APPLIED HEALTH BEHAVIOR RESEARCH PROGRAM

APPLIED HEALTH BEHAVIOR RESEARCH (M88)

The graduate programs in Applied Health Behavior Research (AHBR) are housed in the Clinical Research Training Center (CRTC) in the Wohl Clinic.

Master of Science in AHBR
A 33-credit multidisciplinary, skills-based program designed primarily for working professionals pursuing studies on a part-time basis. The AHBR program focuses on developing the applied skills needed to manage health behavior programs and research projects in academic, clinical, and community settings. There is no thesis or practicum requirement for this program.

Graduate Certificate in Health Behavior Planning and Evaluation
To earn a Graduate Certificate in AHBR, scholars are required to complete 12 credits of core curriculum:

- M88-514 Health Behavior Theory
- M88-536 Health Education: Methods, Planning and Evaluation
- M88-508 Project Management in Clinical and Community Settings
- M88-582 Evaluation of Health Services Programs

And 3 credits of elective. Recommended electives include:

- M88-515 Health Psychology
- M88-540 Community Health Promotion
- M88-535 Health Disparities: Applications in Clinical Settings
- M88-548 Applied Data Management

Registration Instructions for students in AHBR graduate programs
The AHBR Project Manager manages student registration. Enrollment is subject to space availability. Priority registration for degree-seeking students begins November 2, 2015.

Registration Instructions for Students Outside of AHBR Programs
Before registering, current Washington University students must obtain appropriate consent from their division/department. Students outside of the AHBR program must have permission from the AHBR Program to register. Please contact the Project Manager in the CRTC prior to registration.

Spring 2016 Academic Calendar
Spring courses begin on January 19, 2016. Registration opens on November 9, 2015. The last day to drop a class and receive a full refund is February 2, 2016.

AHBR Program Leadership
Anjali Deshpande, PhD, MPH, Program Director

Further Information
For more information and the complete academic calendar, please visit our website: http://crtc.wustl.edu/degrees/ahbr.html.
For specific questions about the Applied Health Behavior Research curriculum, please contact ahbr@dsm.wustl.edu.
instructor permission; refer to the course description for information.

**Academic Calendar**
The Program in Audiology and Communication Sciences follows the academic calendar of the College of Arts & Sciences. Final exam schedules are determined by PACS.

**BIOSTATISTICS (MSIBS) & GENETIC EPIDEMIOLOGY PROGRAM (CERTIFICATE & MASTER’S)**

The Division of Biostatistics offers a master’s degree in Biostatistics and a certificate as well as post-doctoral master’s degree in Genetic Epidemiology. The program is located in the Old Shriner’s Hospital building at the corner of Euclid and Clayton at 706 South Euclid/4565 Clayton Ave., Suite 3300. Please refer to the map of the School of Medicine.

**Master of Science in Biostatistics (MSIBS) June 28, 2016 - December 18, 2017**
This 42-credit hour, 18-month program is designed to prepare students for exciting careers in Biostatistics and Statistical Genetics. We seek those with undergraduate or higher degrees in quantitative sciences (mathematics, statistics, computer science, biomedical engineering, or a closely related field). A choice of two pathways is offered in either area of concentration: Biostatistics or Statistical Genetics.

**Genetic Epidemiology**
We offer a Certificate in Genetic Epidemiology, which may be earned with successful completion (with a minimum of a “B” average) of 7 core courses, totaling 19 credit hours. These courses are only offered in the summer and fall semesters and must be completed within one or two years: M21-503 Statistical Computing with SAS®; M21-506 R Primer, M21-515 Fundamentals of Genetic Epidemiology, M21-550 Intro. to Biostatistics, M21-560 Biostatistics I, M21-570 Biostatistics II, and M21-5483 Human Linkage and Association Analysis. Next entry for new students is summer 2016.

We also offer a post-doctoral master’s degree in Genetic Epidemiology. Interested candidates with an existing doctoral degree in a relevant field may contact the program manager for additional information.

The 2016-17 Academic Calendar begins with these intensive summer courses (9 credits total).

The early workshop is offered at no cost to students enrolled in one or more summer or fall courses.

