
The Thoracic Surgery Foundation for Research and Education

**Program of Grants, Fellowships,
Career Development Awards, and TSF/NHLBI
Jointly Sponsored Mentored Clinical Scientist
Development Awards**



**Application for 2003-2004 TSFRE Awards
Application for 2004 TSFRE/NHLBI Awards**

**401 North Michigan Avenue
Chicago, Illinois 60611-4267
Phone: 312/644-6610 Fax: 312/527-6635
Web: <http://www.tsfre.org>**

August, 2002

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The Thoracic Surgery Foundation for Research and Education is proud to support the research of promising surgeon-scientists. Since The Foundation made its first grant in 1993, The Foundation has made forty-nine research awards to surgeons who are making significant contributions in all areas of thoracic surgery.

This year's Thoracic Surgery Foundation Research Application Brochure contains application information for all TSFRE Research Awards and also the Program Announcement and application procedures for the TSF/NHLBI jointly sponsored Mentored Clinical Scientist Development Award Program. These awards are directed at thoracic surgeons in the early stages of their research careers in order to support the development of outstanding clinician research scientists.

Two annual awards will support young surgical scientists at the level of \$150,000 per year. The program provides specialized study for clinically trained professionals who are committed to a career in research and who have the potential to develop into independent investigators. The award supports a five-year period of supervised research experience that integrates didactic studies with laboratory or clinically-based research. The proposed research should have both intrinsic research importance and be a vehicle for learning the methodology, theories and conceptualizations necessary for a well-trained researcher.

This document will also be available on the web at www.tsfre.org in early September.

David B. Skinner, MD
President

THE THORACIC SURGERY FOUNDATION FOR RESEARCH AND EDUCATION

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PURPOSE OF THE FOUNDATION

The Thoracic Surgery Foundation for Research and Education has been established by the thoracic surgeons of today to enhance the education and capabilities of the thoracic surgeons of tomorrow. *Private philanthropy provides all of the resources for the grants and awards described in this brochure.*

The purpose of The Thoracic Surgery Foundation is to increase the knowledge base of cardiothoracic surgery and to enhance the knowledge of all thoracic surgeons so that ultimately patients may be better served. The Foundation is committed to increasing resources by enlisting the participation of all thoracic surgeons and others who support its purpose. The Foundation is also committed to developing future leaders and standard bearers of our discipline. To this end, the Board of Directors believes that all available income from donations should be put to use immediately so that awards may increase as donations increase.

MISSION STATEMENT

The Thoracic Surgery Foundation supports research and education initiatives to:

- Increase knowledge and enhance treatment of patients with cardiothoracic diseases
- Develop the skills of cardiothoracic surgeons as surgeon-scientists and health policy leaders
- Strengthen society's understanding and trust in the profession

2002 RESEARCH AWARD RECIPIENTS

Leora Balsam, MD

Stanford University
Braunwald Research Fellowship

Yolanda Colson, MD

Brigham and Women's Hospital
TSFRE Research Grant

Robert Korst, MD

Memorial Sloan-Kettering Cancer Center
TSFRE Research Grant

Richard Battafarano, MD, Ph.D.

Washington University
TSFRE Research Grant

Tara Karamlou, MD

Oregon Health Sciences University
Braunwald Research Fellowship

Michael Mulligan, MD

University of Washington
TSFRE/NHLBI
Mentored Clinical Scientist Development Award

GRANTS, FELLOWSHIPS, AND CAREER DEVELOPMENT AWARDS OF TSFRE

The funding programs of The Foundation include:

