

throughout to implement concepts learned in class and to allow scholars to begin to explore their own data.

Winter

**Clinical Trials**

EPI 205 (D. Grady, Director; 1.5 units)

Instruction in experimental design options; methods of randomization; blinding, interventions and controls; measuring outcomes and adverse effects; follow-up, compliance and postrandomization problems; ethical issues; and working with pharmaceutical companies.

**Database Management Systems for Clinical Research**

EPI 218 (M. Kohn, Director; 1 unit)

Instruction in choosing the appropriate data management system; design of research databases; options in data entry; form and report generation; computer security; and budgeting for data management personnel and equipment.

**Biostatistical Methods for Clinical Research II**

BIOSTAT 208 (D. Glidden, Director; 3 units)

Instruction in multiple predictor analyses as a tool for control of confounding and for constructing predictive models. Topics will include linear regression and logistic regression. The STATA statistical package will be used throughout.

Spring

**Systematic Reviews (Meta-Analysis)**

EPI 214 (S. Bent, Director; 1 unit)

Instruction in the methods of systematic and unbiased identification of primary research studies; abstraction of data; determination of summary estimates and evaluation of heterogeneity.

**Publishing and Presenting Clinical Research**

EPI 212 (E. Hartman, Director; 1 unit)

Instruction in preparing abstracts, posters, all aspects of manuscripts, and oral presentations; instruction in oral presentations includes videotaping and critique of trainees' presentations.

**Biostatistical Methods for Clinical Research III**

BIOSTAT 209 (D. Glidden, Director; 3 units)

A continuation of the Winter Quarter course in multivariable statistical analysis that includes instruction in survival analysis and analysis of repeated measures and clustered data. The course culminates with student presentations of statistical analyses of their own research projects.

Year-Long

**ATCR Seminar**

EPI 230 (M. Pletcher, Director)

These monthly seminars provide a support group for discussing the design or conduct of trainees' studies and for critique of contemporary clinical research literature.

---

**ELECTIVE COURSES**

Fall

**Measurement in Clinical Research**

EPI 225 (A. Stewart, Director; 1.5 units)

Instruction in the critical importance of measurement to clinical research including: defining concepts prior to selecting measures; evaluating the conceptual and psychometric adequacy of measures; and locating, reviewing, selecting potential measures.

**Grant Writing Workshop**

(E. Holly and T. Mitchell, Directors; not for credit)

Instruction in grant writing principles, with specific guidelines for preparing successful grant applications using PHS 398 forms, will be presented with emphasis on federal guidelines and regulations for research with human study participants.

Winter

**Decision & Cost-Effectiveness Analysis**

EPI 213 (J. Kahn, Director; 2 units)

Instruction in creating decision trees and other analytic models; obtaining appropriate probabilities, utilities and costs; and completing analyses using customized software.

**Medical Informatics**

EPI 206 (I. Sim, Director; 1 unit)

Instruction in the core concepts of medical informatics: vocabularies, interchange standards, decision support systems, and how computers are used to manage information in health care and to support clinical research.

**Molecular and Genetic Epidemiology I**

EPI 217 (J. Witte, Director; 1.5 units)

Introduction to the concepts, principles, and use of molecular and genetic methods in epidemiologic and clinical research and how to develop a framework for interpreting, assessing, and incorporating molecular and genetic measures in research.

Spring

**Clinical Research with Diverse Communities**

EPI 222 (E. Perez-Stable, Director; 1 unit)

Instruction in the meaning of race, ethnicity, social class, and culture, and how these constructs affect the conduct and interpretation of clinical research.

**Molecular and Genetic Epidemiology II**

EPI 219 (S. Sen, Director; 1.5 units)

Instruction in selected statistical aspects of population-based and family-based candidate gene association studies, quantitative trait mapping in model organisms, and methods for dealing with multiple comparisons.

**Lab Practicum for Molecular and Genetic Epidemiology**

EPI 223 (J. Wiemels, Director; 0.5 unit)

Introduces practical aspects of the generation of molecular and genetic data from human clinical specimens, including blood and oral cavity specimens.

**Outcomes Research**

EPI 211 (A. Bindman, Director; 1.5 units)

Instruction in types of questions that can be addressed with large administrative and clinical databases; gaining access to these

databases; determining validity of information; risk adjustment; linking datasets; and building registries.

#### **Qualitative Research Methods**

EPI 240 (E. Boyd, Director; 1.5 units)

Introduces basic qualitative research methods used in clinical settings: question design and interviewing techniques; focus group analysis; ethnographic fieldwork, notes and narrative analysis; and audio and video data collection and analysis.

## MENTORING

▲ Top

Structured mentoring by faculty members experienced in the scholar's chosen academic discipline is an essential element of becoming an accomplished clinical researcher. While the ATCR curriculum and faculty will provide the methodologic guidance to enable the scholar to plan and implement clinical research, this does not substitute for the benefits derived from a relationship with mentors who work primarily in the scholar's field. Hence, we require that each student receive guidance from:

- A home Department Chair (or Division Chief) or Fellowship Program Director: This is the person in the home Department or Division who assures that the scholar has sufficient time allotted for clinical research and provides resources for the research.
- A research mentor: This is an established scientist who meets regularly with the scholar, reviews progress, provides scholarly guidance, and monitors whether facilities and resources are adequate.

## APPLICATION TO TRADITIONAL ATCR PROGRAM

▲ Top

The ATCR application is available in a ready-to-use Microsoft Word format (created on Word for Office 97 for the PC). To use this, click on the "Microsoft Word Format" button below. The word document should then appear in your browser. Next select "File > Save As" from the menu bar and save a local copy of the document to your computer. **Make sure to save a copy of the file on your computer before attempting to use the file.**

If you are not able to access the application in the Microsoft Word format, please download the .pdf version of the application by clicking on the pdf button below. This can then be printed out and completed by typing where indicated.