**CLINICAL INVESTIGATION PROGRAM**

**CLINICAL INVESTIGATION (M17)**
The degree programs in clinical investigation are housed in the Clinical Research Training Center in the Wohl Clinic.

**Master of Science in Clinical Investigation (MSCI)**
A 33-credit degree program for young investigators committed to pursuing academic careers in clinical research. This innovative program couples high-quality didactic courses with mentored research and a weekly, multi-disciplinary seminar to meet the needs of clinicians seeking training in clinical research. The Clinical Research Curriculum covers the full spectrum of T1 to T4 Translational Research. The degree program offers three tracks to degree completion: Clinical Investigation Track, Translational Medicine Track, and Genetics/Genomics Track. The degree culminates in a research thesis.

**Certificate in Clinical Investigation**
To earn a Certificate in Clinical Investigation, scholars are required to complete 16 credits of core curriculum:

- M17-513 Designing Outcomes and Clinical Research
- M17-588 Epidemiology for Clinical Research
- M17-522 Introduction to Statistics
- M17-524 Intermediate Statistics
- M17-510 Ethical and Legal Issues in Clinical Research
- M17-589 Intermediate Methods for Clinical & Outcomes Research
- M17-528 Grantmanship OR
- M17-529 Scientific Writing and Publishing

**Registration Instructions for M5 in Clinical Investigation candidates**
The Curriculum Coordinator manages student registration. Enrollment is subject to space availability. Registration for degree-seeking students begins November 9, 2015.

**Registration Instructions for Students Outside of MSCI Program**
Before registering, current Washington University students must obtain appropriate consent from their division/department. Students outside of the MSCI program must have permission from the MSCI Program to register. Please contact the Curriculum Coordinator in the Clinical Research Training Center prior to registration.

**Spring 2016 Academic Calendar**
Spring courses begin on January 19, 2016. Registration opens on November 9, 2015. The last day to drop a class and receive a full refund is February 2, 2016.

**MSCI Program Leadership**
David K. Warren, MD, MPH
Program Director

**Further Information**
For more information and the complete academic calendar, please visit our website: [http://crtc.wustl.edu/degrees/courses.html](http://crtc.wustl.edu/degrees/courses.html). For specific questions about the Clinical Investigation curriculum, please contact Suzie Fragale, Curriculum Coordinator, sfragale@dom.wustl.edu.
OCCUPATIONAL THERAPY PROGRAM

(M01)
The Program in Occupational Therapy is located at 4444 Forest Park Blvd. at the corner of Forest Park Blvd. and Newstead Ave. Please refer to the Medical Center map.

Master of Science in Occupational Therapy
The Master of Science in Occupational Therapy (MSOT) is a professional, entry-level master’s degree offered through the Washington University School of Medicine. The degree program is a structured, two and one-half year curriculum designed to prepare practicing professionals in the discipline of occupational therapy. The curriculum fulfills all of the requirements necessary to sit for the national certification exam for occupational therapists.

Three-Two Program
Washington University undergraduates may elect to become part of the three-two program in occupational therapy. Undergraduates completing prerequisite requirements, may apply to the graduate OT program in their junior year. For more information, or to explore occupational therapy as a career, please contact Kathleen Kniepmann, MPH, OTR/L at (314) 286-1610. Several OT courses welcome undergraduate students with an interest in disability issues.

Doctor of Occupational Therapy Degree Program
The Doctor of Occupational Therapy (OTD) is a professional degree offered by the School of Medicine providing students the opportunity to focus their OT studies in one of five areas of concentration, all of which will lead to practice opportunities and satisfying career choices. This is a three and one-half year curriculum which fulfills all requirements necessary to sit for the national certification exam for occupational therapists.

Registration Instructions
Enrollment in any of the graduate level courses requires acceptance into the Program in Occupational Therapy or approval of the coursemaster. Students wishing to enroll should contact the program at 286-1600. Registration of matriculated graduate students is performed on-line by the administrative staff.

The Academic Calendar
The Program in Occupational Therapy follows the calendar of the College of Arts and Sciences.

