

# COMMUNITY HEALTH & PREVENTION RESEARCH

Courses offered by the Stanford Prevention Research Center within the Department of Medicine are listed under the subject code CHPR on the Stanford Bulletin's ExploreCourses website.

The Master of Science (M.S.) in Community Health and Prevention Research (CHPR) covers the study and treatment of leading risk behaviors (e.g., poor diet, physical inactivity, tobacco use, stress, distress) to prevent the prevailing causes of morbidity and mortality (e.g., cardiovascular disease, cancer, diabetes, lung disease, mental illness) with a focus on engaging and advancing health in diverse communities.

Community health and prevention research are complementary fields increasingly integrated to promote health and prevent chronic diseases in individuals, families, local communities, states, and countries, globally.

Community health refers to the scientific discipline of safeguarding and enhancing the wellbeing of diverse communities and populations through education, the promotion of healthy lifestyle habits, and the extensive study of disease and disease determinants. Prevention research is a multidisciplinary scientific field that aims to enhance the health of populations through the study of genetic, behavioral, lifestyle, environmental, and policy factors that lead to disease or vitality.

The M.S. in CHPR is designed for students pursuing health-related careers focusing on chronic disease prevention, health and wellness promotion, and the pursuit of health equity. We anticipate the M.S. in CHPR will be attractive to Stanford's current (coterminal) undergraduates and graduate students, students in the health professions (e.g., medical students), health care providers seeking a second degree, and individuals who will later seek advanced degrees in medicine, nursing, or health/science-related doctoral programs.

The M.S. in CHPR is available to:

1. Current Stanford undergraduates (who must complete the M.S. as a coterminal master's program)
2. Current Stanford graduate students (i.e., master's, doctoral, and medical students)
3. External applicants.

All students in the program must complete the M.S.'s core curriculum and program requirements.

The University requirements for the M.S. degree are described in the "Graduate Degrees (<http://exploreddegrees.stanford.edu/graduatedegrees>)" section of this bulletin.

## Master of Science in Community Health and Prevention Research

The Stanford Prevention Research Center within the Department of Medicine offers a Master of Science (M.S.) in Community Health and Prevention Research (CHPR). The M.S. in CHPR is available to external applicants, to current undergraduates via the coterminal master's program, and to graduate students at Stanford.

The purpose of the M.S. in CHPR is to:

- engage students from a range of backgrounds in didactic and experiential learning opportunities with the goal of gaining an in-depth understanding of community health and prevention research applications in diverse practice settings

- prepare future public health professionals to responsibly and effectively address health challenges faced by diverse communities across the life course.

In the M.S. in CHPR, students:

- study patterns of chronic diseases in diverse communities and settings and examine how prevention can optimize health and promote health equity at the individual, family, community, and population level
- critically interpret and evaluate research on community health and prevention
- become involved in research teams that encourage health equity promotion and social responsibility
- gain and hone methodological skills including research study design, study implementation, and data analysis related to community health and prevention research
- utilize translational research and applied science in a community-based research internship with the expectation that they design, implement, and assess health and wellness solutions addressing preventable community health challenges
- complete a master's thesis.

## Admission for External Applicants

The application deadline for Autumn 2016-17 entry into the M.S. program is December 1, 2015 at 11:59 p.m. Pacific Standard Time (PST). As part of their program application, all applicants (not including coterminal applicants) must submit the following required application materials. Instructions on how to submit these application materials can be found on Stanford's Graduate Admission's web site (<https://studentaffairs.stanford.edu/gradadmissions/applying/start>).

- 3 letters of recommendation
  - At least one letter of recommendation should be from a faculty member at the last school you attended as a full-time student (unless you have been out of school for more than five years).
- GRE scores (valid MCAT scores may be submitted in lieu of GRE scores)
- TOEFL scores (if necessary)
- Resume or curriculum vitae (CV)
- Statement of purpose
  - The statement of purpose should describe succinctly your reasons for applying to the proposed program at Stanford, your preparation for this field of study, research interests, future career plans, and other aspects of your background and interests which may aid the admissions committee in evaluating your aptitude and motivation for graduate study.
- Official transcript(s) from all postsecondary institutions you have attended as a full-time student for one year (i.e., three quarters or two semesters) or longer.
  - You must upload one scanned version of your official transcript(s) in the online application and mail two official copies to the Stanford Prevention Research Center within the Department of Medicine.
- \$125 application fee
  - This application fee is assessed regardless of admission decision.

## University Coterminal Requirements

Coterminal master's degree candidates are expected to complete all master's degree requirements as described in this bulletin. University requirements for the coterminal master's degree are described in the "Coterminal Master's Program (<http://exploreddegrees.stanford.edu/cotermdegrees>)" section. University requirements for the master's degree are described in the "Graduate Degrees (<http://>

exploreddegrees.stanford.edu/graduatedegrees/#masterstext)" section of this bulletin.

