

RESEARCH GRANT PROGRAM AND APPLICATION



ALD Dr. E. Seidner Research Grants

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Coral Springs, FL 33065

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www.laserdentistry.org

Email Siminovsky@laserdentistry.org

RESEARCH GRANT PROGRAM

This grant is funded by the Academy of Laser Dentistry Dr. Eugene Seidner Scholarships and Grants donations and is administered through the Academy to support basic and applied scientific investigation in the field of laser in dentistry. Academy of Laser Dentistry and donors underwrite the funds for the Dr. Eugene Seidner Research Grants Program. Distribution of the funds is administered through the Dr. Eugene Seidner Board of Trustees (SBOT) selected by the ALD Board of Directors.

PURPOSE: The purpose of the Dr. Eugene Seidner Research Grants Program is to support basic and applied scientific investigation in the field of laser dentistry.

I. Primary Objectives

Up to three grant awards totaling \$20,000.00 (twenty thousand dollars) may be awarded annually to individuals to promote basic and applied clinical research for the uses of lasers in dentistry. These include, but are not limited to, effect of light on biological responses, novel or innovative clinical protocols and procedures, laser device development, novel approaches to lasers in dentistry education, initiatives to enhance public acceptance of lasers, behavioral approaches to using lasers in clinics, among others.

II. Eligibility

Primary applicants or at least one team member must be a member of the Academy of Laser Dentistry for the past 3 years. The applicants should be able to demonstrate they are capable of conducting research that meets the primary objective of this award. There are no age or citizenship requirements. Investigators from any scientific or academic discipline and at any stage of their career may apply for a grant. These awards are appropriate for new investigators and those changing areas of research or resuming research careers.

III. Terms and Conditions of the Grant Award

The proposed project may be related to, but the aims must be distinctly different from, those of pending grant applications. The request may be used to supplement projects currently supported by Federal or non-Federal funds or to provide interim support for projects under review.

Institutional Relationship: The award is made to the sponsoring institution on behalf of the awardee. The institution must have the environment and general resources suitable for conducting research as stated in the proposal. A letter from the dean or director of the institution must be enclosed with the application indicating support for the research and a commitment that the funds will only be used for the designated research project. The investigator is directly responsible to the sponsoring institution for the proper conduct of the project and management of the funds.

Nature of Investigation: The project has to broadly assess the role of lasers used in dentistry, irrespective of the nature of laser use for surgical, antimicrobial, Photobiomodulation (PBM), imaging or biomaterials. Research proposals on competing designs or devices are not encouraged.

Funds: The funds are to be used only for direct support of the proposed research, including: technical assistance; supplies; purchasing and/or maintaining laboratory animals; purchase of relevant equipment and instruments; data analysis; preparation of manuscripts and travel to professional meetings related to the project. Indirect cost allocation is prohibited. The award may not be applied to activities sponsored by consulting firms of businesses with which the awardee may be associated nor for costs related to degree completion (tuition) or salary. The funds may be added to resources provided by other entities.

Applicants may request up to \$20,000 (total costs) for the entire budget to fund the project for up to a two-year grant period. Successful applicants who require additional time to perform the proposed research may request extensions of the grant period without additional funds. This grant is not renewable; however, grantees under this program are encouraged to apply for a regular Research Project Grant to a Federal agency, e.g., the National Institutes of Health, the National Science Foundation, the Veterans Administration, or the Department of Defense, to maintain continuity in their studies.

The Board of Trustees reserves first right of refusal on all papers resulting from the approved/funded project.

IV. The Application Process

Please ensure that all applications include the application form along with all the required supplemental materials. Incomplete applications will not be considered.

Application Form: The application form in this information packet must be used. It must be signed by the investigator, project advisor,* and the dean* or director* of the institution. (* = if applicable).

- A. *Description:* The description of the project may not exceed seven (7) pages and must include the following:
 - Specific aims
 - Summary of the project
 - Previous studies by the investigator
 - Condensed review of pertinent literature
 - Experimental design, methods and materials
 - Statistical method of analysis of the data
- B. *Biographical Sketches:* Biographical sketches for the investigator and other key individuals involved in conducting the experiment must be submitted
- C. *Letter of Support:* A letter of support from the dean or director of the sponsoring institution must be provided with the application along with acknowledgement that the funds will only be applied to the approved Seidner project.
- D. *Budget:* A budget must be presented for the 12-month period of the investigation. The budget proposal may include only those costs directly related to the project. Other support available for the proposed project should be specified, including the sponsoring institution's contribution and proposed travel and lodging.
- E. *Human subjects:* Proposals involving human subjects must be accompanied by certification of approval by the Institutional Review Board (IRB). All IRB's must be completed and non-pending.
- F. *Vertebrate animals:* Projects involving use of vertebrate animals must be accompanied by certification from the Institutional Animal Care and Use Committee (IACUC).