- 1. Research Grants**
Provide operational support of original research efforts by cardiothoracic surgeons who have completed their formal training.
- 2. Research Fellowships**
Provide support to encourage research by young investigators:
 - The Thoracic Surgery Foundation Research Fellowship, for cardiothoracic surgical applicants who have not yet completed surgical training.
 - The Baxter Healthcare Corporation Research Fellowship, for cardiothoracic surgical applicants who have not yet completed surgical training.
 - The Foundation for the Advancement for Cardiac Therapies (FACT) Research Fellowship, for cardiothoracic surgical applicants who have not yet completed surgical training. First and foremost, this is designated for heart failure research, and secondarily for adult cardiac research.
 - The Nina Starr Braunwald Research Fellowship, for young women in academic cardiothoracic surgery who have not yet completed surgical training.
- 3. Career Development Awards**
Provide salary support for applicants who have completed their residency training and who wish to pursue investigative careers in thoracic surgery.
 - The Thoracic Surgery Foundation Career Development Award, for men and women in academic cardiothoracic surgery at early stages of their faculty careers; e.g., within five years of completion of training.
 - The Nina Starr Braunwald Career Development Award, for women in academic cardiothoracic surgery at early stages of their faculty careers; e.g., within five years of completion of training.
- 4. Jointly Sponsored Mentored Clinical Scientist Development K08 Award**
 - The information regarding this award is discussed at the end of this application.

The merit of the proposal and the promise of the applicant are impartially rated by the Research Committee from information contained in the application. Applications recommended by the Research Committee are approved by the Board of Directors, and funded within the limits of the funds available.

AWARDS OF THE AMERICAN ASSOCIATION FOR THORACIC SURGERY

In addition to its support of TSFRE Grants, Fellowships, and Career Development Awards, The American Association for Thoracic Surgery (AATS) offers the following Fellowships and Scholarships:

The AATS Evarts A. Graham Memorial Traveling Fellowship. Awarded annually, the \$75,000 stipend provides one year of support for study for young cardiothoracic surgeons from outside North America at host sites of their choice within North America. This fellowship is offered to applicants from outside North America who have completed their formal training in general surgery and thoracic and cardiovascular surgery. The Graham Fellowship is awarded to surgeons of unique promise who are regarded as having potential for later international thoracic surgical leadership. Since 1951, the Graham Fellowship has been awarded to 50 young surgeons from 26 countries. The application deadline is July 1, 2003, for awards commencing in 2004.

The AATS Research Scholarship. Awarded annually, this scholarship provides two years of salary support at \$50,000 per year to young cardiothoracic surgeons committed to pursuing an academic career in cardiothoracic surgery. Applicants must be North American cardiothoracic surgeons who are within the first three years after completion of an approved cardiothoracic residency. All applicants are required to provide a description of their research plan as well as a description of how the scholarship will fit into their current and future clinical and research responsibilities. The application deadline is July 1, 2003, for awards commencing in 2004.

Applications are available on the AATS web site at www.aats.org or can be obtained in writing or over the phone from:

President, Graham Education and Research Foundation
13 Elm Street
Manchester, Massachusetts 01944
Phone: (978) 526-8330
Fax: (978) 526-4018

GENERAL INSTRUCTIONS TO APPLICANTS

Individuals who meet the eligibility requirements are invited to submit applications in any of the three award categories. The Nina S. Braunwald Memorial Fund provides support only to women applicants for Research Fellowships and Career Development Awards. The highest ranking applications from women judged eligible for support in these categories will be considered for an award.

Inquiries and applications should be addressed to the Chair of the Research Committee at The Foundation office.

The following instructions apply to the preparation of applications for grants in all categories; subsequent pages detail specific instructions for individual grant programs.

Please read this page carefully, then turn to the section that describes in greater detail the specific grant for which you wish to apply.

Deadline

In order for an application to be reviewed, the **original and four additional copies** of the entire application must be received in The Foundation office by November 1, 2002 (this is not a postmark deadline):

Chair, Research Committee
The Thoracic Surgery Foundation for Research and Education
401 N. Michigan Avenue
Chicago, IL 60611-4267

No exceptions will be granted without prior approval from the Research Committee.