Completed ATCR applications in MS Word format should be sent by email to Allison Deneen, Program Assistant ([adeneen@psg.ucsf.edu](mailto:adeneen@psg.ucsf.edu)). A signed hard copy of the application should also be sent to:

Allison Deneen  
Program Assistant, Advanced Training in Clinical Research Certificate Program  
University of California, San Francisco  
UCSF Box 0560  
185 Berry St, Suite 5700  
San Francisco, CA 94107  
415-514-8135 (telephone)

**Deadline:** Applications for the ATCR Certificate Program for 2006-2007 are due June 1, 2006. Notice of admission decisions will be made by early July.

**Cost:** The current fee for 2006-2007 is \$7425 for University of California Fellows

and Faculty. This includes fees for all four quarters (Summer, Fall, Winter, and Spring). Fees do not include books, supplies, or software. Fees in subsequent years are subject to change.

Scholars are also strongly encouraged to own a wireless-capable laptop computer for use in computer labs in various courses and to take advantage of the wireless internet network at the TICR Program's facility at the China Basin Landing Building.

The statistical software package Stata (Stata Corporation, College Station, Texas) is used in the program. The TICR Program has arranged for a sizeable discount for UCSF-affiliated personnel via the Stata GradPlan program.

## APPLICATION TO CREDIT-BEARING ATCR PROGRAM

[▲ Top](#)

To apply to the credit-bearing ATCR Certificate program you must complete the one-page UCSF Graduate Division application available in PDF format below and send it to Allison Deneen with a \$60 non-refundable processing fee by June 1, 2006. When completing the application check the box "Cert" and write in "Advanced Training in Clinical Research" in the blank space following "Graduate Program". Please note that transcripts, GRE scores and TOEFL scores are not required for admission into the program.

**GRADUATE DIVISION  
APPLICATION  
PDF Format**

Send to:

Allison Deneen  
Program Assistant, Advanced Training in Clinical Research Certificate Program  
University of California, San Francisco  
UCSF Box 0560  
185 Berry St, Suite 5700  
San Francisco, CA 94107

In addition to the Graduate Division application, you must also complete the ATCR application. The ATCR application is available in a ready-to-use Microsoft Word format (created on Word for Office 97 for the PC). To use this, click on the "Microsoft Word Format" button below. The word document should then appear in your browser. Next select "File > Save As" from the menu bar and save a local copy of the document to your computer. **Make sure to save a copy of the file on your computer before attempting to use the file.**

If you are not able to access the application in the Microsoft Word format, please download the .pdf version of the application by clicking on the pdf button below. This can then be printed out and completed by typing where indicated.

**ATCR  
APPLICATION  
Microsoft Word Format**

**ATCR  
APPLICATION  
PDF Format**

Completed ATCR applications in MS Word format should be sent by email to Allison Deneen, Program Assistant ([adeneen@psg.ucsf.edu](mailto:adeneen@psg.ucsf.edu)). A signed hard copy of the application should also be sent to:

Allison Deneen  
Program Assistant, Advanced Training in Clinical Research Certificate Program  
University of California, San Francisco  
UCSF Box 0560  
185 Berry St, Suite 5700  
San Francisco, CA 94107  
415-514-8135 (telephone)

**Deadline:** Applications for the credit-bearing ATCR Certificate Program for 2006-2007 are due June 1, 2006. Notice of admission decisions will be made by early July.

**Cost:** The fee for the credit-bearing ATCR Certificate Program in 2006-07 is \$10,758. This includes the \$7,425 ATCR program fee for University of California fellows or faculty plus the estimated UCSF student services fees of \$3,333. The latter fees are required for all persons in credit-bearing certificate or degree programs and at this time are only estimated for 2006-07. This includes fees for all four quarters (Summer, Fall, Winter, and Spring). In addition there is a \$60 non-refundable application processing fee that must accompany the one-page UCSF Graduate Division Application.

Fees do not include books, supplies, or software. Fees in subsequent years are subject to change.

Scholars are also strongly encouraged to own a wireless-capable laptop computer for use in computer labs in various courses and to take advantage of the wireless internet network at the TICR Program's facility at the China Basin Landing Building.

The statistical software package Stata (Stata Corporation, College Station, Texas) is used in the program. The TICR Program has arranged for a sizeable discount for UCSF-affiliated personnel via the Stata GradPlan program.

**Note:** Pre-doctoral students who are currently enrolled in a graduate or professional degree program at UCSF should apply for the Traditional ATCR Program, and not the Credit-Bearing Program. This is because UCSF policy does not allow students to enroll in more than one graduate degree/certificate program at a time. If you are accepted into the Traditional ATCR Program, then as long as you formally register (pay fees in the quarter), and file a study list through the UCSF Registrar's on-line system for each course you take in the ATCR Program you will receive credit on your graduate transcript for these courses.

[TICR Home](#) | [TICR Master Schedule](#) | [TICR Courses](#) | [TICR Programs](#) | [TICR Rosters](#)  
[Department Home](#)

Last Updated: Friday, 17-Nov-2006 10:51:35 PST

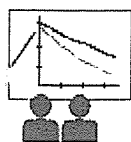
▲ Top

Copyright © 2005 The Regents of the University of California

Please send comments, suggestions, and edits to the web developer

**Masters**

- Overview
- Objectives
- Prerequisites
- Program of Study
- Courses
- Products
- Instruction
- Filing for Graduation
- Sample Course Schedule
- Master's Committee
- UCSF Graduation
- Grantwriting Tutorial Application
- Student Directory



# Training In Clinical Research

- Home
- Overall Schedule
- Courses
- Programs
- Rosters
- Career Awards

---

## Master's Degree Program in Clinical Research

Director: Jeffrey N. Martin, MD, MPH

---

Applications are due March 19, 2007 for admission in Summer 2007

**Note:**

- All courses are held in the TICR Program's new facilities at [China Basin Landing](#). However, during the Summer Quarter, the morning courses will be held on the Parnassus campus.
- Scholars are strongly encouraged to own a wireless-capable laptop computer for use in computer labs in various courses and to take advantage of the wireless internet network at China Basin

