The development of computer models of human body segments and other systems during the past half century of research in impact biomechanics has been instrumental in understanding concussion. In recent years, we have been applying the knowledge gained about adverse effects of airbags and how the helmet protects an athlete from head injuries. Our research includes both basic science research associated with the mechanisms of brain injury, biomaterial properties of surgically implanted devices, as well as translational research and population studies of cancer. The focus of the training experience can be varied to suit individual student needs. It leads to the Doctor of Philosophy degree in Cancer Biology.

The Barbara Ann Karmanos Cancer Institute is a premier, nationally-recognized cancer research, treatment, education, and outreach center. It is also home to one of the eighteen national registries of the SEER (Surveillance, Epidemiology, End Result) programs. The current research programs are as follows:

- Molecular Imaging
- Molecular Therapeutics
- Population Sciences and Disparities
- Tumor Biology and Microenvironment

Bioengineering Center
818 W. Hancock, 2208 Bioengineering Center
313-577-0252
https://engineering.wayne.edu/bme/research/

The mission of the Bioengineering Center is to promote fundamental discoveries, design and development of technologies and education in the understanding, mitigation and prevention of impact associated injuries.

The Bioengineering research program at Wayne State University began in 1939 as an interdisciplinary effort between the College of Engineering and the School of Medicine. The Bioengineering Center was first established by Professor Herbert Lissner as the Biomechanics Research Center in the Department of Engineering Mechanics. In 1963, the Center was chartered by the Board of Governors of Wayne State University and appointed Professor Lissner as its first director.

Over the past 68 years, the Center has developed into a modern research powerhouse with the principal aim of promoting fundamental discoveries, designing and developing technologies for human safety, and educating students in the understanding, mitigation, and prevention of impact associated injuries. Our research includes both basic science research (such as studying the mechanisms of brain injury, biomechanical properties of the kidney capsule subject to high-speed loading, and etiology of low back pain) and practical safety research (such as evaluating the potential adverse effects of airbags and how the helmet protects an athlete from concussion). In recent years, we have been applying the knowledge gained during the past half century of research in impact biomechanics towards the development of computer models of human body segments and of the whole body. These tools are being used to design countermeasures to reduce injury.

Center for Automotive Research
Director: Naiem Henein, Ph.D.
2121 Engineering
313-577-3887
https://automotiveresearch.wayne.edu/

The Center for Automotive Research (CAR) was established in 1980 to advance, promote and support research and academic courses in areas of interest to the automotive industry. Faculty and graduate students from the College of Engineering and local industry participate in the research programs conducted at the Center.

Current research areas include the auto-ignition, combustion and emission characteristics of petroleum, alternate and renewable fuels in spark-ignition and compression-ignition engines, under different operating conditions. The research thrust areas are auto-ignition and combustion in engines, conventional, alternate and renewable fuels, cold startability at low ambient temperatures, sensors, diagnostics, electronic controls, engine dynamics, friction and wear, and simulations and mathematical modeling.

The research in the Center combines theoretical and experimental investigations. Theoretical research deals with fundamental processes of thermodynamics, heat transfer, mass transfer, and combustion kinetics, applied to combustion engines. CFD and chemical kinetics codes are used to determine the flow in the combustion chamber, the development of the auto-ignition and combustion processes, the radicals concentrations and the formation of the different engine-out emission species. In addition to the cold room and optical engine test cells, experimental research is conducted under warmed up and loaded engine conditions in six dynamometer test cells equipped with electric dynamometers, flow-meters, pressure transducers, charge amplifiers, shaft encoders, gas analysis equipment, particulate mass and characterization equipment, gas chromatograph, FTIR spectrometer, mass spectrometer, fast response flame ionization detectors, fast-response NO detectors, and fast response CO and CO2 detectors and high speed data acquisition systems.

Center for Excellence and Equity in Mathematics
Director: Steven Kahn, Ph.D.
313-577-2558
http://clas.wayne.edu/ceem/

The Center for Excellence and Equity in Mathematics, in the College of Liberal Arts and Sciences, is a research and educational center with a two-fold mission: to find ways to significantly improve the quality of K-12 and introductory college-level mathematics instruction across the United States; and, by using mathematics as a tool, to provide students from inner cities and underrepresented minority groups with the kinds of educational and lifetime opportunities that should be available to all students.