Format

The application should be typed, single-spaced, on 8 1/2" x 11" paper using 10-point type or larger. No appendix material is permissible and strict adherence to the format is required. Applications by fax are not acceptable. All proposals should include the following:

- *Face Sheet* (enclosed) 1 page
See detailed instructions for filling out Face Sheet.
- *Narrative* 6-8 pages
See the award-specific instructions that follow.
- *Literature References* (not to exceed 1 page).
- The *curriculum vitae* of the applicant, all project participants and mentor(s) should be included. A letter of support from each co-investigator that clearly states their role in the proposed project should be included where applicable.
- *Photograph* of applicant attached to Face Sheet.
- *A letter of institutional approval* must accompany the application and can be incorporated into a communication from a sponsoring individual. The latter, usually a department chair or division chief, must indicate his/her authority to commit institutional resources necessary to carry out the project.

LETTERS OF SUPPORT

For all applications (grant, fellowship and career development), letters of support are required from (1) the Director of the applicant's program, indicating the specified amount the applicant's time will be free to pursue the proposed investigation [Research Grant: 30%; Research Fellowship: 80%; Career Development Award: 50%; K08 70%]; (2) any person(s) identified as having a mentoring role (specifically for the Research Fellowship, Career Development Award and K08); and (3) the Chair of the Department of Surgery, attesting to the applicant's commitment to a career in investigative cardiothoracic surgery. Include the *curriculum vitae* of your scientific mentor(s).

A letter of support committing the additional funds needed to support and complete your research project is required from the individual(s) that will supply those funds (e.g. principal investigator, division or departmental chairperson, hospital or university administrator, etc.). This individual may be either your sponsor, scientific mentor or another official authorized to provide financial support for your project. If the additional funds are supplied by a funding grant from government, or an industrial, philanthropic or charitable institution, include the principal investigator for that award, title of the grant, grant identifying number and the amounts (direct costs only) of the award during the period of your proposed research project or fellowship.

SPECIFIC INSTRUCTIONS FOR RESEARCH GRANTS

This award provides operational funding to support the costs of original research. Preference will be given to either clinical or laboratory based investigations that are judged likely to generate data that will, in turn, facilitate the successful pursuit by the applicant of subsequent funding support. In making the awards, emphasis will be placed on originality, the probability of successful project completion and an assessment of the importance of the work toward the advancement of thoracic surgery.

This is a one or two year award of up to \$30,000 per year. A progress report approved by the chairperson of the Research Committee is required prior to a second year of funding if two years of support are requested.

Eligibility

Any thoracic surgeon who has completed a program leading to certification by the American Board of Thoracic Surgery or its equivalent in a country outside of the United States or will soon successfully complete such training.

The Thoracic Surgery Foundation recognizes that the support provided by a Thoracic Surgery Foundation Research Grant may not be sufficient to fully fund operational costs. The Foundation's Research Grant awardees are permitted to secure other research grants to supplement a Thoracic Surgery Foundation Research Grant, but are expected to have 30% of their time protected for research pursuits.

Narrative

Your narrative should include the following elements:

- *Specific Goals and Significance (1 page)*
Identify the goals of the project and the potential significance of your expected findings. Logical future studies may also be indicated and some appraisal should be made as to the general impact of this work on the field. For most applications, less than one page will be required for this element of the proposal.
- *Background (1 page)*
To present the rationale for the project, a critical presentation of the most important relevant work of others and the results of any preliminary work that you have done. Because this grant is regarded as a pilot grant, preliminary data are not a prerequisite for funding. This page should reflect the applicant's knowledge and critical analysis of the area of interest and provide a rationale and foundation for the proposed project.
- *Experimental Design (not to exceed 3 pages)*
State the **hypothesis** that you will test and the methods that you will use. Indicate the design of the study and outline in logical sequence how you plan to proceed. Indicate the source of biological material that you will study and the statistical methods you will use in analyzing your data. Excessive methodologic detail is unnecessary, unless you are developing or applying new and unique techniques.
- *Budget (1 page)*
Outline costs of the **entire** project under the broad categories of personnel, equipment and supplies. Indicate the sources of funds that exceed the amount of the Thoracic Surgery Foundation award that are required to complete the project (e.g. National Institutes of Health, Department of Surgery, American Heart Association, etc). See letters of support, page 7. The Foundation does not support costs of consultants, travel or graphics.