PHYSICAL THERAPY PROGRAM

Academic Calendar 2015-2016

Fall Semester (1st, 2nd Year Classes)
1st Year Class: Jan 4 – Apr 29
Classes Begin: Jan 4
MLK Holiday: Jan 18
Spring Break: Feb 29 - Mar 4
Finals: Apr 25 – 29
CE I: May 9 – Jul 1

2nd Year Class: Jan 4 – Jun 24
CE II: Jan 4 – Feb 26
MLK Holiday: Jan 18
Spring Break: Feb 29 – Mar 4
Classes Begin: Mar 7
Finals: Jun 20 – 24

3rd Year Class: Jan 4 – May 3
Classes Begin: Jan 4
MLK Holiday: Jan 18
Spring Break: Mar 2 - 6
Finals: Feb 29 – Mar 4
Graduation: May 20

Spring Semester (1st, 2nd, 3rd Year Classes)
Classes Begin: Jan 4 – Apr 29
MLK Holiday: Jan 18
Spring Break: Feb 29 - Mar 4
Finals: Apr 25 – 29
CE I: May 9 – Jul 1

2nd Year Class: Mar 7 – Jun 24
CE II: Jan 4 – Feb 26
MLK Holiday: Jan 18
Spring Break: Feb 29 – Mar 4
Classes Begin: Mar 7
Finals: Jun 20 – 24

3rd Year Class: Jan 4 – May 3
Classes Begin: Jan 4
MLK Holiday: Jan 18
Spring Break: Mar 2 - 6
Finals: Feb 29 – Mar 4
Graduation: May 20

The program in Physical Therapy is located at the corner of Forest Park Blvd and Newstead Ave at 4444 Forest Park Blvd. Please refer to the Medical Center map.

DEGREE PROGRAMS –

Doctor of Physical Therapy
An entry-level, full-time program that focuses on diagnosis and evidence based practice of physical therapy. This program refines scientific and biomedical knowledge incorporating additional clinical experiences and coursework to prepare students for the practice of physical therapy. This degree is offered through the School of Medicine and courses are coded M02.

Course Restrictions
Physical Therapy courses, with the exception of PT 5001 Independent Study, are open ONLY TO INDIVIDUALS ENROLLED IN THE PROGRAM IN PHYSICAL THERAPY (GP).

Registration Information
The Program in Physical Therapy is a structured three year curriculum for the Doctor of Physical Therapy degree. Registration for physical therapy students is NOT completed on-line. Withdrawal from required courses must be approved by either the program's Director of the Associate Director for Professional Education.

POPULATION HEALTH SCIENCES

Master of Population Health Sciences
The Master of Population Health Sciences (MPHS), offered by Washington University School of Medicine, is designed as a ten-month, full-time degree program that meets the needs of clinicians seeking training in population-based research methods. Its quantitative curriculum emphasizes the role of epidemiology and biostatistics in approaching clinical effectiveness and outcomes research. The MPHS does not require a research thesis/capstone. Instead, the program uses applied coursework to focus on the long-term application of skills. Using topics relevant to their careers and interests, the applied coursework allows MPHS students to practice the art of developing research study protocols, performing systematic reviews, designing epidemiologic studies and more. The MPHS program currently offers four concentrations: Clinical Epidemiology, Health Services, Quantitative Methods and Psychiatric and Behavioral Health Sciences.

Successful applicants will have a strong academic record and relevant academic preparation with particular emphasis on quantitative skills, identified clear career goals that correlate to MPHS program competencies, and completed (or in the process of completing) a clinical training program at the doctoral level. 2016-2017
DOCTOR OF MEDICINE PROGRAM

ACADEMIC CALENDAR 2015-16

June 2015
19 New 3rd year class: Clinic Orientation
22 3rd, 4th year classes: Academic year begins

July 2015
2 Independence Day holiday begins, 5pm
3 Independence Day Observance (Monday)

August 2015
3 1st year class: Orientation, matriculation & initial payment of tuition/fees
4 1st year classes: Academic year begins
17 2nd year classes: Academic year begins

September 2015
6 Labor Day Observance, 5pm
7 Labor Day Observance

November 2015
25 Thanksgiving Day holiday begins, 5pm
26 Thanksgiving Day Observance
27 Holiday for all classes