Application Review and Selection Process

Applications will be reviewed by an expert panel comprising of, but not limited to, members of the Academy. The review committee with representation from academic, clinical and research in laser dentistry will determine the overall quality and scientific merit of each research grant application.

Applications will be evaluated in accordance with: the significance and scientific merit of the proposed project and its characterization as an innovative and/or pilot project that provides a basis for more extended research. Additional consideration will be given to the investigator's potential for carrying out the project, the time commitment of the investigator, the adequacy of the facilities and the adequacy of the justifications presented for budget requests.

The application will be recommended for approval or disapproval. If recommended for approval, it will be assigned a priority score.

The recommendations will be submitted to the Dr. Seidner Board of Trustees (SBOT) for final approval and selection. The Board of Trustees functions as the stewards of the Seidner funds and is responsible for final selection of awardees, disbursement of funds, and following the research progress of each grant recipient. Applicants will be informed of acceptance or rejection of their proposals in a timely manner to allow presentation of the grant award during ALD's annual meeting.

Deliverable from the grant recipient

- A. *Progress Report:* The awardee is required to submit a progress report on or before January 31st of each year to be available for the Annual Meeting. The progress report must include the following:
 - A summary description of the research progress
 - Results of the research conducted
 - Conclusion
- A. *Presentation:* The awardee is required to present the results of the investigation at the Annual Meeting of the Academy of Lasers in Dentistry. Travel expenses (airfare, ground transportation, and lodging) will be provided by the Academy.
- B. *Publication:* The awardee is encouraged to submit a manuscript based on the research grant to the Journal of Academy of Lasers in Dentistry. Primary research is strongly encouraged but a review on the proposal is acceptable.

If you have any questions regarding this grant or the application process, please Contact Ms. Gail Siminovsky siminovsky@laserdentistry.org

Application Procedure

Applications received by February 1 will be considered for award announcement at the ALD Annual Meeting. Funding of approved projects will begin on July 1 of the same year. Please submit application to:

Gail Siminovsky, CAE
ALD Dr. E. Seidner Research Grants
9900 W. Sample Road, Suite 400
Coral Springs, FL 33065
Telephone: (954) 346-3776
siminovsky@laserdentistry.org

Scoring System and Procedures

The ALD scoring system is intended to allow reviews of the applications in a less subjective way and to standardize the evaluation process.

- The grant application scoring system uses a 9-point scale and at least 3 reviewers will be invited, mix of clinicians and basic researchers, to evaluate each application.
- A score of 1 indicates an exceptionally strong application with essentially no weaknesses. A score of 9 indicates an application that lacks fundamental aspects of a grant with very few strengths; 5 is considered an average score. Ratings are in whole numbers.
- This scale is used by all eligible (without conflict of interest) reviewer members to provide an overall impact score and for assigned reviewers to score (at least) *five individual criteria* namely Significance, Investigator (s), Innovation, Approach and Environment.
- For the impact score, strengths and weaknesses across all of the review criteria should be considered. For each criterion rating, the strengths and weaknesses within that review criterion should be considered.
- Reviewers should consider not only the relative number of strengths and weaknesses noted, but also the importance of these strengths and weaknesses to the overall impact when determining a score. For example, a major strength may outweigh many minor and correctable weaknesses. An application does not need to be

strong in all categories to be judged likely to have major impact. For example, a project that by its nature is not innovative may be essential to advance a field

- Reviewers will be provided a score sheet and detailed instructions and requested to submit findings to the Academy of Laser Dentistry Dr. Eugene Seidner Board of Trustees for final discussions and selection.
- The impact score for an application is based on each individual reviewer's assessment. Discussed applications receive numerical impact scores from all eligible reviewers.
 - High Impact 1 through 3
 - Moderate Impact 4 through 6
 - Low Impact 7 through 9
- Reviewers are guided to use the full range of the rating scale and spread their scores to better discriminate among applications
- Reviewers whose evaluations or opinions of an application fall outside the range of those presented by the assigned reviewers and discussant(s) should ensure that their opinions are brought to the attention of the entire committee.
- An application does not need to be strong in all categories to be judged likely to have major impact, e.g., a project that by its nature is not innovative may be essential to advance a field.