The Center currently operates five core programs: the WSU Math Corps, an outreach program serving Detroit middle and high school students; the WSU Middle and High School Math Network, which provides day to day instructional and/or operational resources to Detroit are a middle and high school math departments; the Math Corps Learning Community at WSU, a University support and retention program for Math Corps “kids” now attending WSU; and the Emerging Scholars Program (ESP), a WSU
honors-level calculus and pre-calculus program; and the Rising Scholars Program (RSP), serving WSU students at the developmental level.

Center for Latino/a and Latin American Studies

Director: Jorge L. Chinea, Ph.D.
3324 Faculty/Admin. Bldg.
313-577-4378
https://las.wayne.edu/

The Center for Latino/a and Latin American Studies is a multi-service unit engaged in teaching, research, and service. The Center plays an important role in the urban mission of Wayne State University and involves four components:

1. The Center hosts two learning communities: the CBS Scholars Program and the College-to-Career Program. The first one recruits students into the University, facilitates their transition between high school and college, and promotes increased retention. The second program supports students through completion of their degrees and beyond, especially in the areas of career development and graduate school preparedness. It also offers courses and related educational activities for students interested in Latino and Latin American Studies.

2. It promotes research on issues relevant to the Latino/a community, especially in the urban and workplace environment; and Latin American cultural studies and current issues.

3. It creates and fosters the interaction and exchange of personnel and resources between the University and the Latino/a community; and it serves as a source of expertise on Latino issues to the larger metropolitan community.

4. As an advocate for the awareness and advancement of Latino/a issues within the University, the Center contributes to the University's continuing efforts to create a richer multicultural campus environment.

Center for Molecular Medicine and Genetics

Director: Lawrence I. Grossman, Ph.D.
3127 Scott Hall, 540 E. Canfield
313-577-5323
https://genetics.wayne.edu/

The Center for Molecular Medicine and Genetics conducts and fosters interdisciplinary health-related research and research training in three focal areas of molecular biology:

1. Structure and function of macromolecules: chemical synthesis and analytical characterization of nucleic acids and protein products with scientific and commercial potential; and genetically-engineered products with new or improved functions.

2. Structure and function of human, viral, mitochondrial and other genomes; DNA sequences of genes and their regulatory regions; genetic and physical maps of simple and complex genomes, with emphasis on those important in human health and disease.

3. Development and characterization of animal models of human disease: use of transgenic and knockout technologies in vertebrate and invertebrate model organisms to elucidate the etiology and pathophysiology of major diseases.

The research and research training activities promoted by the Center involve its own research faculty and faculty from at least twelve departments throughout the University. The Center is supported by the University's Research Excellence and Economic Development Fund.

Center for Peace and Conflict Studies

Director: Frederic S. Pearson
2320 Faculty/Administration Building
313-577-3453
https://cpcs.wayne.edu/

On November 20, 1965 the Center for Teaching about War and Peace opened its doors under the leadership of Director Russell Broadhead and a committee of distinguished faculty members. The mission then was to provide interdisciplinary, university-wide, academic programs in the field of domestic and international conflict and peace issues. In 1987 the WSU Board of Governors, building upon this rich heritage, created The Center for Peace and Conflict Studies.

The mission of the Center for Peace and Conflict Studies is to develop and implement projects, programs, curricula, research, and publications in areas of scholarship related to international and domestic peace, war, social justice, arms control, globalization, multicultural awareness and constructive conflict resolution. The Center addresses this mission in three ways. CPCS supports undergraduate and graduate student excellence through its academic programs. CPCS staff and students engage in scholarly research initiatives on aspects of domestic and international conflict management. CPCS provides community outreach programs that emphasize: conflict resolution, development of inter-cultural understanding, and enhance local knowledge of global affairs.

Center for Social Work Research

Director: Joanne Sobeck, Ph.D.
5447 Woodward
313-577-4439
https://socialwork.wayne.edu/research

Chartered in 2008, the goals of the Center for Social Work Practice and Policy Research are to:

1. conduct research that advances social work practice and policy in settings that range from urban neighborhoods to international contexts;

2. develop relationships with the purpose of identifying and expanding research opportunities and promoting Center sustainability; and

3. foster a commitment to the dissemination of findings that inform social work practice and expand the body of social work knowledge.