December 2015
18 All classes: Winter recess begins, 5pm

January 2016
4 All classes: Winter recess ends and classes resume, 8am
17 Martin Luther King Day holiday begins, 5pm
18 Martin Luther King Day Observance

March 2016
25 1st & 2nd year classes: Spring Break begins, 5pm
31 3rd & 4th year classes: Spring break begins, 5pm

April 2016
4 All classes: Classes resume, 8am

May 2016
8 Graduating students: Academic year ends, 5pm
13 2nd year class: Academic year ends, 5pm
20 Commencement (Friday)

Tuition Payment Deadlines:

<table>
<thead>
<tr>
<th>Level</th>
<th>Initial</th>
<th>Final</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Year</td>
<td>Aug 3, 2015</td>
<td>Jan 8, 2016</td>
</tr>
<tr>
<td>2nd Year</td>
<td>Aug 21, 2015</td>
<td>Jan 8, 2016</td>
</tr>
<tr>
<td>3rd &amp; 4th Year</td>
<td>Jun 26, 2015</td>
<td>Jan 8, 2016</td>
</tr>
</tbody>
</table>

NOTE: The beginning and ending dates of each academic term will be published with individual class schedules.

Doctor of Medicine Program

The School of Medicine is located in the Washington University Medical Center at 660 S. Euclid.

Course Restrictions/Registration Procedures for Non-medical Students

Courses listed in this section are restricted to students accepted into the Doctor of Medicine degree program unless otherwise noted in the course description. Students not in the degree program interested in registering for the allowed courses should register under the crosslisted number noted, following the procedures of the student's home school. Dates, refunds and policies regarding withdrawal from a course will also be determined by the student's home school. Payment of fees to the School of Medicine will be handled administratively. Please note: prerequisites and required instructor permission must be strictly enforced. Students enrolling in any course without following specified procedures will be removed from the roster without notice. Space is sometimes limited and medical students must be given priority. If you must be dropped from a course due to unforeseen space limitations, you will be contacted immediately.

Registration Procedures for Medical Students

Due to the structured nature of the program leading to the degree Doctor of Medicine, registration is most efficiently accomplished administratively. On-line registration will NOT be used for the current academic year for medical students. You will be notified of procedures specific to your class. Policies of the School of Medicine apply regarding performance, payment of
Doctor of Philosophy/Doctor of Medicine and Master of Arts/Doctor of Medicine

See the Division of Biology and Biomedical Sciences, Graduate School of Arts and Sciences. Joint degree students should follow registration procedures of the division that will be prime in the semester for which you are registering.

For additional information contact the Registrar's Office at 362-6848.

Availability of Medical Classes to Students Not Admitted to the Doctor of Medicine Program

Registration for the following courses is open to students outside the Doctor of Medicine degree program only where noted in course descriptions, if all course prerequisites are met, and always with approval of the course master. Courses available for enrollment are identified as crosslisted. Students register in the division where the class is crosslisted and not with the medical school. Contact the School of Medicine at 362-6848 for further information about the availability of medical school courses.

ELECTIVE PROGRAM—FOURTH YEAR MEDICAL SCHOOL

Philosophy of the Elective Program

The elective year allows the student to develop a flexible program which should be of great value and interest in the middle of an eight- to ten-year period of formal education. This flexible year occurs at a crucial time, helps the student decide on the rest of his/her formal education and helps focus productively upon already established interests. It also enables students to gain from the wide range of specialized knowledge and skills found in the faculty. As there is not enough time for each student to be introduced to each of today's areas of specialization, the elective program permits the student to select, according to desire, the areas s/he wishes to explore in depth.

Requirements

To qualify for the degree of Doctor of Medicine at Washington University School of Medicine, students are required to satisfactorily complete a minimum of 36 weeks of approved electives in the fourth (final) year. The fourth year encompasses a 44-week time block. At least 24 of the 36 weeks required time of the elective program must be taken on campus in the Washington University School of Medicine elective courses described in this catalog. Most students utilize most of the elective year for clinical electives. Clinical electives are generally of four weeks duration. Research electives are a minimum six weeks, and a maximum of 12 weeks duration. Special study electives are typically of four weeks duration. Reading electives may range from 1-4 weeks, but a student may not spend more than 4 weeks on reading electives.

