

# Center for Tobacco Control Research and Education

## Fellowship Curriculum Summary

### CORE REQUIREMENTS: COURSES

#### Introduction to Tobacco Research—August-October, Year 1

This ten-week course provides first-year fellows with an early overview of major and recent issues in tobacco control at the beginning of their training. Individual contributions of CTCRE faculty members are integrated into the information presented regarding different topics. The course includes a hands-on introduction to the databases and methodology employed for tobacco industry documents research that was pioneered at our Center, and which many of the fellows have used as part of their individual research programs. At the completion, students have an appreciation of the scope of tobacco research pursued at the Center and where their own interests might fit into this context. Past sessions have covered the following topics:

- Alternative Tobacco Products & Harm Reduction (Pamela Ling, MD, MPH, Benjamin Chafee, DDS, MPH, PhD, Gideon St Helen, PhD)
- Basics of smoking cessation (Jodi Prochaska, PhD, MPH, and Neal Benowitz, MD)
- Gays and the military: tobacco industry targeting and tactics (Libby Smith, PhD)
- Global Tobacco Control (Stella Aguinaga-Bialous, PhD)
- Health Policy and Tobacco Policy (Dorie Apollonio, PhD)
- How to Search the Tobacco Documents (Rachel Taketa)
- Nicotine Addiction (Neal Benowitz, MD)
- Secondhand Smoke: Science, Public Health and Policy (Stanton Glantz, PhD)
- The California Tobacco Wars (Stanton Glantz, PhD)
- The De-Normalization of Smoking and the De-Legitimization of the Tobacco Industry (Patricia McDaniel, PhD)
- Tobacco Marketing Targeting Youths and Young Adults (Pamela Ling, MD, MPH)
- Tobacco Prevention with Youth: A Developmental Perspective (Bonnie Halpern-Felsher, PhD, FSAHM)
- Tobacco Products & Biomarkers of Tobacco Exposure (Gideon St Helen, PhD)

#### Writer's Task Force—December-May, Year 1

The Writer's Task Force, led by CTCRE faculty Maya Vijayaraghavan, MD, and NIDA T-32 fellowship program faculty Carmen Masson, PhD, meets biweekly from December to May to assist fellows and junior faculty in developing scientific writing abilities and understanding technical and practical aspects of publication. Every session includes draft papers for review by the group and outside speakers, such as two journal editors (Gary Swan, *Nicotine & Tobacco Research*; Rick Seymour, *Journal of Psychoactive Drugs*) to discuss the broader context of scientific writing. In addition, the seminar has invited CTCRE members such as Joseph Gydish, Annelise Taylor, and others, to discuss the publication process, including planning publications, selecting and submitting to journals, undergoing peer review, and the rules and ethics of publication.

Fellows start in their first year of training and are welcome to continue to participate throughout their fellowship. Participants submit manuscripts for peer review in each session and read and critique the manuscripts of others. In addition, the Writer's Task Force exposes the fellows to ethical issues related to authorship and responsible publication and a range of research issues and writing styles, from econometric to ethnographic and from observational to controlled trial. Each fellow submits at least one paper annually to obtain feedback from a group of people representing a wide range of disciplines, and to develop their ability to present and defend their work to this diverse body. Drs. Vijayaraghavan and Masson track manuscript submission and acceptance rates.

## **Nicotine: from Addiction to Therapeutics—February, May and June, Year 1**

This course was developed specifically to support our CTCRE Fellowship training program. It is led by Neal Benowitz, Professor of Medicine and Bioengineering & Therapeutic Sciences and Chief of the Division of Clinical Pharmacology, to provide fellows with an understanding of the role of nicotine in causing tobacco addiction, mechanisms by which smoking causes disease, and the pharmacologic basis for the use of nicotine and other medications to facilitate tobacco cessation. Dr. Benowitz was senior scientific editor of the 1988 US Surgeon General Report *Nicotine and Addiction* and the 2001 NCI Smoking and Health Monograph 13, *Risks Associated with Smoking Cigarettes with Low Tar Machine-Measured Yields of Tar and Nicotine*. The course meets for two hours approximately monthly, with one hour of lecture followed by a one-hour seminar discussing a recent paper. This course introduces fellows to a wide range of biomedical disciplines and includes other Center faculty. Topics include:

- Basic and Clinical Pharmacology of Nicotine
- Nicotine and Tobacco Addiction
- The nature of tobacco products; disposition kinetics and metabolism of nicotine
- Addiction in Special Populations I - Gender Differences / Ethnic & Racial Differences
- Addiction in Special Populations II - Adolescents / Psychiatric and Substance Abuse co-morbidity
- Treatment of Tobacco Addiction: Behavioral Aspects
- Treatment of Tobacco Addiction: Pharmacotherapy
- Nicotine and Smoking-Induced Disease - Safety of Pharmacotherapy
- Nicotine and Public Health Policy

## **Scientific Ethics and Responsible Conduct of Research—Year 1**

All fellows complete online training in scientific ethics available through the UCSF Institutional Review Board website and first year fellows attend a course in Responsible Conduct of Research, both of which meet NIH guidelines. Trainees learn through case discussions how to identify and resolve common ethical dilemmas that arise in clinical research, how research involving on human participants is regulated by the federal government, and what constitutes research misconduct. Trainees resolve ethical considerations involved in research protocols they develop. The fellowship program pays the tuition for this course.