**Other Programs**

- Summer Workshop
- Certificate (ATCR)

**OVERVIEW**

▲ Top

The Master's Degree Program in Clinical Research is a two-year course of study intended for advanced pre-doctoral students, post-doctoral fellows, and faculty members who wish to master clinical research methods and pursue independent research careers. Course work extends beyond that which is required for the [ATCR Certificate Program](#) to include instruction in advanced epidemiologic and biostatistical methods and specialized topics such as outcomes research, medical informatics, molecular methods in clinical research, and decision and cost-effectiveness analysis. Requirements include a comprehensive review of the literature in the scholar's field, presentation of original work at a national scientific meeting, and publication of a peer-reviewed manuscript. Scholars will work closely with mentors in their home departments and preceptors chosen from the TICR faculty.

**OBJECTIVES**

▲ Top

1. Acquire a mastery of a broad set of clinical research methods.
2. Plan and implement one or more clinical research projects.
3. Present research findings at a national meeting.
4. Write a comprehensive literature review and publish one or more first-authored peer-reviewed original research papers.
5. Obtain experience in the instruction of clinical research methods.

**PREREQUISITES**

▲ Top

- Possession of a MD, PhD, DDS or PharmD degree, or currently enrolled as a medical, dental, or pharmacy student and will have completed at least two years of training in respective professional school prior to enrollment in the Master's program.
- Ability to devote at least 70% of time to this program and to the conduct of the scholar's own research during August to May in at least two academic years.
- Established relationship with a research mentor.

**PROGRAM OF STUDY**

▲ Top

## 1. COURSES

This is a two-year course of study. 36 quarter units are required. Trainees will take the majority of their coursework in the first year allowing for focus on independent research in the second year. Grading policy is determined by the UCSF Graduate Division. In particular, scholars should note that UCSF graduate students must maintain at least a 3.0 (B average). It is the policy of the TICR Program that one "C" grade or less (or one "U" grade) will trigger a discussion between the program director and the student about the expected level of performance in the program; two "C" grades or less (or two "U" grades) will trigger a formal review by the TICR Internal Advisory Committee and may result in the student being dismissed from the program.

Other policies and procedures governing graduate study at UCSF may be found at the Graduate Division website.

**Course Registration:** All students matriculated in the Master's in Clinical Research Degree program must follow the registration process established by the UCSF Office of Admissions and Registrar. Please refer to the Office of Admissions and Registrar website for further information about the registration process, deadlines for filing study lists, adding/dropping courses, and other matters.

### REQUIRED COURSES

#### YEAR 1

##### Summer

Scholars who have taken and passed summer courses prior to enrollment in the Master's program will be excused from taking these courses if accepted into the program. However, in accordance with Graduate Division policy, retroactive course credit units cannot be granted, and hence scholars will need to take additional coursework in other quarters to compensate for not receiving credit for these summer courses.

##### **Designing Clinical Research**

EPI 202 (S. Hulley, Director; 2 units)

This course provides instruction in developing a clinical research question and creating a concise protocol that includes a literature review, study design, subject sampling and recruitment, instruments and other measurement approaches, sample size, consent form, budget and timetable. Each trainee reviews and supports the work of colleagues. The course closely follows the textbook *Designing Clinical Research*, by S. Hulley and other TICR faculty, now in its third edition.

##### **Building a Career in Clinical Research**

EPI 227 (M. Whooley, Director; 0.5 unit)

Trainees learn about choosing a mentor, time management, generating finished projects, getting grants and getting a job; about how UCSF administration works; and about sources of clinical research funding including industry and foundations in addition to NIH and other government agencies.

**Responsible Conduct Of Research**

EPI 201 (B. Lo, Director; 0.5 unit)

Trainees learn through case discussions how to identify and resolve common ethical dilemmas that arise in clinical research, how research on human subjects is regulated by the federal government, and what constitutes research misconduct. Trainees resolve the ethical considerations involved in the research protocol they develop in the Designing Clinical Research course. This course meets the NIH requirements for training in research ethics.

**Introduction to Statistical Computing in Clinical Research**

BIOSTAT 212 (M. Pletcher, Director; 1 unit)

Instruction in use of computer software for managing and analyzing clinical research data; roles of spreadsheet and relational database programs; use of STATA for managing, cleaning, describing, and analyzing data.

Fall

**Epidemiologic Methods**

EPI 203 (J. Martin, Director; 3 units)

Instruction in clinical research study design; measures of disease occurrence and disease association; the different mechanisms of bias in clinical research (selection, measurement, and confounding); and a conceptual approach to multivariable analysis.

**Clinical Epidemiology**

EPI 204 (T. Newman, Director; 3 units)

Instruction in the research implications of evidence-based clinical medicine, including the specifications of diagnostic tests, screening tests, and prognostic tests.

**Biostatistical Methods for Clinical Research I**

BIOSTAT 200 (B. Jersky, Director; 3 units)

Introduction to descriptive statistics, distributions, probability, exploratory data analysis, and selected variable parametric and non-parametric inference. The STATA software package will be used throughout to implement concepts learned in class and to allow scholars to begin to explore their own data.

Winter

**Clinical Trials**

EPI 205 (D. Grady, Director; 1.5 units)

Instruction in experimental design options; methods of randomization; blinding, interventions and controls; measuring outcomes and adverse effects; follow-up, compliance and postrandomization problems; ethical issues; and working with pharmaceutical companies.

**Database Management Systems for Clinical Research**

EPI 218 (M. Kohn, Director; 1 unit)

Instruction in choosing the appropriate data management system; design of research databases; options in data entry; form and report generation; computer security; and budgeting for data management personnel and equipment.