NOTE: You should be aware that on January 1, 1996, the Medical Board of California. Assembly Bill 3497 added to Section 2089.5 of the Business and Professions Code a new requirement for four weeks of undergraduate clinical training in family medicine. This new family medicine requirement applies to all California licensing applicants who graduate from medical school after May 1, 1998.

Inquiries and correspondence should be directed to:

Curriculum Office
Washington University School of Medicine
660 S. Euclid Avenue, Box 8214
St. Louis, Missouri 63110
(314) 362-6838

Medical students participating in any of the electives described in this booklet will be providing services as members of a team under the direct supervision of an attending physician or senior resident. While Washington University School of Medicine strives to provide each student with maximum responsibility and experience, students will be supervised in their efforts at all times until they are fully licensed.

Visiting students should go to http://wusmat1.wustl.edu/medstudents/electvsat.nsf for eligibility requirements and additional information.

Fourth Year Medical School

Washington University School of Medicine offers an extensive array of electives and research opportunities at the 800 and 900 course levels for the 4th year medical student.

Specific areas of study and research opportunities are listed below. Please access the website for further details of elective offerings:

http://wusmat1.wustl.edu/medstudents/electvsat.nsf/openpag

Anatomy and Neurobiology

(Level 800)
Advanced Dissection
Teaching Assistant in Human Anatomy

(Level 900)
Research Opportunities

Anesthesiology

(Level 800)
Anesthesiology
Anesthesia for Neurosurgery
Cardiothoracic Anesthesiology
Cardiothoracic Critical Care
Critical Care
Obstetrical Anesthesia
Pain Management
Pediatric Anesthesia

Biochemistry and Molecular Biophysics

(Level 900)
Research Opportunities

Cell Biology and Physiology

(Level 900)
Research Opportunities

Developmental Biology

(Level 900)
Research Opportunities

Genetics

(Level 800)
Research Opportunities

Internal Medicine

(Level 800)
Adult Allergy and Clinical Immunology
Ambulatory Care – Jacqueline Maritz Lung Center
Ambulatory Infectious Disease
Biomedical Innovation and Entrepreneurship
Bone and Joint Infectious Disease Consult
Bone and Mineral Diseases
Bone Marrow Transplantation & Stem Cell Biology
Cardiac Arrhythmias and Electrophysiology
Clinical Cardiology – VA
Clinical Cardiovascular Medicine
Clinical Emergency Medicine, Barnes-Jewish Hospital
Clinical Gastroenterology and Hepatology
Clinical Internal Medicine – Hospitalist
Clinical Mentoring
Clinical Nephrology
Dermatology
Emergency Ultrasound
Endocrinology, Diabetes and Metabolism
General Infectious Disease
Geriatric Medicine
Heart Failure/Cardiac Transplantation
Hematology and Hemostasis
Honors Medicine – Cardiology
Honors Medicine – General Medicine
Honors Medicine – VA Hospital
Hyperbaric Medicine & Problem Wound Management
Infectious Disease: Care of HIV-Infected Patients
Inpatient Cardiology
Inpatient Internal Medicine/Oncology–Firm
Intensive Care Medicine – BJ North
Intensive ECG Interpretation
Medical Intensive Care
Medical Toxicology
Medicine Consult Service
Occupational/Enviromental Medicine
Oncology–Inpatient
Oncology–Outpatient
Palliative Care for the New Physician
Palliative Medicine
Pulmonary Medicine, Barnes-Jewish Hospital
Pulmonary Medicine – VA Hospital
Rheumatology
Transplant Infectious Disease Consult

(Level 900)
Research Opportunities

Molecular Microbiology

(Level 900)
Research Opportunities
Neurology
(Level 800)
Adult and Pediatric Epilepsy
Clinical Aspects of Aging and Dementia
Clinical Neuroimmunology and Multiple Sclerosis
MS Center/Outpatient
Neonatal Neurology
Neuro-Oncology
Neurology Subinternship
Neurology Subinternship for Visiting Students
Neurology/Neurosurgery ICU
Pediatric Neurology
Physical Medicine and Rehabilitation
(Level 900)
Research Opportunities