Grant Review Process: The grants will be reviewed by at least 3 (max 5) subject experts, based on the application in either clinical or basic science but with at least 2 in the directly relevant area of application. One of these will be designated randomly as primary, lead reviewer. These experts will be solicited first from the ALD membership and then, as necessary, from the general laser and dental community. The criteria used will be the routine NIH grant mechanism, but much simplified to make evaluations (by reviewers) and interpretations (by committees and applicant) easy to understand. And to make the whole process transparent, specific written feedback on merits and limitations will be requested from reviewers and provided to each submitting applicant along with their final standing in the overall evaluations for every grant cycle. Non-funded applicant will be encouraged to resubmit, specifically addressing the weaknesses pointed out. All reviewer scores and comments will be distributed to the whole committee at least 4 weeks prior to a full committee discussion (in person at the summer / fall meeting or online / phone). The lead reviewer for each application will be asked to present the consolidated report and discussion will be encouraged.

A final decision by the Dr. Seidner Board of Trustees (SBOT) will be made on three specific criteria namely - the scientific merit; impact on clinical laser dentistry, and practical feasibility of investigators completing proposed research based on simple majority. The Trustees decision will be communicated to the ALD Board of Directors for final endorsement. Should the ALD Board of Directors desire further clarification or have concerns with the decisions of the Seidner Board of Trustees, the SBOT will be requested to provide further feedback. In the unusual situation that the proposal still necessitates further clarification, the grant applicant will be invited to present to the board directly (via phone conference, skype or another virtual mechanism).

The grant award will be presented by the Dr. Seidner Board of Trustees or other person designated by the SBOT chairperson. ALD progress reports will be collected by the Academia committee in a timely manner. The ALD Board of Directors and Dr. Seidner Board of Trustees will review the effectiveness and success of this Research Grants Program initiative every 3 years for continuance, expansion or dissolution.

Dr. Seidner Research Grant Application

Instructions

1. Please read all related material prior to filling out the application.
2. The application must be completed in WORD.
3. If additional space is required, follow the same format as the original application.
 - a) Use 8-1/2 x 11 format
 - b) place name at the top of each sheet and page number at the bottom
4. Abstract of research plan (page 4). Select 10 key words and underline them.
5. The budget estimate should be as detailed as possible, e.g., Kodachrome slides, 200 pictures @ \$1.00/slide-\$200. The proposal may not exceed \$20,000 for support from the Academy; however, support in lesser amounts are encouraged and acceptable.
6. An explanation of the project should be as indicated below: (See Application Page 14)
 - a. Specific Aims State concisely and realistically what the research described in this application is intended to accomplish and/or what hypothesis is to be tested. (Do not exceed one page.)
 - b. Significance Briefly sketches the background to the present proposal, critically evaluate existing knowledge, and specifically identify the gaps which the project is intended to fill. State concisely the importance of the research described in this application by relating the specific aims to longer term objectives. (Do not exceed one page.)
 - c. Experimental Design and Methods Discuss in detail the experimental design and the procedures to be used to accomplish the specific aims of the project. Describe the protocols to be used and provide a tentative sequence or timetable for the investigation. Include the means by which the data will be analyzed and interpreted. Describe any new methodology and its advantage over existing methodologies. Discuss the potential difficulties and limitations of the proposed procedures and alternative approaches to achieve the aims. Point out any procedures, situations, or materials that may be hazardous to personnel and the precautions to be exercised. (Although no page limitation is specified for this part of the application, make every attempt to be succinct.)
 - d. Please give the sequence of events and time schedule of the proposed research in detail to include, e.g., preparation of animal receptor site, duration of implant, removal dates, analysis of data, completion time. Support may be up to two years.
 - e. A complete bibliography should be included to substantiate your proposal.

7. A curriculum vitae should include all previous research experience, grant awards, publications, institutional appointments and affiliations. Please use the format indicated on the "Biographical Sketch" page.
8. All co-investigators and consultants should be listed and a complete curriculum vitae and disclosures included. Please use the format indicated on the "Biographical Sketch" page. An outline of their role in the project should be defined on the budget Justification, page 6.
9. The award recipient is required to send a progress report by January 31.
10. The award money will be distributed to the educational institution.
11. The project timeline must be submitted indicating the start and end dates of the project.