SPECIFIC INSTRUCTIONS FOR RESEARCH FELLOWSHIPS

The following applies to Research Fellowships supported by The Thoracic Surgery Foundation, The Nina Starr Braunwald Memorial Fund, Baxter Healthcare Corporation, and the Foundation for the Advancement of Cardiac Therapies (FACT).

These awards are designed to provide salary and/or direct experimental support for surgeons and surgical trainees who wish to acquire investigational skills. Although a specific research program is required as the major component of the application, particular emphasis is placed on senior investigative input into the program and the environment in which the research training will occur. Emphasis in making the award is placed on the quality of the educational experience for the applicant, the probability of successful project completion and an assessment of the importance of the particular educational effort toward the advancement of thoracic surgery.

Research Fellowships provide support of \$35,000 per year typically for two years. Requests for support for a single laboratory year are discouraged unless this represents the second of two consecutive research years.

Eligibility

Any general surgical trainee who intends to pursue a career in investigative thoracic surgery; thoracic surgical trainees whose program director indicates that the applicant will be allowed not less than 80% protected time for research; or thoracic surgeons who have completed their training but wish to acquire an investigative education with a specified mentor. Fellowships supported by The Nina S. Braunwald Memorial Fund are available only to female applicants.

Narrative

Your narrative should address the following elements:

- *Personal Goals (five sentences or less)*
State your personal career goals. Identify exactly what you wish to accomplish in the course of the proposed work. Logical future studies may be indicated, as well as the potential impact of this work on the field.
- *Background (1 page)*
A highly focused presentation of the background and rationale for the project, a critical presentation of the most important work of others in the field and the results of any preliminary work by the investigators. Because this grant is regarded as a pilot grant, preliminary data are not prerequisite for funding. This page should reflect the applicant's knowledge and critical analysis of the area of interest and provide a rationale and foundation for the proposed project.
- *Experimental Design (not to exceed 3 pages)*
State the **hypothesis** that you will test and the methods that you will use. Indicate the design of the study and outline in logical sequence how you plan to proceed. Indicate the source of biological material that you will study and the statistical methods you will use in analyzing your data. Excessive methodologic detail is unnecessary, unless you are developing or applying new and unique techniques.

- *The Educational Environment (not to exceed 2 pages)*
Particular emphasis will be placed on the potential of the applicant, based on prior accomplishments, and the extent to which a valid educational experience is planned. Organized contributions of a senior investigator and mentor to the development of the trainee must be clearly identified. A very specific learning program for the trainee must be identified, and the manner in which the proposed work will interact with the training program should be well delineated.
- *Financial Support for the Project*
State the sources of financial support for the project that you will pursue and for the laboratory in which you will work. Identify the director of the laboratory and sources of support for the project (e.g. National Institutes of Health, Department of Surgery, etc.). Identify the principal investigator, title, grant number, dates of the grant award and direct costs for the period of your fellowship. Include a letter from the principal investigator (of the grant supporting your project) or department chairman indicating that resources necessary for the project will be provided.
- List any other research applications pending or approved and whether any overlap exists with The Thoracic Surgery Foundation request. The intent of The Thoracic Surgery Foundation is to enable this applicant by the award, but not to provide redundant funding for a funded project.

SPECIFIC INSTRUCTIONS FOR CAREER DEVELOPMENT AWARDS

The following applies to Career Development Awards sponsored by The Thoracic Surgery Foundation and The Nina Starr Braunwald Memorial Fund.