The Center fosters a culture for research within the School of Social Work by creating an infrastructure of resources for faculty scholarship and research including pre- and post-award grant support. In addition, the Center facilitates opportunities for faculty and staff engagement with community partners. The Center strongly believes in using interactive processes where researchers, practitioners and policy makers can find new ways to work together, generate innovative ideas, share knowledge and solve problems. Through our Strategic Partners Project and other Center activities, the School of Social Work continues to demonstrate its commitment to the Detroit area, researching and developing real solutions for real world problems. To this end our faculty and staff are engaged in evaluation research, grant writing, instrument development and other research-related service projects with community agencies.

Translating research and disseminating social work knowledge among practitioners is critical. The Center implements a variety of strategies to synthesize recent research findings into serviceable formats for practitioners including an enhanced web page, policy and practice briefs,
and researcher-practitioner dialogue meetings. Learning communities are also provided for students interested in applying research methods to social work contexts.

**Center for the Study of Citizenship**

*Director: Mark Kruman, Ph.D.*
3157 Faculty/Admin. Bldg.
313-577-2593
http://www.clas.wayne.edu/citizenship (http://www.clas.wayne.edu/citizenship/)

The Center for the Study of Citizenship at Wayne State University promotes research and intellectual exchange about citizenship among a global community of scholars; students, political, community, and business leaders; and the general public. The Center fosters research in the emerging interdisciplinary field of citizenship studies locally, nationally, and internationally. In particular, the Center encourages analysis of the relationship between citizens and the political, social, economic, and cultural communities of which they are a part. Toward these ends, the Center hosts the leading international conference in citizenship studies; publishes a book series, Citizenship Studies, in collaboration with the Wayne State University Press; sponsors a discussion network with over 2000 subscribers from over 30 countries; hosts an annual civic festival in September; and sponsors public programs about citizenship.

**Center for Urban Studies**

*Director: Lyke Thompson, Ph.D.*
*Managing Director: Charo Hulleza, M.P.A.*
5700 Cass Avenue, Room 2207 Academic/Administration Building
313-577-2208
http://www.cus.wayne.edu (http://www.cus.wayne.edu/)

The Center for Urban Studies improves understanding of and provides innovative responses to urban challenges and opportunities. The Center conducts and disseminates research, develops policies and programs, and provides training, capacity-building, and technical assistance. The Center participates in defining and influencing local, regional, State, and urban policy. The Center’s current initiatives have a real, substantial and lasting impact on Detroit’s challenges across a number of areas ranging from crime reduction to healthy homes. Committed to serving Detroit and its metropolitan area, the Center exemplifies Wayne State’s urban research and service mission. The Center employs a highly trained multi-disciplinary team consisting of social science Ph.D. and master’s-level researchers, as well as WSU graduate and undergraduate students.

**Center to Advance Palliative-Care Excellence (CAPEWAYNE)**

4201 St. Antoine, Suite 5C-UHC
313-577-3997
http://www.capecwayne.med.wayne.edu (http://www.capecwayne.med.wayne.edu/)

CAPEWAYNE is an inter-disciplinary academic center bringing together scholars, educators, researchers and clinicians dedicated to improving the quality of end-of-life care. The main focus areas of this center are education, research and clinical practice, all of which permeated by the field of humanities.

**Education:** The Center offers an end-of-life curriculum for students, trainees and clinicians across disciplines and levels of training. A major undertaking of the Center is to offer a highly regarded regional conference on Palliative Care annually.

**Research:** The Center gathers researchers who have a shared interest in the conduct of collaborative, interdisciplinary interdepartmental research.

**Clinical Practice:** The Center provides resources to clinicians across disciplines and settings that practice palliative care, through a paradigm of sharing and ensuring optimization of clinical care in our community.