**Biostatistical Methods for Clinical Research II**

BIOSTAT 208 (D. Glidden, Director; 3 units)

Instruction in multiple predictor analyses as a tool for control of confounding and for constructing predictive models. Topics will include linear regression and logistic regression. The STATA statistical package will be used throughout.

**Molecular and Genetic Epidemiology I**

EPI 217 (J. Witte, Director; 1.5 units)

Introduction to the concepts, principles, and use of molecular and genetic methods in epidemiologic and clinical research and how to develop a framework for interpreting, assessing, and incorporating molecular and genetic measures in research. (Note: This required course can also be taken during the second year.)

Spring

**Systematic Reviews (Meta-Analysis)**

EPI 214 (S. Bent, Director; 1 unit)

Instruction in the methods of systematic and unbiased identification of primary research studies; abstraction of data; determination of summary estimates and evaluation of heterogeneity.

**Publishing and Presenting Clinical Research**

EPI 212 (E. Hartman, Director; 1 unit)

Instruction in preparing abstracts, posters, all aspects of manuscripts, and oral presentations; instruction in oral presentations includes videotaping and critique of trainees' presentations.

**Biostatistical Methods for Clinical Research III**

BIOSTAT 209 (D. Glidden, Director; 3 units)

A continuation of the Winter Quarter course in multivariable statistical analysis that includes instruction in survival analysis and analysis of repeated measures and clustered data. The course culminates with student presentations of statistical analyses of their own research projects.

Year-Long

**Master's Seminar I** EPI 220 (T. Newman, Director; 1 unit each quarter)

The seminar provides a forum for presenting scholar's projects, and for evaluating controversies in clinical research.

YEAR 2

Fall

**Biostatistical Methods for Clinical Research IV**

BIOSTAT 210 (J. Neuhaus, Director; 2 units)

Instruction in advanced topics in biostatistics including individualized instruction in biostatistical methods pertaining to the scholars' research projects. Topics are in part suggested by the class and include, but are not limited to: analysis of health surveys, nonparametric regression techniques, and survival

and repeated measures analyses.

Winter

**Biostatistical Methods for Clinical Research V**

BIOSTAT 226 (J. Hilton, Director; 2 units)

Instruction in advanced topics in biostatistics in two subject areas: 1) issues in the design and analysis of randomized clinical trials; and 2) bioinformatics.

Year-Long

**Master's Seminar II**

EPI 221 (J. Martin (Fall); J. Witte (Winter); R. Hiatt (Spring), Directors; 1 unit each quarter)

The seminar provides a forum for scholars to present their projects and specialized methodologic topics.

---

**ELECTIVE COURSES**

Fall

**Measurement in Clinical Research**

EPI 225 (A. Stewart, Director; 1.5 units)

Instruction in the critical importance of measurement to clinical research including: defining concepts prior to selecting measures; evaluating the conceptual and psychometric adequacy of measures; and locating, reviewing, selecting potential measures.

**Grant Writing Workshop**

(E. Holly and T. Mitchell, Directors; not for credit)

Instruction in grant writing principles, with specific guidelines for preparing successful grant applications using PHS 398 forms, will be presented with emphasis on federal guidelines and regulations for research with human study participants.

Winter

**Decision & Cost-Effectiveness Analysis**

EPI 213 (J. Kahn, Director; 2 units)

Instruction in creating decision trees and other analytic models; obtaining appropriate probabilities, utilities and costs; and completing analyses using customized software.

**Medical Informatics**

EPI 206 (I. Sim, Director; 1 unit)

Instruction in the core concepts of medical informatics: vocabularies, interchange standards, decision support systems, and how computers are used to manage information in health care and to support clinical research.

Spring

**Clinical Research with Diverse Communities**

EPI 222 (E. Perez-Stable, Director; 1 unit)

Instruction in the meaning of race, ethnicity, social class, and culture, and how these constructs affect the conduct and interpretation of clinical research.

**Molecular and Genetic Epidemiology II**

EPI 219 (S. Sen, Director; 1.5 units)

Instruction in selected statistical aspects of population-based and family-based candidate gene association studies, quantitative trait mapping in model organisms, and methods for dealing with multiple comparisons.

**Lab Practicum for Molecular and Genetic Epidemiology**

EPI 223 (J. Wiemels, Director; 0.5 unit)

Introduces practical aspects of the generation of molecular and genetic data from human clinical specimens, including blood and oral cavity specimens.

**Outcomes Research**

EPI 211 (A. Bindman, Director; 1.5 units)

Instruction in types of questions that can be addressed with large administrative and clinical databases; gaining access to these databases; determining validity of information; risk adjustment; linking datasets; and building registries.

**Qualitative Research Methods**

EPI 240 (E. Boyd, Director; 1.5 units)

Introduces basic qualitative research methods used in clinical settings: question design and interviewing techniques; focus group analysis; ethnographic fieldwork, notes and narrative analysis; and audio and video data collection and analysis.

Scholars may also choose from a diverse array of other graduate level courses at UCSF.

**Intercampus Exchange**

The University of California Intercampus Exchange Program allows graduate students to take courses on another campus of the University while remaining registered on the home campus. The student pays fees only to the home campus and grades for courses taken at the host campus are reported to the Registrar for inclusion on the student's UCSF transcript. Application forms for the intercampus Exchange are available in MU200W. A similar program exists with Stanford University. Forms for cross registration with Stanford are also available in MU200W.