## **Making a Career in Tobacco Control—February-November, Years 1 and 2**

This course was developed expressly for the Center's fellowship program. It consists of presentations, roundtables, and small group discussions of various topics related to career development for postdoctoral fellows. Topics include:

- Finding Your First Academic Position (roundtable presentation by Center alumni)
- Finding Your First Non-academic Position (roundtable presentations by Center alumni)
- Communicating Effectively with Policymakers (Amiee Alden, UCSF Director of State and Local Government Relations)
- Communicating to the Media and the Public (Elizabeth Fernandez, UCSF Public Relations)
- Policy Relevant Research and How to Fund It (roundtable presentation by Center faculty and alumni)
- Writing a CV (fellow workshop with Dorie Apollonio and Anna Song, UC Merced)
- Writing a Cover Letter (fellow workshop with Dorie Apollonio and Anna Song, UC Merced)
- Preparing for Job Interviews and Key Questions (roundtable presentation by Center alumni)
- Developing a Negotiating Strategy (UCSF Office of Career and Professional Development seminar)
- Negotiating Your Job Offer (UCSF Office of Career and Professional Development seminar)
- Academic Advancement (Dorie Apollonio and Dan Cook, University of Nevada at Reno)

In addition to this course, all fellows have individualized plans for career development that are overseen by their primary and secondary mentors and the Fellowship Advisory Committee.

## **Grant Writing—July-December, Year 2**

This course, led by faculty Matthew Springer, PhD and Gideon St. Helen, PhD, trains our fellows in all aspects of preparing a competitive NRSA fellowship grant as the principal investigator. In addition to teaching the different elements of a grant and key elements to include in the Research Plan, there is a strong emphasis on helping them put themselves in the seats of members of a study section, who are often called on to review proposals outside their areas of technical expertise.

Unlike the other didactics, we teach this course at the beginning of the fellows' second year. By this time, fellows have had sufficient training to begin to write their own grants and the course is timed so the grants can be submitted for October/November NIH deadlines. We have found that preparing a real grant, including all the necessary supporting materials provides a more complete training experience for the fellows and higher-quality proposals than a "mock grant" prepared exclusively for a course.

Successfully funded fellowship grants can be used to fund a third year of fellowship beyond the two years supported by the fellowship grant at the point that fellows are most competitive for these awards. Most grants are submitted as NRSA fellowship grants, unless logistical concerns (e.g., US citizenship) require alternate funding mechanisms (e.g., the California Tobacco-Related Disease Research Program).

Second year fellows work with their primary mentors to prepare an original grant application, and each fellow conceives a research plan and acts as the Principal Investigator. The series of lectures and workshops walk the fellows step-by-step through the preparation of each part of the grant including research plan, budget, training plan, biosketch, human subjects research section, institutional facilities resources, and other supporting documentation. Administrative staff guide fellows through the administrative aspects of grant submission processes including budget preparation and electronic submission.

Fellows read and critique each others' grants, section by section, during the course. Near-finished grants are submitted to a panel of senior faculty for formal peer review that mimics an NIH study section. The study section provides written critiques and the study section meeting is recorded. The fellows and course faculty view and discuss the video together to obtain detailed feedback and, more important, for fellows to gain a sense of how grants are assessed in the actual peer review process.

## **Funding Your Research Workshop– January-May, Year 1**

In this five-part mini-series, fellows learn from faculty how the NIH is structured and how a grant is reviewed during study section. They also gain tips about the writing and application process from guest speakers including editors, faculty, and prior awardees. (See "other Optional Didactic Opportunities", below.)

## **Science Communication Training Workshop – April – May, Year 1 or 2**

Every other year, fellows participate in public speaking and presentation training workshops. There is a [one day intensive \(with professional trainers\)](#) combining exercises with individual coaching, and a series of four workshops led by journalist and innovator [Jon Littman](#) focuses on developing your story in presentations, delivery, slide format and effective visuals for communication, and on-camera coaching. Audiences include scientific interdisciplinary audiences, the press, and public testimony.