**Cohn-Haddow Center for Judaic Studies**

*Director: Howard Lupovitch, Ph.D.*
2311 Faculty/Admin. Bldg., 656 W. Kirby
313-577-2679
https://judaicstudies.wayne.edu/

Established in 1988 as a cooperative venture between Wayne State University and the Jewish Foundation of Metropolitan Detroit/United Jewish Foundation, the Cohn-Haddow Center embodies the fruitful relationship that has long linked the University to the metropolitan Jewish community. As such, it is a model for universities and Jewish communities in a dynamic urban setting. The Cohn-Haddow Center serves as a resource to the University and to the larger community in Jewish studies and related areas. It sponsors a broad array of programs and activities related to several of the University’s wide-ranging missions. From biannual international conferences to smaller symposia, incidental lectures, and broadly-defined cultural events, the Cohn-Haddow Center has introduced the University and community to some of the world's most distinguished academics and eminent writers, poets, artists and musicians.

**C.S. Mott Center for Human Growth and Development**

*Director: Gil G. Mor, M.D., Ph.D.*
275 E. Hancock
313-577-1337
https://mott.med.wayne.edu/

The C.S. Mott Center for Human Growth and Development, a basic, research facility housing over 24,000 sq. ft. of laboratory space, is located on the medical campus of Wayne State University School of Medicine.

Initially occupied in 1973, the building has been totally renovated through a 5-phase reconstruction project spanning the years of 2001-2008. In addition to individual Ob/Gyn investigators’ laboratories/offices and animal facilities, the renovated building now also houses the research laboratories of the Perinatology Research Branch (PRB) of the NICHD, the Implantation Laboratory of the Reproductive Biology and Medicine Branch, NICHD Intramural Research Division, the Wayne State University Genomics Facility, a Bioinformatics Center and a Systems Biology section. It also contains one of the Ob/Gyn Department’s Clinical Research areas.

**Damon J. Keith Center for Civil Rights**

*Director: Peter J. Hammer, J.D., Ph.D.*
471 W. Palmer St.
313-577-3620
https://law.wayne.edu/keith-center/

Located within Wayne State University’s Law School, the Damon J. Keith Center for Civil Rights addresses the civil rights needs of southeast Michigan and beyond. The Keith Center’s mission is to promote the educational, economic and political power of underrepresented communities in urban settings.
Our communities need institutions that call attention to today’s civil rights challenges and that nurture social conscience. The Keith Center strives to be one such institution: a hub for civil rights teaching, research and action, and a place that fuels the next generation of civil rights leaders.

At the Keith Center, stakeholders gather to analyze policy, law students teach a civil rights curriculum to high school students, and leaders dive into the equity issues of the day, such as tax foreclosures, water shutoffs and police-community relations. We welcome the public for lectures by civil rights icons, we support community-based organizations, and we publish scholarship about how the law and social justice impact one another.

Developmental Disabilities Institute

Director: Sharon Milberger, Sc.D.
Leonard Simons Building
4809 Woodward Avenue, Suite 268
313-577-2654 or 888-978-4334
https://ddi.wayne.edu/

The Developmental Disabilities Institute is one of a national network of over sixty University Affiliated Programs, nationally and in U.S. territories. The Institute’s mission is to contribute to the development of inclusive communities, which enhance the quality of life of people with disabilities and their families through a culturally-sensitive statewide program of interdisciplinary education, community support and services, and research and dissemination of information.

Staff and faculty engage in technical assistance, training, and research programs throughout Michigan via collaborative efforts with schools, community agencies, community colleges, and other Universities. Over 10,000 individuals with disabilities benefit from these activities annually. The Institute offers a wide range of opportunities for students and faculty to engage in state-of-the-art community-based research, education, and technical assistance.

The Institute develops activities and projects based on needs of persons with disabilities and the communities in which they live and work. The Community Advisory Council, composed of representatives of twenty-five key statewide organizations, meets bi-annually to provide information and assistance to Institute staff and faculty in establishing priorities and evaluating activities.

Douglas A. Fraser Center for Workplace Issues

249 Walter P. Reuther Library, 5401 Cass Ave.
313-577-2191
https://labor.wayne.edu

The Douglas A. Fraser Center for Workplace Issues is a core part of Labor@Wayne. It was chartered by the University Board of Governors in 1998 to honor Douglas Fraser, former president of the United Automobile Workers (UAW). The Center has been endowed by major gifts from the UAW, General Motors Corporation, Chrysler Corporation, and Ford Motor Company, and generous gifts from many other organizations and individuals, including the United Steelworkers of America. The mission of the Fraser Center is to generate knowledge and information about best practices in the workplace through effective union representation. The Center is guided by the external and internal advisory Boards of Labor@Wayne. It supports research through the Fraser Fellows, Fraser Scholars, Fraser Paper Series, and Fraser Workshop activities. It sponsors the annual Labor Leaders on Labor Forum which honors nationally prominent leaders for their contributions to working people and families.