**SAMPLE COURSE SCHEDULE**

2. **ACCOMPLISHMENT OF THE FOLLOWING PRODUCTS OF CLINICAL RESEARCH**
  - **Preparation of a comprehensive literature review:** For this requirement, the scholar will compose a comprehensive review of the literature pertinent to his or her research question. This review should take the form of a three to five page single-spaced report, similar in format to the "Background and Significance" section of an NIH proposal, that demonstrates the scholar's mastery of the field's literature and provides the rationale for his/her proposed project. Emphasis should be placed not only in describing the findings of prior work but also providing a methodologic critique of sentinel studies. If numerous other studies have been performed on the scholar's research question, the scholar should explain why further work (which may include a formal meta-analysis) is needed. If little or no prior work has been

performed, the scholar should focus on background work just proximal to the question posed, again with an emphasis on methodologic critique. It is expected, although not required, that this requirement be completed by the end of the first year in the program.

- **First-authored oral or poster presentation at a national or international meeting:** This requirement involves submission of a first-authored abstract to a nationally or internationally recognized scientific meeting/conference within the scholar's academic field and acceptance of that abstract for either poster or oral presentation. The abstract should describe a study of a comparative nature (not simply a case report or case series) using data analyzed (but not necessarily collected) during residence in the Master's program. It may be acceptable in selected cases, with pre-approval by the scholar's Master's Committee, to present work that was started prior to enrollment in the program. It is expected that the work represent a substantive contribution to the scholar's research field.
- **Submission as first author of a peer-reviewed manuscript:** Using data analyzed (but not necessarily collected) during residence in the Master's program, the scholar will prepare and submit a first-authored manuscript for publication in a peer-reviewed journal that is approved by the Master's Committee. It may be acceptable in selected cases, upon approval of the scholar's Committee, to submit work that was started prior to enrollment in the program. The manuscript should describe a study of a comparative nature and not simply a case report or case series. The manuscript may be a comprehensive extension of the work submitted in abstract form to a national meeting. It is expected that the work represent a substantive contribution to the scholar's research field. The format should follow that suggested by the journal to which submission is intended. Achievement of this requirement will be considered complete upon satisfactory review by the scholar's Master's Committee and upon written correspondence indicating receipt of the manuscript by an approved peer-reviewed journal. Of note, it is not acceptable for a scholar to present an already submitted, accepted, or published manuscript to his/her committee and expect automatic approval. The final arbiters of the soundness of the work will be the Master's Committee members and not the journal editors or its reviewers.

### 3. INSTRUCTIONAL EXPERIENCE IN CLINICAL RESEARCH

All scholars will be required to serve as instructional assistants (typically in their second year) for one or more courses in the TICR program. This experience will typically involve leading a weekly small-group discussion section of 10 to 15 students, holding office hours for students, and grading homework assignments and projects. Scholars will receive feedback on their performance both from the Course Director and from students, who are polled anonymously using the TICR Program's web-based course evaluation system.

### 4. FILING FOR GRADUATION

The UCSF Graduate Division's "Completion of Degree Requirements" form should be used to document the completion of the required number of course units and the three required products of clinical research. Scholars should use this form to have their Master's Committee members mark their signatures attesting to the satisfactory completion of each written requirement. Scholars must be registered for the quarter during which they complete the last of their requirements, whether it is coursework or any of the written products. The "Completion of Degree Requirements" form must be completed and submitted to the Program Coordinator by the end of the quarter during which the scholar plans to graduate.

The "Completion of Degree Requirements" form is available in a ready-to-use Microsoft Word format (created on Microsoft Word 2000 for the PC). To use this, click on the "Microsoft Word Format"

button below. The word document should then appear in your browser. Next select "File > Save As" from the menu bar and save a local copy of the document to your computer. **Make sure to save a copy of the file on your computer before attempting to use the file.**

**COMPLETION  
REQUIREMENTS**  
Word Format

**COMPLETION  
REQUIREMENTS**  
PDF Format

If you are not able to access the application in the Microsoft Word format, please download the .pdf version of the form by clicking on the pdf button above. This can then be printed out and completed by typing where indicated.

## MASTER'S COMMITTEE

▲ Top

Each scholar selected for the Program will be asked to form a **Master's Committee**, which will consist of three faculty members:

1. **A representative from the scholar's academic field** (e.g., cardiology). This individual should be conducting primary research in the scholar's chosen field and will typically be a faculty member at UCSF. Upon approval from the TICR Steering Committee, individuals from outside of UCSF (e.g., UC, Berkeley; Stanford; or Biotechnology/Pharmaceutical Industry) may serve in this capacity. To request to include an individual outside of UCSF, scholars should provide the Master's Program Director with the individual's curriculum vitae and a letter of justification.
2. **An epidemiologist/clinical researcher faculty member from the UCSF Department of Epidemiology and Biostatistics**. If possible, a faculty member with working knowledge of the scholar's substantive interests should be chosen.
3. **A biostatistician faculty member from the UCSF Department of Epidemiology and Biostatistics**. If possible, a faculty member with working knowledge of the scholar's substantive interests should be chosen.

The purpose of this committee is both to provide mentorship and to evaluate the achievement of the requirements for graduation. Scholars should select and submit committee members to the Master's Program Director by the end of the Winter Quarter in the first year. One committee member should be selected as the Chairperson, whose role is to arbitrate when there is significant disagreement among committee members or to advocate for the scholar if he/she is experiencing difficulties gaining access to other committee members or scheduling meetings of the committee. The Chairperson must hold either a primary or secondary faculty appointment in the Department of Epidemiology and Biostatistics. It is expected that scholars will meet with their committees at least quarterly to review progress and set future objectives.

By the end of their first year, scholars will be required to complete the "Initial Committee Review" form indicating, 1) that they have had at least one meeting with all 3 members of their Master's Committee present and, 2) that the committee members and scholar agree that the scholar is making satisfactory progress toward meeting the program requirements (i.e., the comprehensive literature review, first-authored presentation and manuscript). The completed form should be sent to Chris Ireland at Box 0560 by June 30 of the first year in the program. Scholars must complete this form in order to be eligible to register for subsequent quarters.

