who may benefit from your study. Table, Figures, Statistical Analysis, and interpretation of results should be included.

Respond to the following questions:

- 1. Were the original, specific aims of the proposal realized?
- 2. Were the results published?
 - a. If so, cite reference/s for publication/s including titles, dates, author or co-authors, journal, issue and page numbers
 - b. Was AAOF support acknowledged?
 - c. If not, are there plans to publish? If not, why not?
- 3. Have the results of this proposal been presented?
 - a. If so, list titles, author or co-authors of these presentation/s, year and locations
 - b. Was AAOF support acknowledged?
 - c. If not, are there plans to do so? If not, why not?
- 4. To what extent have you used, or how do you intend to use, AAOF funding to further your career?

Accounting for Project; (i.e.), any leftover funds, etc.



401 N. Lindbergh Blvd. St. Louis, MO 63141 Tel.: 314.993.1700, #546 Toll Free: 800.424.2841, #546

Fax: 800.708.1364

Send via email to: jbode@aaorhto.org and/or cyoung@aaortho.org

AAO Foundation Progress Report Form (a/o 5/30/2020)

In an attempt to make things a little easier for the reviewer who will read this report, please consider these two questions before this is sent for review:

- Is this an example of your very best work, in that it provides sufficient explanation and justification, and is something otherwise worthy of publication?
- Does this Report provide the level of detail, etc. that you would expect, if you were the reviewer?

1.	Type of Award (Check One):
	Orthodontic Faculty Development Fellowship Award Postdoctoral Fellowship Award Biomedical Research Award Center Award Educational Innovation Award
	Program Award
	Research Aid Award
2.	Name(s) of Principal Investigator(s):
3.	Institution:
4.	Title of Project:
5.	Period of AAOF support (e.g. 07-01-2021 to 6-30-2022):
6.	Amount of AAOF Funding:
Sig	gnature: Date:
PL	EASE ADDRESS EACH CATEGORY SEPARATELY (single spaced)
1.	Specific Aims List original specific aims

2. Studies and Results

Summarize which studies have already been conducted and results achieved, particularly in reference to specific aims (investigated hypothesis(es) and corresponding findings).

3. Progress Report

Explain how research is proceeding relative to original timetable and contingency plans (any changes from original plan). Accordingly, what are the future plans to carry the project to its end? Supply specific statements on human or animal subjects.

- a. Progress to date
- b. Plans for the next 6 months of support
- c. Subjects (detailed description of sample, including information gender and age)
- d. Publications/presentations
- e. Listing of investigators, nature of involvement in research, and time allotted since beginning of research
- f. Percentage funding from AAOF and other sources; amount of grant funds already spent
- g. Request/justification for extension of present cycle: do the investigator(s) foresee a time extension for this project and why?

4. Illustrations, addendum



401 N. Lindbergh Blvd. St. Louis, MO 63141 Tel.: 314.993.1700, #546 Toll Free: 800.424.2841, #546 Fax: 800.708.1364

Cell: 314.283.1983

Send via email to: jbode@aaortho.org and/or cyoung@aaortho.org

AAO Foundation NCE Request Form (a/o 5/30/2020)

l.	Type	e of Award (Check One):
		Orthodontic Faculty Development Fellowship Award Postdoctoral Fellowship Award Biomedical Research Award Center Award Educational Innovation Award Program Award Research Aid Award
2.	Nam	ne(s) of Principal Investigator(s):
3.	Insti	tution:
4.	<u>Title</u>	e of Project:
5.	<u>Perio</u>	od of AAOF support (e.g. 07-01-2021 to 06-30-2022):
6.	Amo	ount of AAOF Funding:
Sig	gnatui	re: Date:
	I.	PLEASE ADDRESS THE REASON AND CIRCUMSTANCES THAT HAVE LED YOU TO REQUEST AN NCE (NOT TO EXCEED ONE PAGE SINGLE LINE SPACE)
	II.	PLEASE PROVIDE A RECENT PROGRESS REPORT (WITHIN 6 MONTHS) OR PROVIDE THE INFORMATION BELOW

A MAXIMUM OF 2 NCE ARE PERMITTED PER AWARD

III.