ALD Dr. Seidner Research Grant Application

Title of Project:

Principle Investigator:

Name:

Address

Telephone

Email

Private Practice Office Address

University Affiliation

Title

%Full Time:

%Part Time:

Facility at which Project will be conducted:

Office _____ Hospital _____ University _____ Other Please Explain Below

Responsible Administrator:

Name:

Sponsoring Institution:

Full Mailing Address:

Telephone:

Email:

Tax ID#:

PRINCIPAL INVESTIGATOR		
ABSTRACT OF RESEARCH PLAN		
KEY PROFESSIONAL PERSONNEL ENGAGED ON PROJECT		
NAME	POSITION TITLE	DEPARTMENT & ORGANIZATION
<p>ABSTRACT OF RESEARCH PLAN: State the application's long-term objectives and specific aims, making reference to the health relatedness of the project, and describe concisely the methodology for achieving these goals. Avoid summaries of past accomplishments and the use of the first person, the abstract is meant to serve as a succinct and accurate description of the proposed work when separated from the applications. Attach another page as necessary. DO NOT EXCEED 1 full page for the Abstract of the Research Plan.</p>		

VERTEBRATE ANIMALS INVOLVED? NO YES If "YES," identify by common names and underline primates.

PRINCIPAL INVESTIGATOR:

BUDGET FOR ENTIRE PROPOSED PROJECT PERIOD DIRECT COSTS ONLY

BUDGET CATEGORY TOTALS		1st BUDGET PERIOD (from page 5)	ADDITIONAL YEARS SUPPORT REQUESTED			
			2nd	3rd	4th	5th
PERSONNEL (Salary and fringe benefits.) (Applicant organization only)						
CONSULTANT COSTS						
EQUIPMENT						
SUPPLIES						
TRAVEL	FOREIGN					
	DOMESTIC					
PATIENT CARE COSTS	INPATIENT					
	OUTPATIENT					
ALTERATIONS AND RENOVATIONS						
CONSORTIUM/ CONTRACTUAL COSTS						
OTHER EXPENSES						
TOTAL DIRECT COSTS						
TOTAL FOR ENTIRE PROPOSED PROJECT PERIOD (Also enter on page 1, item 8)						\$

JUSTIFICATION (Use continuation pages if necessary): Describe the specific functions of the personnel and consultants. If a recurring annual increase in personnel costs is anticipated, give the percentage, for all years, justify any costs for which the need may not be obvious, such as equipment, foreign travel, alterations and renovations, and consortium/contractual costs. For any additional years of support requested, justify any significant increases in any category over the first 12 month budget period. In addition, for COMPETING CONTINUATION applications, justify any significant increases over the current level of support.

BIOGRAPHICAL SKETCH

Give the following information for key professional personnel listed on page 8, beginning with the Principal Investigator/Program Director. Photocopy this page for each person.

NAME TITLE BIRTHDATE (Mo., Day, Yr.)

EDUCATION (Begin with baccalaureate or other initial professional education and include postdoctoral training)

INSTITUTION AND LOCATION	DEGREE (circle highest degree)	YEAR CONFERRED	FIELD OF STUDY

RESEARCH AND/OR PROFESSIONAL EXPERIENCE: Concluding with present position, list in chronological order previous employment, experience, and honors. Include present membership on any Federal Government Public Advisory Committee. List, in chronological order, the titles and complete references to all publications during the past three years and to representative earlier publications pertinent to this application. **DO NOT EXCEED TWO PAGES.**

OTHER SUPPORT

(Use continuation pages if necessary)

For each of the professionals named on page 2, list, in three separate groups: (1) active support; (2) applications and proposals pending review or funding; (3) applications and proposals planned or being prepared for submission. Include *all* Federal, non-Federal, and institutional grant and contract support. If none, state "none." For each item give the source of support, identifying number, project title, name of principal investigator, time or percent of effort on the project by professional named, annual direct costs, and entire period of support. (If part of a larger project, provide the titles of both the parent project and the subproject and give the annual direct costs for each.) Describe the contents of each item listed. If any of these overlap, duplicate, or are being replaced or supplemented by the present application, delineate and justify the nature and extent of the scientific and budgetary overlaps or boundaries.

PRINCIPAL

INVESTIGATOR (1)

ACTIVE SUPPORT:

PRINCIPAL INVESTIGATOR

Educational Institution Tax
ID Number:

Detailed Explanation of Project

Please follow the outline as described in Item 6 of the instructions on page 6. Use continuation pages as necessary. Please number each page at bottom and identify at top.