Neurological Surgery
(Level 800)
Neurosurgery
(Level 900)
Research Opportunities

Obstetrics and Gynecology
(Level 800)
GYN Oncology Subinternship
Gyn Urogynecology Subinternship
Maternal-Fetal Medicine Outpatient Care Subinternship
Maternal-Fetal Medicine Inpatient (Antepartum) Subinternship
Obstetrical Anesthesia
OB/GYN Endocrinology-Infertility Subinternship
OB/GYN Ultrasound-Genetics
Special Topics in Reproductive Health
(Level 900)
Research Opportunities

Ophthalmology and Visual Sciences
(Level 800)
Clinical Ophthalmology
Neuro-Ophthalmology
Oculofacial Plastic Reconstruction and Orbital Surgery
(Level 900)
Research Opportunities

Orthopaedic Surgery
(Level 800)
Orthopaedic Hand and Upper Extremity Surgery
Orthopaedic Oncology
Orthopaedic Pediatric Surgery
Orthopaedic Spine Surgery in Adult Patients
Orthopaedic Sports Medicine
Orthopaedic Surgery Externship For Visiting Students Only
Orthopaedic Surgery – Foot/Ankle Surgery
Orthopaedic Surgery – Shoulder/Elbow Surgery
Orthopaedic Trauma
Pediatric Orthopaedics – Spine and Sports Surgery
Reconstructive and Joint Preservation Surgery
(Level 900)
Research Opportunities

Otolaryngology
(Level 800)
Ambulatory Otolaryngology For the Primary Care Physician
General Otolaryngology
Neurotology
Otolaryngology
Pediatric Otolaryngology
Practicum in Adult Clinical Audiology
(Level 900)
Research Opportunities

Pathology
(Level 800)
Autopsy Pathology
Clinical Laboratory Medicine
Dermatopathology
Diagnostic Hematopathology
General Cytopathology
Introduction to Neuropathology
OB-GYN Pathology Subinternship
Surgical Pathology – Barnes/Jewish
(Level 900)
Research Opportunities

Pediatrics
(Level 800)
Clerkship in Rural Primary Care Pediatrics
Clinical Pediatric Pulmonary Medicine
General Pediatrics Subinternship – St. Louis Children’s Hospital
Genetics and Genomic Medicine
Newborn Medicine
Pediatric Asthma and Allergy
Pediatric Cardiac Catheterization
Pediatric Cardiology- outpatient Service
Pediatric Critical Care Medicine
Pediatric Emergency Medicine
Pediatric Endocrinology and Diabetes
Pediatric Gastroenterology, Hepatology and Nutrition
Pediatric Infectious Diseases
Pediatric Lung Transplantation
Pediatric Pulmonary Subinternship
Pediatric Renal Disease
Pediatric Rheumatology
Quality of Care through Health Informatics
Special Topics in Reproductive Health
Subinternship in Pediatric Hematology and Oncology
(Level 900)
Research Opportunities

Psychiatry
(Level 800)
Child Psychiatry
Clinical Psychiatry-Inpatient Psychiatric Service
Interventional Psychiatry
Introduction to Eating Disorders
Outpatient Community Psychiatry
Psychiatric Oncology
Psychiatry Consult Service
Schizophrenia Precursors and Prodromal States
(Level 900)
Research Opportunities

Radiation Oncology
(Level 800)
Clinical Radiation Oncology
(Level 900)
Research Opportunities

Radiology
(Level 800)
Clinical Nuclear Medicine
General Radiology
Interventional Radiology
(Level 900)
Research Opportunities

Surgery
(Level 800)
Cardiothoracic Surgery
Colon and Rectal Surgery, Acting Internship
Critical Care
Hepatobiliary Pancreatic Surgery, Acting Internship
Minimally Invasive Surgery, Acting Internship
Organ Transplantation
Pediatric Surgery
Plastic Reconstructive Surgery
Plastic Surgery Externship For Visiting Students Only
Surgical Night Float and ER Subinternship
Surgical Oncology and Endocrine Surgery, Acting Internship
Trauma Service, Acting Internship
Urology
Vascular Surgery, Acting Internship
(Level 900)
Research Opportunities

Additional Electives
(Level 800)
Business of Medicine
Fourth Year Capstone Course
(Level 900)
Research Opportunities