PLEASE ADDRESS EACH CATEGORY SEPARATELY (single spaced)

1. Specific Aims

List original specific aims

2. Studies and Results

Summarize which studies have already been conducted and results achieved, particularly in reference to specific aims (investigated hypothesis(es) and corresponding findings).

3. Progress Report

Explain how research is proceeding relative to original timetable and contingency plans (any changes from original plan). Accordingly, what are the future plans to carry the project to its end? Supply specific statements on human or animal subjects.

- a. Progress to date
- b. Plans for the requested remaining months of support
- c. Subjects (detailed description of sample, including information gender and age)
- d. Publications/presentations
- e. Listing of investigators, nature of involvement in research, and time allotted since beginning of research
- f. Percentage funding from AAOF and other sources; amount of grant funds already spent
- g. Request/justification for extension of present cycle: do the investigator(s) foresee a time extension for this project and why?

4. Illustrations, addendum



401 N. Lindbergh Blvd. St. Louis, MO 63141 Tel.: 314.993.1700, #546 Toll Free: 800.424.2841, #546

Fax: 800.708.1364

Send via email to: jbode@aaortho.org and/or cyoung@aaortho.org

AAO Foundation Re-budgeting Request Form (a/o 5/30/2020)

<u>Type of Award</u>, e.g., Orthodontic Faculty Development Fellowship Award, Postdoctoral Fellowship Award, Biomedical Research Award, Center Award, Educational Innovation Award, Program Award, Research Aid Award

Name(s) of Principal Investigator(s)

Title of Project

Institution

Period of AAOF Support (e.g. 07-01-2021 to 06-30-2022):

Amount of Funding

<u>Rebudgeting Request:</u> Please list in detail the original budget and highlight in red if there are any changes in a particular category. The Table below serves as a guide but details for each time and category that are relevant are required.

Category	Original Budget Amount	Revised Budget Amount
Research		
a. Supplies		
b		
c		
Educational		
a		
b		
c. And so forth		
Clinical		
a		
b		
c. And so forth		
Travel		
a		
b		
c. And so forth		

Revised Budget Justification: (Narrative)
You should describe and justify in a paragraph, each category relevant to your proposal, why a change in funding amount is being requested
Personnel:
Research Expenses (Materials/Supplies/Equipment):
Equipment:
Educational Expenses:
Other:

Named Awards Listing

Biomedical Research Awards

B.F. Dewel Memorial Biomedical Research Award*
Robert L. Boyd Biomedical Research Award
Robert James Bray Biomedical Research Award
Burstone-Indiana Biomechanics Award**
The Fred and Dianne Garrett Biomedical Research Award
Graber Family Biomedical Research and Teaching Award***
Fred F. Schudy Memorial Research Award
Five naming opportunities available

Orthodontic Faculty Development Fellowship Awards

Willie and Earl Shepard Fellowship Award
Robert E. Binder Teaching Fellowship Award
Robert E. Gaylord Teaching Fellowship Award
Anthony A. Gianelly Teaching Fellowship Award
T.M. Graber Teaching Fellowship Award
Michael Matlof Memorial Teaching Fellowship Award
Robert M. Ricketts Sunflower Orthodontics Fellowship Award
Subtelny, Baker, Eastman Teaching Fellowship Award
Orhan C. Tuncay Teaching Fellowship Award
Eugene E. West Memorial Fellowship Award
Albert P. Westfall Memorial Teaching Fellowship Award
James A. McNamara Orthodontic Faculty Fellowship Award
Closed