**Initial Committee  
Review**  
PDF Format

At no less than 6 months prior to the date that scholars anticipate completing the

last of their original research research products (i.e., the comprehensive literature review, first-authored presentation and manuscript), scholars are required to complete the "Pre-Graduation Review" form indicating that they have had at least one meeting with all 3 members of their Master's Committee present where the content and timeline were agreed upon regarding the completion of the three research products. For example, if the scholar plans to graduate at the end of the Spring quarter of the second year (the minimum length of stay in the program), then he/she will need to file for graduation by approximately June 7 and thus should complete the "Pre-Graduation Review" form by no later than December 7. The purpose of this "Pre-Graduation Review" meeting is to ensure that the Committee is well aware of the exact projects the scholars have chosen to fulfill their requirements. The completed form should be sent to Chris Ireland at Box 0560.

**Pre-Graduation Review  
PDF Format**

At no less than 3 months prior to the date that scholars anticipate completing the last of their original research products (i.e., the comprehensive literature review, first-authored presentation and manuscript), scholars are also required to complete the "Final Graduation Review" form indicating that they have had at least one meeting with all 3 members of their Master's Committee present where a final plan and timeline were agreed upon regarding the content and completion of the three research products. For example, if the scholar plans to graduate at the end of the Spring quarter of the second year (the minimum length of stay in the program), then he/she will need to file for graduation by approximately June 7 and thus should complete the "Final Graduation Review" form by no later than March 7. The purpose of this "Final Graduation Review" meeting is to ensure that the Committee is well aware of and agrees with the final plans the scholar has made to fulfill the program's research product requirements. The objective is to avoid last minute submissions to Committee members, which defeat the purpose of obtaining the members' well-reasoned advice. It is, however, anticipated that the scholar will continue to meet with Committee members, either together or individually, after this required "Final Graduation Review" meeting for further mentoring and review of the scholar's work. When planning for final approval of products by Master's Committee members, scholars should expect that Committee members may require as long as three weeks to return comments to the scholar. Therefore, Committee members should be presented with drafts of the required products well before the scholars' anticipated graduation. The completed form and electronic files of all three required products should be sent to Chris Ireland at Box 0560.

**Final Graduation  
Review  
PDF Format**

At all required Committee meetings (and any other meetings held with the full committee), the scholar should take the responsibility for setting the agenda for the meeting, including sending out the agenda and accompanying materials (e.g., drafts of products) by e-mail at least one week prior to the meeting.

## UCSF GRADUATION

[▲ Top](#)

In late May of each year, the UCSF Graduate Division invites all Master's Program scholars who anticipate graduating in the calendar year to participate in university-wide graduation ceremonies. Information about the ceremony is distributed in approximately March of each year.

## GRANTWRITING TUTORIAL

[▲ Top](#)

Although not a required component of the program, scholars in the Master's Degree Program in Clinical Research are eligible to receive assistance in grantwriting via a tutorial with Mr. Tom Mitchell. In this tutorial, Mr. Mitchell will work with a select number of scholars individually over the course of several months to guide them through the grant writing process, to instruct them regarding how to

write individual grant components (e.g., specific aims, background and significance, methods, etc.), to review and edit successive drafts of individual components, and to ensure timely completion and submission of grant applications. The grantwriting tutorial will be offered 3 times a year, in accordance with NIH funding cycles for career development and investigator-initiated research projects (i.e., February 1, June 1, and October 1, or January 2, May 1, and September 1 for HIV-related projects). The tutorial will be open to post-doctoral fellows and faculty members in the Master's Degree Program who would be classified at NIH as a "new investigator" and who intend to apply for either a patient-oriented research career development award (NIH K series) or submit their first investigator-initiated research grant (NIH R series) for a clinical research project. Scholars intending to apply for substantial grants to other agencies or foundations are also eligible. Scholars interested in this tutorial should contact Mr. Mitchell ([tmitchell@psg.ucsf.edu](mailto:tmitchell@psg.ucsf.edu)) directly at least 5 months prior to the proposed submission deadline.

## APPLICATION

▲ Top

To apply for the Master's program starting in Summer 2007, you must complete the one-page UCSF Graduate Division application available in PDF Format below and send it to Chris Ireland with a \$60 nonrefundable processing fee by **March 19, 2007**. When completing the application check the box for MAS degree and write in "Clinical Research" in the blank after "Graduate Program".



In addition to the Graduate Division application, you must also complete a detailed Master's Degree Program application. The Master's application is available in a ready-to-use Microsoft Word format (created on Word for Office 97 for the PC). To use this, click on the "Microsoft Word Format" button below. The word document should then appear in your browser. Next select "File > Save As" from the menu bar and save a local copy of the document to your computer. **Make sure to save a copy of the file on your computer before attempting to use the file.**

If you are not able to access the application in the Microsoft Word format, please download the .pdf version of the application by clicking on the pdf button below. This can then be printed out and completed by typing where indicated.



Scholars either currently in or graduated from the ATCR Credit-bearing Certificate Program may submit updated versions of their original applications to the ATCR Program. Such scholars must still provide all necessary transcripts and three new letters of recommendation.

Completed Master's applications in MS Word format should be sent by email to Chris Ireland, MPH, Program Coordinator ([cireland@psg.ucsf.edu](mailto:cireland@psg.ucsf.edu)). A signed hard copy of the application, plus the one-page Graduate Division application and \$60 fee, should also be sent to:

Chris Ireland, MPH  
University of California, San Francisco  
Box 0560  
San Francisco, CA 94143

**Deadline:** Applications are due by **March 19, 2007** for admission in Summer 2007.

**Costs:** The Master's Program is a minimum two-year course of study, requiring registration for seven quarters (Summer, Fall, Winter, Spring in the first year and

Fall, Winter, Spring in the second year). Fees for 2007-2008 are \$17,500 per year for the two-year program. Selected applicants will be eligible to have their fees offset by a Department of Epidemiology and Biostatistic Scholarship of up to \$8200 the first year. Those applicants who meet the following criteria will be eligible:

1. Demonstrated excellence in the performance of academic work and clinical care, based on prior transcripts, publications, and letters of recommendation. This criterion will be evaluated by the Master's Degree Program Admissions Committee.
2. Concurrent enrollment in a UCSF-sponsored residency or post-doctoral fellowship program; or student in good standing at the UCSF School of Medicine, Dentistry, or Pharmacy; or individuals who hold full-time salaried UCSF faculty or academic positions.

