

COMMUNITY HEALTH & PREVENTION RESEARCH

Courses offered by the Stanford Prevention Research Center within the Department of Medicine are listed under the subject code CHPR (<https://explorecourses.stanford.edu/search?q=CHPR&view=catalog&page=0&academicYear=&filter-term-Autumn=on&filter-term-Winter=on&filter-term-Spring=on&filter-term-Summer=on&collapse=&filter-catalognumber-CHPR=on&filter-departmentcode-CHPR=on&filter-coursestatus-Active=on&filter-catalognumber-CHPR=on>) 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 well-being 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 course work and implementation 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 2019-20 entry into the M.S. program is January 15, 2019 at 11:59 p.m. Pacific Standard Time (PST).

• Knight-Hennessy Scholars

- The Knight-Hennessy Scholars program (<https://knight-hennessy.stanford.edu>) awards up to 100 high-achieving students every year with full funding to pursue a graduate education at Stanford, including the M.S. in CHPR. To be considered, you must apply to Knight-Hennessy Scholars by that program's deadline and separately apply to the CHPR program by November 5, 2018 at 11:59 p.m. Pacific Standard Time (PST).

All applicants (not including coterminal applicants) must submit the following required application materials as part of their application. Instructions on how to submit these application materials can be found on Stanford's Graduate Admissions web site (<https://gradadmissions.stanford.edu/applying>).

- 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 one official copy 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.

Admission for Coterminal Applicants

The application deadline for Autumn 2019-20 entry into the M.S. program is January 15, 2019 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 Current Stanford Students (<https://gradadmissions.stanford.edu/applying/current-stanford-students>) page of the Graduate Admissions web site.

- Application for admission to coterminal master's program
- 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 Students in Other Stanford Graduate Programs and Professional Schools

- 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 2019-20 entry into the M.S. program is January 15, 2019 at 11:59 p.m. Pacific Standard Time (PST).

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

- Completed Current Graduate Student Online Application Form (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 and Research Methods courses.

		Units
CHPR Foundation Core		
All courses in this section are required. (The only exception is the option of substituting HUMBIO 126/CHPR 226 for CHPR 201.)		
CHPR 200	SPRC/GMD Research Seminar (Take for 3 quarters, 3 units total; Autumn, Winter, Spring)	1
CHPR 201	Introduction to Science of Healthy Living (Autumn)	1
CHPR 220	Responsible Conduct of Research in the Community (Autumn)	1
CHPR 227	The Science of Community Engagement in Health Research (Winter)	3
CHPR 222	CHPR Professional Development and Career Planning (Spring)	1
CHPR 228	Theoretical Foundations and Design of Behavioral Intervention Trials (Autumn)	2-3
CHPR 240	Prevention Research: the Science of Healthy Living (Autumn)	3

CHPR 260	(Winter)	3
CHPR 270	Prevention Across Surgical and Other Medical Disciplines (Spring)	3

Biostatistics and Research Methods

A minimum of 9 units from this section is required. Students may take any combination of the courses listed here, except students may take either HRP 258 or HRP 259, but not both.

CHPR 202	INTRODUCTION TO R (Winter)	1
CHPR 205	Understanding Evidence-Based Medicine: Hands-on experience (Winter)	3
CHPR 206	Meta-research: Appraising Research Findings, Bias, and Meta-analysis (Winter)	3
CHPR 247	Methods in Community Assessment, Evaluation, and Research (Spring)	3
CHPR 290	Curricular Practical Training and Internship (CHPR students must take course for 3 units; pre-req: HRP 261 & HRP 262, or HRP 239) (Spring)	2-3
HRP 216	Analytical and Practical Issues in the Conduct of Clinical and Epidemiologic Research (Spring)	2-3
HRP 234	Engineering Better Health Systems: modeling for public health (Autumn)	4
HRP 258	Introduction to Probability and Statistics for Clinical Research (Spring)	3
HRP 259	Introduction to Probability and Statistics for Epidemiology (Autumn)	3
HRP 261	Intermediate Biostatistics: Analysis of Discrete Data (Pre-req: HRP 258; Winter)	3
HRP 262	Intermediate Biostatistics: Regression, Prediction, Survival Analysis (Spring Pre-req: HRP 258; Spring)	3
EDUC 430C	Using Data to Describe the World: Descriptive Social Science Research Techniques (Spring)	3-5
PEDS 202C	Qualitative Research Methods and Study Design (Spring)	2-3

Community-Based Research Internship

Take for 2 consecutive quarters, 6 total units.

CHPR 299	Directed Reading (Autumn, Winter, Spring)	3
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Master's Thesis

Take for 2 quarters, 6 total units. CHPR 298 (Directed Reading) recommended if additional research is required for thesis writing.

CHPR 399	Community Health and Prevention Research Master's Thesis Writing (Autumn, Winter, Spring, Summer)	3
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Community-Based Research Internship

Students must complete a consecutive two-quarter long community-based research internship under the supervision of an SPRC 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.

1. Students must fulfill the following requirements in order to enroll in CHPR 299 Community-Based Research Internship:
 - a. Complete or be enrolled in one of the following courses:
 - i CHPR 227 The Science of Community Engagement in Health Research

- ii CHPR 228 Theoretical Foundations and Design of Behavioral Intervention Trials

- b. Complete or be enrolled in at least 1 approved Biostatistics and Research Methods course.
2. The earliest that incoming students may begin their community-based research internships is in the Winter Quarter of their first year.

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. CHPR 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.

Graduate Advising Expectations

The Stanford Prevention Research Center within the Department of Medicine is committed to providing academic advising in support of graduate student scholarly and professional development. When most effective, this advising relationship entails collaborative and sustained engagement by both the adviser and the advisee. As a best practice, advising expectations should be periodically discussed and reviewed to ensure mutual understanding. Both the adviser and the advisee are expected to maintain professionalism and integrity.

Faculty advisers guide students in key areas such as selecting courses, designing and conducting research, developing of teaching pedagogy, navigating policies and degree requirements, and exploring academic opportunities and professional pathways.

Graduate students are active contributors to the advising relationship, proactively seeking academic and professional guidance and taking responsibility for informing themselves of policies and degree requirements for their graduate program.

For a statement of University policy on graduate advising, see the "Graduate Advising (<http://exploreddegrees.stanford.edu/graduatedegrees/#advisingandcredentialstext>)" section of this bulletin.

Core Faculty and Academic Staff

Interim Director of the Stanford Prevention Research Center: David Maron, MD

Professors: John Ioannidis, PhD, Marcia Stefanick, PhD, Christopher Gardner, PhD

Associate Professor: Judith J. Prochaska, PhD, MPH (Program Faculty Director)

Assistant Professors: Mike Baiocchi, PhD

Senior Research Scientists: Wes Alles, PhD, Michaela Kiernan, PhD

Instructors: Anna Epperson, PhD, Jennifer Robinson, PhD, Sandra Winter PhD

Program Director: Jennifer Robinson, PhD