Post-doctoral Fellowship Award

Martin "Bud" Schulman Post-doctoral Fellowship Award *Closed*

Center Awards

3M Unitek Corporate Center Award Align Technologies, Inc. Corporate Center Award American Orthodontics Corporate Center Award GAC International Corporate Center Award Ormco/ "A" Company Corporate Center Award TP Orthodontics Corporate Center Award Closed

- *Awarded to the most outstanding application within the category
- ** Successful applicant of the award each year designated as a Burstone Fellow in Biomechanics
- ***A preference for Junior Faculty

AAOF PARC Review Template (2021)

Principal Investigator	r(s):	
Mechanism:		
Institution:		
Citizenship status:	Verified	Eligible
Chairs/Institutional su	pport letter:	
		Overall Impact
the project to exert a s consideration of the for application does not no scientific impact or a s	trong influence of ollowing five sco eed to be strong sound career dev	act score to reflect their assessment of the likelihood for on the research topic or career development with ored review criteria, and additional review criteria. An in all categories to be judged likely to have major relopment. A summary of the review should be prepare the applicant. Weaknesses can be stated as major,
impactful about sentences or phi should be useful	this application that the thing and the the AAOF the awards pro	ize in lay terms what is most compelling and ion for the field of orthodontics in 1-2 application is successful, this statement of for conveying the current relevance and ogram for fundraising and other a.)
Weaknesses		

Scored Review Criteria

Reviewers will consider each of the five review criteria below in the determination of scientific and technical merit and give a separate score for each.

1. Significance
Strengths
Weaknesses
•
2. Investigator(s)
Strengths
•
Weaknesses
•
3. <u>Innovation</u>
Strengths
•
Weaknesses
•
4. Approach
Strengths
Weaknesses
5 Descine and including mentions and accesses
5. Environment including mentors and resources
Strengths •
Weaknesses
• •

6. Success and Productivity of Previous Funding Provided or N/A

Strengths

•

Weaknesses

•

Additional Review Criteria

As applicable for the project proposed, reviewers will consider the following additional items in the determination of scientific and technical merit but will not give separate scores for these items.

Status of human research approval (NA, Approved, Submitted, Not Submitted):

Status of animal research approval (NA, Approved, Submitted, Not Submitted):

Budget: Appropriate and justified \$

Ineligible request(s) (please specify)

AAOF PARC Award Scoring Criteria

Please score each grant on a scale of 1 to 9 on overall impact score in WHOLE NUMBERS (not decimals) using the following grading criteria.

Impact	Score	Descriptor	Additional Guidance on Strength/Weaknesses
High	9	Exceptional	Exceptionally strong with essentially no weaknesses
	8	Outstanding	Extremely strong with negligible weaknesses
	7	Excellent	Very strong with only some minor weaknesses
Medium	6	Very Good	Strong with numerous minor weaknesses
	5	Good	Strong but with at least one moderate weakness
	4	Satisfactory	Some strengths but also some moderate weaknesses
Low	3	Fair	Some strengths but with at least one major weakness
	2	Marginal	A few strengths and few major weaknesses
	1	Poor	Very few strengths and numerous major weaknesses

American Association of Orthodontists Foundation (AAOF) announces its interest to fund investigator-defined applications for studies in business of orthodontic practice. This call is in response to the current healthcare landscape and rapidly changing market conditions for orthodontic treatment provided by the orthodontists. It is expected the focus and study methods of these applications will be varied. Below are some possible areas of investigation to guide the creativity of investigators.

BACKGROUND:

AAOF is committed to support the studies to advance biological, diagnostic, material, and therapeutic elements of orthodontics. Recently, in addition to these academic topics, the need to also understand and adapt to changes in the marketplace became obvious. The Foundation has long considered orthodontic practices as business establishments, where services are delivered for esthetics and healthcare.