An additional offset of fees will be available in the scholar's second year in the program depending upon the scope and magnitude of his/her contribution as an instructional assistant.

Scholars are also strongly encouraged to own a wireless-capable laptop computer for use in computer labs in various courses and to take advantage of the wireless internet network at the TICR Program's facility at the China Basin Landing Building.

The statistical software package Stata (Stata Corporation, College Station, Texas) is used in the program. The TICR Program has arranged for a sizeable discount for UCSF-affiliated personnel via the Stata GradPlan program.

**Interviews:** Selected applicants will be interviewed by the admissions committee or its designate.

[TICR Home](#) | [TICR Master Schedule](#) | [TICR Courses](#) | [TICR Programs](#) | [TICR Rosters](#)  
[Department Home](#)

Last updated Tuesday, 06-Mar-2007 15:40:04 PST

Copyright © 2005 The Regents of the University of California

Please send comments, suggestions, and edits to the web developer.

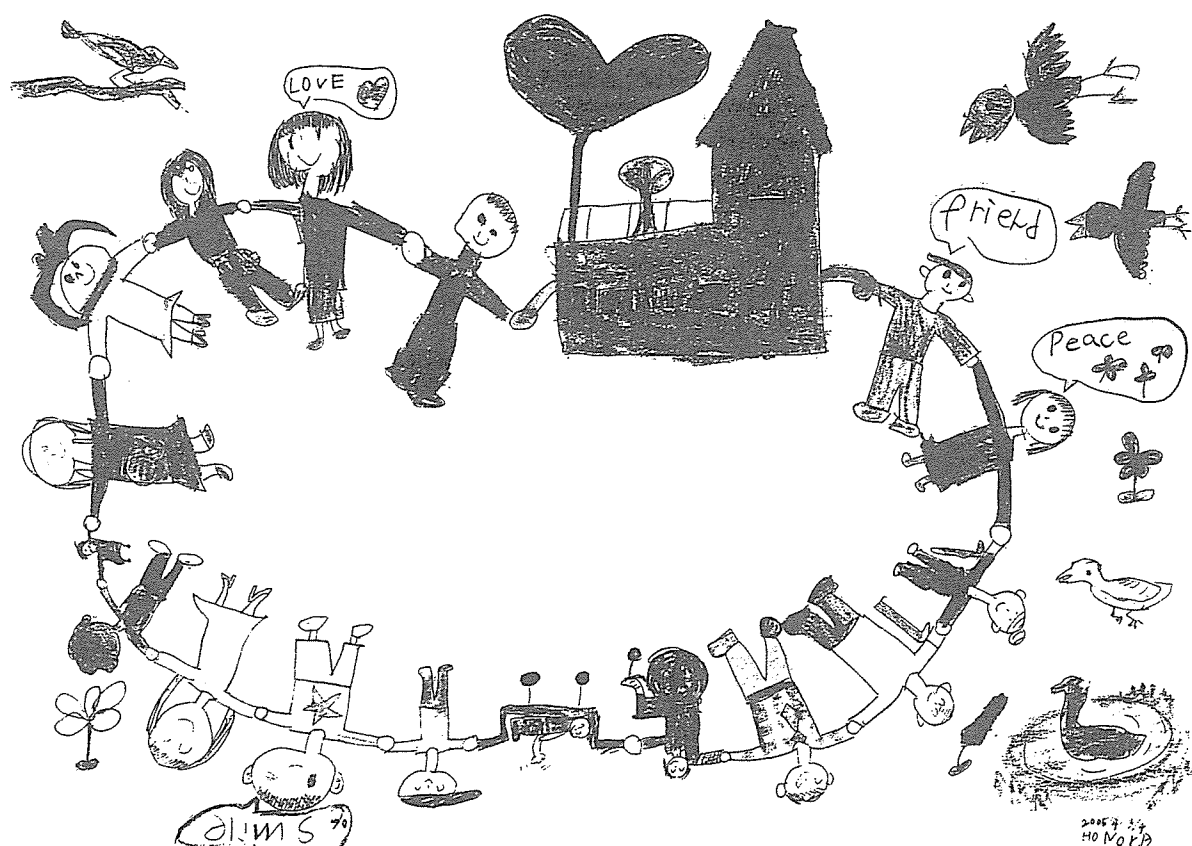


2006 Seiiku International Symposium

2006年 成育医療国際シンポジウム

“Advancing Clinical Research for Children and Families”

「子どもと家族のための臨床研究の推進」



2006年10月21日 (土)

Saturday, October 21, 2006

13:00 ~ 17:30

国立成育医療センター講堂

Auditorium, National Center for Child Health and Development

2006 Seiku International Symposium  
“Advancing Clinical Research for Children and Families”  
2006年 成育医療国際シンポジウム  
「子どもと家族のための臨床研究の推進」