These awards are designed to provide salary support for the development of cardiothoracic surgical investigators. Preference is given to investigators (either clinical or laboratory based) that are able to demonstrate unique potential for a successful career in investigative cardiothoracic surgery. Awards should allow the investigator to diminish the financial impact of reduced clinical activity in order for the applicant to cultivate skills that will enhance credibility and expertise in investigation. Preference is given to applicants who are able to demonstrate clearly focused goals in an appropriately supportive and nurturing environment.

This is a two-year award of \$50,000 per year.

Eligibility

Applicants must have completed thoracic surgical training and be able to demonstrate that they hold a position in an investigation-oriented environment. Awards are available for recently trained thoracic surgeons and for established investigators who wish to add a specific component to currently existing investigative skills. Career Development Awards supported by The Nina S. Braunwald Memorial Fund are available only to female applicants. It is expected that the applicant will have not less than 50% protected time dedicated to research. Prospective applicants considering this option are encouraged to also consider the K08 mechanism.

Narrative

Your narrative should include the following elements:

- *Specific Goals and Significance (1 page)*
Identify the goals to be accomplished during the period of the Career Development Award, the potential impact of this award on the investigator's career and the field of investigation. The likely educational impact of the award on specific lines of future investigation should be documented. For most applications, less than one page is required for this element of the proposal.
- *Please refer to and follow the guidelines for the TSF Research Fellowship.*

REVIEW OF APPLICATIONS

The enclosed Face Sheet must be completed and returned to The Foundation office with your application. The Foundation business office will conduct a preliminary review of your application to ensure that (a) you have met the eligibility requirements set forth on the preceding pages; (b) all required elements of the application have been received; and (c) you have adhered to all guidelines regarding format.

All applications will then be sent to The Foundation's Research Committee. The Committee may request additional information or clarification of your proposal.

Final review and approval of the Research Committee's recommendations will be made by The Foundation's Board of Directors.

TSFRE awards will be announced in February 2003.

Please note:

- The Foundation will provide a brief critique to those applicants whose proposals are not funded.
- **Should you receive an award, you will be required to acknowledge the support of The Foundation in any and all resultant publications of your findings. Copies of these publications should be forwarded to The Foundation.**
- The Foundation may request periodic status reports and/or a final report on your research, particularly in the case of multi-year support.
- No part of any grant, fellowship or award may be directed toward institutional overhead.

The Thoracic Surgery Foundation for Research and Education offers an important philanthropic opportunity to everyone who wishes to support thoracic surgery.

Fully endorsed by The American Association for Thoracic Surgery, The Society of Thoracic Surgeons, The Southern Thoracic Surgical Association and The Western Thoracic Surgical Association, The Foundation is an independent not-for-profit organization classified by the Internal Revenue Service as a 501(c)(3) public charity qualified to receive charitable contributions eligible for deduction from taxable income as provided by law.

Contributions can be sent to the attention of:

President
The Thoracic Surgery Foundation for Research and Education
401 North Michigan Avenue, Suite 2200
Chicago, Illinois 60611-4267

DETAILED INSTRUCTIONS FOR FACE SHEET
(Numbers refer to boxes on the Face Sheet of the Application)

Please note: This form is for TSF awards only, the K08 application process is detailed in the program announcement at the end of this brochure.