Competition to provide orthodontic services are now different due to the advent of digital technology, artificial intelligence, advertising, and pricing. In such a business climate the distinction between orthodontic treatment and tooth movement could become indistinguishable. Also not made clear is the "burden vs. benefit ratio" of moving teeth. Outcome measures have not been proposed.

Areas of Interest:

AAOF is requesting to study: market-related forces, conditions of profitability, recruitment and conversion of patients, efficacy and outcomes assessment of treatment, flow of patients, assignment of tasks to office staff, burden of obsolete office equipment and technology, applications of robotics, applications of artificial intelligence and remote monitoring, creation of novel software, development of standards of excellence in orthodontic treatment, education of the public, promotion of healthier orthodontic treatment with mediums different than teleorthodontics, kiosk, DIY promotions, impact of awareness of straight teeth due tooth movement done outside of orthodontic offices, and the like topics. Whereas, RCTs might be too costly for AAOF funding, evidence-based proposals (using cross-

sectional or prospective clinical cohort study designs, evaluation of existing publicly available datasets/registries, and retrospective evaluation of electronic dental health record datasets), to justifiably define the parameters of excellence in orthodontic treatment within the framework of "patient desires" are also appropriate to investigate. Creation of a registry of patient complaints kept by AAO, FTA, FDA (eg: MAUDE, Best Business Bureau) is also appropriate. Also appropriate is the effects of population increase in the cities and suburbs on teleorthodontics, kiosk or DIY tooth-movement vs. traditional orthodontics offices.

Exploratory/developmental research proposals are also welcome.

The applications can be submitted under the Center Award, Biomedical Research Award, Post-doctoral Fellowship Award, Orthodontic Faculty Development Fellowship Award, and Research Aid Award categories.

XVII. CALL FOR PROPOSALS (CFP) TO STUDY COVID-19 RELATED OUTCOMES

The American Association of Orthodontists Foundation (AAOF) announces its interest to fund investigator-defined studies concerning COVID-19 related outcomes in orthodontics. It is not well known how orthodontic practices and treatment outcomes are affected by this pandemic. Accordingly, significant interest and need is present to assess the impact of coronavirus induced closures of orthodontic clinics on patient centered outcomes.

The investigator-defined proposals will naturally vary in their focus and methods of study, but they are expected to offer, or lead to, solutions to the present and future issues of the orthodontic specialty. This could be an opportunity to employ methods of qualitative research to reveal the needed answers that cannot be collected quantitatively.

BACKGROUND:

The AAOF is issuing this call for proposals to uncover the effects of COVID-19 pandemic on orthodontic practices, practitioners, and patient-related outcomes.

This pandemic-induced closure of orthodontic practices disturbed the continuity of care and the manner patients are treated. It is not known how guidelines from the CDC, the AAO, and state dental associations for the use of PPE, aerosol control, distancing of patients, and a plethora of additional regulations might have affected the specialty of orthodontics. Information regarding the timeliness and excellence of orthodontic care provided during outbreaks of novel viruses, while surrounded by unfamiliar equipment and barriers, is scarce. Priority will be given to proposals that can be immediately impactful to the issues of orthodontic practices, practitioners, and the care of patients.

POTENTIAL AREAS OF INTEREST TO STUDY COULD BE:

- Effects of practice physical layout modifications on humans
- Financial impact on practices during and post-shutdowns
- Changes in staffing and their impact on clinical outcomes
- Appropriateness and best practices of disinfection strategies by orthodontic practices in response to the pandemic
- Changes in access-to-care issues attributed to the COVID-19 pandemic

- Changes in processes of care, such as screening methods, testing, choice of appliances, modifications to planned treatments, appointment intervals, patient cooperation, and the like
- The utility of virtual health and remote monitoring (VHRM) during the COVID-19 pandemic
- Mathematical predictions and preparations for future similar events

The applications can be submitted under the Center Award, Biomedical Research Award, Post-doctoral Fellowship Award, Orthodontic Faculty Development Fellowship Award, and Research Aid Award categories.