After accepting admission to this coterminal master's degree program, students may request transfer of courses from the undergraduate to the graduate career to satisfy requirements for the master's degree. Transfer of courses to the graduate career requires review and approval of both the undergraduate and graduate programs on a case by case basis.

In this master's program, courses taken three quarters prior to the first graduate quarter, or later, are eligible for consideration for transfer to the graduate career. No courses taken prior to the first quarter of the sophomore year may be used to meet master's degree requirements.

Course transfers are not possible after the bachelor's degree has been conferred.

The University requires that the graduate adviser be assigned in the student's first graduate quarter even though the undergraduate career may still be open. The University also requires that the Master's Degree Program Proposal be completed by the student and approved by the department by the end of the student's first graduate quarter.

## Coterminal Admission

The application deadline for Autumn 2016-17 entry into the M.S. program is December 1, 2015 at 11:59 p.m. Pacific Standard Time (PST).

Stanford undergraduates may apply to the M.S. program once the following conditions have been met:

- Applicants must have earned 120 units toward graduation (UTG) as shown on the undergraduate unofficial transcript. This includes allowable Advanced Placement (AP) and transfer credit.
- Applicants must have a major(s) declared.
- Applicants must have completed six non-Summer quarters at Stanford (or two non-summer quarters at Stanford for transfer students).

As part of their program application, applicants must submit the following required application materials. Instructions on how to submit these application materials can be found on the CHPR program web site (<https://CHPR.stanford.edu>).

- Application for admission to coterminal master's program (<https://stanford.box.com/CotermApplic>) (paper format)
- Supplemental online application form (see CHPR program website (<https://chpr.stanford.edu>))
- Statement of purpose
  - The statement of purpose should describe succinctly your reasons for applying to the proposed program at Stanford, your preparation for this field of study, research interests, future career plans, and other aspects of your background and interests which may aid the admissions committee in evaluating your aptitude and motivation for graduate study.
- Resume or curriculum vitae (CV)
- Preliminary program proposal
- Two letters of recommendation from Stanford professors
- 1 copy of your Stanford transcript (unofficial transcripts are acceptable)
- \$125 application fee (this fee is assessed by the Registrar's Office to those accepted and matriculated into the program).

## Admission for Current Stanford Graduate Students

- Current Stanford graduate students include master's, doctoral, and medical students who are currently enrolled in a graduate degree program at Stanford. Current Stanford postdoctoral scholars must apply as external applicants.

- The application deadline for Autumn 2016-17 entry into the M.S. program is December 1, 2015 at 11:59 p.m. Pacific Standard Time (PST).
- On a case-by-case basis, current Stanford graduate students may be allowed to apply to the program after the December 1, 2015 application deadline.

*Required Application Materials:* Instructions on how to submit these application materials can be found on the CHPR program web site (<https://CHPR.stanford.edu>).

- Completed Current Graduate Student Online Application Form ([https://stanfordmedicine.qualtrics.com/SE/?SID=SV\\_eIIAYRZnPUqkPGJ](https://stanfordmedicine.qualtrics.com/SE/?SID=SV_eIIAYRZnPUqkPGJ))
- Resume/CV
- Transcript (unofficial transcripts are acceptable)
- Valid GRE, MCAT, or GMAT scores (i.e., the test scores students submitted to their original graduate program at Stanford)
- Statement of Purpose
  - The Statement of Purpose should describe succinctly the reasons for applying to the proposed program at Stanford, preparation for this field of study, research interests, future career plans, and other aspects of the applicant's background and interests which may aid the admissions committee in evaluating aptitude and motivation for graduate study.
- 2 letters of recommendation from Stanford professors
- \$125 application fee

## Core Curriculum and Program Requirements (45 units)

To complete the M.S. in CHPR, students must complete a minimum of 45 units, conduct a two-quarter community-based research internship, and write a master's thesis. All students in the M.S. in CHPR must also fulfill the course requirements below. Students are advised to check the prerequisites for all CHPR courses, especially the Biostatistics courses.

	Units
<b>CHPR Foundation Core</b>	
Take 5 courses, 14 total units	
CHPR 210: Prevention Across Medical Disciplines (Spring)	3
CHPR 225 The Role of Causal Inference, Study Design, & Outcomes in Community Research (Autumn)	4
CHPR 228 Theoretical Foundations and Design of Behavioral Intervention Trials (Winter)	3
CHPR 240 Prevention Research and Public Health: the Science of Healthy Living (Winter)	3
CHPR 255 The Responsible Conduct of Research for Clinical and Community Researchers (Autumn, Spring)	1
<b>Biostatistics and Research Methods</b>	
Take 3 of the 5 courses or other approved Biostatistics and Research Methods courses, minimum 9 total units	
CHPR 206 Meta-research: Appraising Research Findings, Bias, and Meta-analysis (Winter)	3
MED 247 Methods in Community Assessment, Evaluation, and Research (Spring)	3
CHPR 254 Disease control systems: epidemics, outbreaks, and modeling for public health (Autumn)	4
HRP 259 Introduction to Probability and Statistics for Epidemiology (Autumn)	3-4
CHPR 290 Advanced Statistical Methods for Observational Studies (CHPR students must take course for 3 units) (Spring)	2-3
<b>Weekly Internship Course</b>	
Take course for 3 quarters, 3 total units	