1. **Title of Proposal.** A brief, informative title not to exceed 60 typewritten spaces.
2. **Award category** for which the applicant is applying. Use abbreviations: **RG** for Research Grant; **RF** for Research Fellowship; **CDA** for Career Development Award. Add **(Br)** if you qualify for support from the Braunwald Fund.
3. **Starting Date** of the Project. Not before July 1, 2003 or after January 1, 2004. Enter month, day, year; e.g. 7/1/02.
4. **Ending Date** of the Project. Not more than 2 years after starting date.
5. **Duration** of the project in months. Not more than 24 months.
6. **Name and highest degree(s) of applicant.**
7. **Sex** of applicant. Enter M or F.
8. **Social Security or Tax ID Number** of Applicant (9 digits).
9. **Institutional address of the applicant.** Include name of Institution, Department (9a), Street address (9b), City (9c), State (9d) and Zip code (9e). Also include any mailing addresses used to facilitate mail delivery within the institution.
10. Applicant's **telephone** number at institutional address.
11. Applicant's **email** address at institutional address.
12. Applicant's **fax** number at institutional address.
13. Applicant's **institutional affiliation**, department and address if different from that listed in Box 9.
14. **Applicant's title** or appointment at sponsoring institution.
15. **Institution sponsoring the applicant.** Give name, full address (15a) and tax **ID number** of institution (15b). The sponsoring institution may be a division, department, hospital or school that has a tax ID number and control of the space and support facilities needed to carry out the project. The sponsoring individual, normally a division or department chief, must have the authority to commit the institutional resources necessary to carry out the project.
16. **Sponsor of the applicant.** Name, Title (16a), Address (16b), Telephone (16c), Email address (16d) and Fax number (16e) of **applicant's sponsor** (normally the applicant's department or division chief as opposed to scientific

mentor). If thoracic surgery is a full department (chief reports to the Dean or Chief of Medical Staff), list that individual. If thoracic surgery is organized as a division within a department, list the division chief if he/she has the authority to commit institutional resources needed for the project; otherwise list the department chair. **The person listed in this box assumes responsibility for providing space, time and customary institutional resources needed to carry out the project.**

17. **Name, address** (17a) and **telephone** number (17b) of **applicant's scientific mentor** (required for all RFs and CDAs). Indicate "same" if the individual is identified in Box 16.
18. **Institution and full address** (18a) of where the project will be carried out if different from Box 15.
19. **Payee of an award.** This cannot be the applicant. Award checks are made to the sponsoring institution or a unit of the sponsoring institution that is administered by the sponsoring individual. The sponsoring institution or unit within must have a tax ID number. The payee may be a business official of the sponsoring institution or unit as designated by the sponsoring individual. The applicant receives award monies from the sponsoring institution. Include full address of payee after the name of the individual and also telephone and fax numbers.

Signatures: Both the applicant and the sponsor of the applicant should sign the Face Sheet. The sponsor's signature indicates that the sponsor assumes the responsibility for providing space, time and customary institutional resources needed to carry out the project.

APPLICATION FACE SHEET

All questions must be answered and both the applicant and the applicant's sponsor (not necessarily scientific mentor) must sign this Face Sheet.

| | | | |
|---|------------------|----------------|----------------|
| 1. Title of Proposal | | | |
| 2. Award Category | 3. Starting Date | 4. Ending Date | 5. Duration |
| 6. Applicant's Name and Highest Degree(s) | | | 7. Sex |
| 8. SSN | | | |
| 9. Applicant's Institution | | | |
| 9a. Department | | | |
| 9b. Street Address | | | |
| 9c. City | | 9d. State | 9e. Zip |
| 10. Telephone | 11. Email | 12. Fax | |
| 13. Institutional Affiliation (if different from above) | | | |
| 14. Title (at sponsoring institution) | | | |
| 15. Sponsoring Institution | | | |
| 15a. Address | | | |
| 15b. Tax ID No. of Sponsoring Institution | | | |
| 16. Sponsor | | | |
| 16a. Title | | | |
| 16b. Address | | | |
| 16c. Telephone | 16d. Email | 16e. Fax | |
| 17. Scientific Mentor (indicate "same" if individual is identified in box 16) | | | |
| 17a. Address | | | 17b. Telephone |
| 18. Institutional Site of Research (if different from box 15) | | | |
| 18a. Address | | | |
| 19. Payee of Award (include address, telephone and fax) | | | |

Signature of Applicant

Date

Signature of Sponsor

Date