## **CORE SEMINARS, Monthly, Years 1 and 2**

### **Tobacco Control Research in Progress Seminar**

This monthly seminar provides a forum to present new ideas and research in progress. Each 90-minute meeting features two presentations with active audience participation. The seminar is attended by fellows, students, research staff, and faculty and provides an opportunity for the fellows to receive – and offer – constructive feedback from people in several different disciplines. This experience develops communication skills applicable to presenting findings to researchers in different fields and other audiences. Fellows are required to make at least one presentation per year.

### **Cancer Center Cancer Control Program Seminar**

The Center for Tobacco Control Research and Education is part of the [Cancer Control Program of the UCSF Helen Diller Family Comprehensive Cancer Center](#). The Program sponsors a monthly seminar with presentations by UCSF faculty and senior investigators. These seminars are designed to facilitate cross-

disciplinary collaboration, feedback, and discussion with faculty in cancer research. Many Cancer Control faculty are not primarily tobacco researchers, but share common interests in cancer causes, prevention, equity, environmental or industrial determinants of health, interventions, policy and systems to prevent cancer and cancer-related adverse health outcomes.

### **Ad hoc Presentations**

CTCRE's leadership role in global tobacco control ensures that it is often visited by academics and other leaders from around the country and world. We often ask these visitors to present seminars and meet one-on-one with relevant fellows.

### ***It's About A Billion Lives: Annual Research Symposium***

The annual [CTCRE Research Symposium](#) is open to the entire training faculty, the broader campus community, members of our External Advisory Committee and the interested public. The symposium typically draws 80-100 attendees. In addition to an invited speaker and CTCRE Faculty presentations, each Symposium features presentations of research by two CTCRE fellows.

The symposium has been a valuable mechanism to feature the interdisciplinary work of fellows and faculty in an egalitarian context that provides multidisciplinary feedback and demonstrates the breadth and quality of tobacco research at UCSF. The tobacco control program is recognized by campus leadership as an exemplary model for interdisciplinary and translational research at UCSF.

## **OTHER OPTIONAL DIDACTIC OPPORTUNITIES**

### **Biostatistics and Research Design**

Trainees are expected to understand applied biostatistics. The Fellowship Committee reviews the biostatistical training and research and career goals of new fellows. While some fellows may join the program with a strong background or have goals that would not be served by training in biostatistics, many of the fellows take the *Introduction to Biostatistics* or biostatistics courses offered through UCSF's *Training in Clinical Research (TICR)* program, described below.

### **Clinical & Translational Science Institute (CTSI)**

The Clinical & Translational Science Institute (CTSI) at UCSF was one of the first 12 academic institutions selected to be part of the NIH's national clinical & translational science consortium. At UCSF, CTSI is a cross-campus institute, with scientist leaders at its helm. Our fellows primarily take part in the Training in Clinical Research program as detailed above, but they are also eligible to take part in any of the workshops offered to UCSF postdoctoral fellows; our faculty may participate in the Mentor Development workshops.

- Training in Clinical Research (TICR):
  - [Summer Clinical Research Workshop](#)
  - [Advanced Training in Clinical Research \(ATCR\)](#)
- [Clinical & Translational Science Institute \(CTSI\)](#)

### **Professional & Academic Success Skills Workshops**

Some fellows elect to attend "PASS" (Professional & Academic Success Skills) series workshops designed to enhance the professional development of UCSF students and scholars engaged in research. The fellowship program pays the workshop tuition. These workshops are presented by the Office of Career & Professional Development, a unit within Student Academic Affairs; topics include:

- Giving a Dynamic Research Talk
- Presenting & Interpreting Statistics in Biomedical Research Reports
- Making Scientific Figures and Presentation Graphics with Adobe Illustrator
- Writing Qualitative Research
- Goal Setting Strategies for Scientific and Career Success

- Finding the Right Career Path for You
- Funding Your Research
  - Part A: Navigating the NIH Grant Application Package
  - Part B: Getting a Postdoctoral Fellowship
  - Part C: Writing an Effective NIH Grant Proposal
  - Part D: Preparing a Mentored K Award Application

## **Scientific Writing**

The [UCSF Office of Career and Professional Development](#) offers many resources for developing research-writing skills. Postdocs also have the opportunity to take a scientific writing course, an eight-week course twice a year taught by Pamela Derish, M.A., Publications Manager, Surgery. Faculty.

## **Tobacco Control Policy Fellows can also take courses in the following UCSF training programs:**

- [Substance Abuse Treatment Training Program](#)
- [Institute for Health Policy Studies: Health Services Research and Policy Analysis Training Program](#)
- [Benioff Homelessness and Housing Initiative research training program](#)
- [Center for AIDS Prevention Studies](#)
- [Social and Behavioral Sciences](#)
- [Anthropology, History, and Social Medicine](#)
- [Medical Information Sciences](#)