CHPR 239 Program Internship and Engagement (Autumn, Winter, Spring) 1

### Community-Based Research Internship

Take course for 2 consecutive non-summer quarters, 6 total units

CHPR 299: Community-Based Research Internship (Autumn, Winter, Spring) 3

### Master's Thesis

Take course for 1 or more quarters, minimum 3 total units

CHPR 399: Graduate Research (Autumn, Winter, Spring, Summer) 1-3

## Community-Based Research Internship

Students must complete a consecutive two-quarter long community-based research internship under the supervision of an SPRC faculty mentor. Students will receive 6 total units for their internships, which are all unpaid positions. The primary learning goal of these internships is for students to apply their coursework and implementation science in a community or lab setting by engaging community members and faculty to create innovative, research-based, chronic disease prevention solutions addressing community health challenges.

SPRC has currently identified over 40 placement opportunities for potential internships. Our community partners include K-12 schools, social service agencies/shelters, religious and ethnic community organizations, advocacy/activist groups, health care organizations, SPRC's WELL Living Lab, campus partners at Stanford, and many more.

- CHPR students (not including coterminal students) enroll in CHPR 239 Program Internship and Engagement during the Autumn, Winter, and Spring quarters and CHPR 299 Community-Based Research Internship during the Winter and Spring quarters.
- Coterminal students must fulfill the following requirements in order to enroll in CHPR 239 Program Internship and Engagement and CHPR 299 Community-Based Research Internship:

1. Complete or be enrolled in one of the following courses:
  - a. CHPR 225 The Role of Causal Inference, Study Design, & Outcomes in Community Research
  - b. CHPR 228 Theoretical Foundations and Design of Behavioral Intervention Trials
2. Complete or be enrolled in at least 1 approved Biostatistics course.

- For the 2015-16 academic year, the earliest that students may begin their community-based research internships is in the Winter Quarter.
- For coterminal students who plan to begin their community-based research internships in the Winter Quarter 2016, it is highly recommended that they follow the below sequence:

1. Autumn Quarter: Take at least one of the following courses:
  - CHPR 225 The Role of Causal Inference, Study Design, & Outcomes in Community Research
  - CHPR 254 Disease control systems: epidemics, outbreaks, and modeling for public health
2. Winter Quarter: If only CHPR 225 or CHPR 254 is completed in Autumn Quarter, it is recommended that students take the following Winter Quarter course:
  - If CHPR 225 is completed in Autumn Quarter, then take CHPR 206 Meta-research: Appraising Research Findings, Bias, and Meta-analysis.
  - If CHPR 254 is completed in Autumn Quarter, then take CHPR 228 Theoretical Foundations and Design of Behavioral Intervention Trials.

## Master's Thesis

Students are required to complete and present a master's thesis. The master's thesis allows students to demonstrate knowledge, application, and thoughtful scholarly communication of theoretical principles central to community health interventions, study design, research and analytic methods, as well as depth in a substantive area of community health and prevention research. The thesis is intended to be 30 pages in length (i.e., article-length), double-spaced, including supporting tables, figures, and references. The thesis can take one of the following forms:

1. Analysis of original data collected via a student's internship
2. Comprehensive literature review with meta-analysis of data or critical reanalysis of data
3. Evaluation of a methodological problem using data
4. Comprehensive literature review with a grant proposal (NIH-style format) for a new study to bridge a gap in existing knowledge
5. Organizational health improvement and evaluation plan written for a student's internship organization
6. Faculty mentor approved, independently designed thesis.

The program encourages students to use extant data sets for their projects. Students are not limited to quantitative data sets; many SPRC faculty possess qualitative data sets that may be analyzed for an M.S. thesis project. Students also have the option of collecting original data, for example, through the use of surveys. Students are encouraged to develop their thesis into a manuscript for publication or a credible research grant application, and mentorship is provided to do so.

*Director of the Stanford Prevention Research Center:* John Ioannidis

## Core Faculty and Academic Staff

*Professors:* John Ioannidis, Randall Stafford, Marcia Stefanick

*Associate Professors:* Judith J. Prochaska (Program Faculty Director)

*Assistant Professors:* Mike Baiocchi, Sanjay Basu

*Senior Research Scientists:* Wes Alles, Michaela Kiernan

*Instructors:* Lisa Goldman Rosas, Sonoo Thadaney (Program Staff Director)