プログラム program

- 13:00~13:05 「開会の辞」 *welcom*  
秦 順一 (国立成育医療センター総長)  
Dr. Jun-ichi Hata, President, NCCHD
- 13:05~13:10 「イントロダクション」 *Introduction*  
倉辻 忠俊 (国立成育医療センター研究所長)  
Dr. Tadatoshi Kuratsuji, Director-General, Resarch Institute, NCCHD
- 13:10~13:30 「政府の役割」  
*Role of Government in Supporting Clinical Research for Children and Families in Japan*  
斎藤 慈子 (厚生労働省雇用均等・児童家庭局母子保健課長補佐)  
Dr. Yoshiko Saito, Deputy Director, Division of Maternal and Child Health, Ministry of Health, Labor and Welfare, Japan
- 13:30~13:50 「国立成育医療センターでの現状」  
*Current Status of Clinical Research for Children and Families at NCCHD*  
中村 秀文 (国立成育医療センター治験管理室長)  
Dr. Hidefumi Nakamura, Director, Division of Clinical Research, NCCHD, Tokyo, Japan
- 13:50~14:30 「若手医師の育成」  
*Training Physicians in Clinical Research in Pediatrics*  
トーマス・ニューマン (カリフォルニア大学サンフランシスコ医学部小児科・疫学統計学部教授)  
Dr. Thomas B. Newman, Professor, Epidemiology and Biostatistics, Pediatrics, University of California San Francisco, San Francisco, California, USA
- 14:30~15:10 「米国での現状と効果」  
*Status and Impact of Clinical Research on Children and Families in the U.S.A.*  
マイケル・ワイツマン (元米国小児科学会付属小児保健医療研究センター事務局長、ニューヨーク大学医学部小児科部長)  
Dr. Michael Weitzman, Former Executive Director, Center for Child Health Research, American Academy of Pediatrics; Chairman, Department of Pediatrics, New York University School of Medicine, New York, New York, USA
- 15:10~15:50 「小児病院と研究所の意義」  
*Role of Children's Hospital and Research Institute for Children and Families*  
ステイブン・アルトシューラー (フィラデルフィア小児病院院長・最高経営責任者)  
Dr. Steven M. Altschuler, President and Chief Executive Officer, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania, USA
- 15:50~16:20 「コンサート」 (カルテット・メランジェ)  
*Concert (Quartet Melange)*
- 16:20~17:20 「ディスカッション」 *Discussion*  
司会：高山 ジョン 一郎 (国立成育医療センター総合診療部長)  
moderator : Dr. John I. Takayama, Director, Dept.of Interdisciplinary Medicine, NCCHD
- 17:20~17:30 「閉会の辞」 *Conclusion*  
名取 道也 (国立成育医療センター副院長)  
Dr.Michiya Natori, Deputy Director,Hospital, NCCHD

シンポジウム開催にあたって  
Opening Remarks

秦 順一  
国立成育医療センター総長  
Jun-ichi Hata, MD, PhD.  
President, NCCHD

成育国際シンポジウム「子どもと家族のための臨床研究の推進」の開催にあたり、ご参集いただきました皆様に厚くお礼申し上げます。

2002年3月に子どもと家庭のための医療センターが設立されてから、国際シンポジウムを開催しておりますが、研究所が病院に隣接して設立され、一本の橋によって結ばれて1年が経ちました。これを機会に、「臨床研究」の重要性を改めて認識すると共に、とくに少子化社会において、子どもと家庭の健康の促進するための臨床研究の意義について、皆さんと考えたいと思います。

今回、カリフォルニア大学サンフランシスコ校小児科、疫学教授のニューマン教授、本年まで米國小児科学会の臨床研究センター長をされていたニューヨーク大学のワイツマン教授、臨床研究の第一人者フィラデルフィア小児病院院長のアルトシューラー教授を同時にお招きすることが出来ました。これからの日本の子ども家庭の医療保健の向上のために、本シンポジウムで積極的ディスカッションを期待したいと思います。

On behalf of the National Center for Child Health and Development (NCCHD), it is my pleasure to welcome everyone to the Seiiku International Symposium on “Advancing Clinical Research for Children and Families”

Four years have passed since NCCHD is founded in March 2002, and the Hospital and the Research Institute were linked to each other by the bridge the last October. The mission of NCCHD is to promote the health and well-being of children and their families through providing good and evidence-based medical services, and to be achieved by clinical researches.

We invited here Dr. Thomas B. Newman is Professor of Epidemiology and Biostatistics, and Pediatrics, University of California San Francisco, Dr. Michael Weitzman, the former Executive Director, Center for Child Health Research, American Academy of Pediatrics, and Dr. Steven Altschuler, the President and CEO of Philadelphia Children’s Hospital. They are top runners of clinical researches in the world. I am hopeful that the symposium will assist us to progress our clinical research. Thank you for coming to this symposium.

講師略歴  
Seiiku International Symposium 2006  
BIOSKETCH of Panelists

齋藤慈子 (さいとうよしこ)

Yoshiko Saito, MD, MPH

厚生労働省 雇用均等・児童家庭局 母子保健課 課長補佐

Deputy Director, Maternal and Child Health, Japanese Ministry of Health, Labor and Welfare (MHLW)

1993 (平成5) 年厚生省入省後、科学研究の推進、感染症対策、精神保健、食品保健、国際協力等の分野に従事、その後、WHO (世界保健機関)、FAO (国連食糧農業機関)、世界エイズ結核マラリア対策基金等の国際機関へ出向。2004 (平成16) 年4月から母子保健課勤務で、小児医療分野を含め厚生科学研究の推進などを担当している。

慶応大学医学部及びハーバード大学公衆衛生大学院卒業。専門分野は公衆衛生、国際保健、保健医療行政。

Dr Saito joined the Japanese MHLW in 1993 and has worked in extensive areas in national as well as international public health policy making. She has also worked in international organizations such as the World Health Organization (WHO) and the Food and Agriculture Organization (FAO). She also took part in establishing the Global Fund to Fight HIV/AIDS, TB and Malaria in 2001 and served as its Director for East Asia, South East Asia and Oceania. Returning to Tokyo in 2004, Dr Saito joined the Maternal and Child Health Division, and, among other responsibilities, plans and overseas research programs related to maternal and child health.

Dr Saito received her MD from the Keio University School of Medicine in Tokyo and her MPH from the Harvard School of Public Health in international health.