The Fraser Center also convenes numerous conferences and events to bring academics, labor leaders, business leaders, and policymakers together to discuss important workplace and public policy topics. It focuses on manufacturing, healthcare, and the public sector. The Fraser Center supports various topical White Papers on key issues such as employee engagement through labor-management joint initiatives.

Humanities Center

Director: Jaime Goodrich, Ph.D.
2226 Faculty/Administration Building; 656 W. Kirby; 313-577-5471
https://humanities.wayne.edu/

The mission of the Humanities Center is to nurture interdisciplinary, transdisciplinary and interdisciplinary work in the humanities and the arts through competitions, conferences, discussion groups and other programs for Wayne State’s humanities and arts faculty and students, and for visiting scholars and artists. The Center promotes excellence in research and creative endeavors through rigorous peer review of proposals submitted to it for funding. By sponsoring programs that involve community participants, the Center supports the University’s urban mission. Through its various programs, the Center brings humanists of diverse talents and interests together for conversation and collaboration, and fosters innovation and creativity across the humanistic disciplines.

The Humanities Center provides funding support to both faculty members and students. Two of the Center’s most prominent faculty programs are the Marilyn Williamson Endowed Distinguished Faculty Fellowship (MWEDF) and an annual themed Faculty Fellowship Competition. The Center awards either one or two Williamson fellowships a year, each worth $20,000, depending on the funds available in the budget. Other faculty award programs include an annual themed the Faculty Fellowship Competition with between eight and ten recipients awarded up to $6,000 each. Prominent student programs are the Doctoral Dissertation Fellowship and the Graduate Travel program. The Doctoral Dissertation Fellow will receive $15,000 plus health care coverage if it is requested. Up to three smaller awards of $500 may be made at the discretion of the Center to applicants for the award. The Graduate Travel program encourages graduate students in the humanities and the arts to present their research or artistic work at national conferences and exhibitions by offering up to $300 in travel assistance to applicants. Please check the Humanities Center Web site for additional programs that provide funding opportunities for faculty.

Institute of Environmental Health Sciences

Director: Melissa Runge-Morris, M.D.
Integrative Biosciences Center, 6135 Woodward Ave.
313-577-6590
https://iehs.wayne.edu/

The Institute of Environmental Health Sciences (IEHS) is the originator of the Center for Urban Responses to Environmental Stressors (CURES). IEHS is a core of research scientists who use state-of-the-art technologies to identify the central mechanisms that lead to environmentally-linked disease.

CURES is a diverse team of scientists, clinicians, public health professionals, educators and community leaders working together to build a healthy living and working environment in the City of Detroit. Located in the heart of the “motor city” and situated on the Wayne State University urban campus, the CURES motto is “Gateway to a Healthy Detroit.”
Institute of Gerontology

Director: Peter Lichtenberg, Ph.D., A.B.P.P.
87 E. Ferry St., 226 Knapp Bldg.
313-664-2600
https://iog.wayne.edu

The Institute of Gerontology was created in 1965 by the Wayne State University Board of Governors in response to a mandate by the State of Michigan. The Institute of Gerontology strives to contribute relevant research and education devoted to enhancing the quality of life of older people, especially those who reside in metropolitan Detroit and the State of Michigan. The interdisciplinary team of faculty partner with academic colleagues, trainees, community organizations, and citizens to better understand aging and health. It works to promote the integration of gerontology into the broader research, teaching, and service activities of Wayne State University, and employs analytical and conceptual advances in the understanding of aging and related processes, with specific attention focused on health and health disparities in our urban environment.

Labor Studies Center

249 Walter P. Reuther Library, 5401 Cass Ave.
313-577-2191
https://labor.wayne.edu

The Labor Studies Center is a comprehensive labor education center committed to strengthening the capacity of organized labor to represent the needs and interests of workers, while at the same time strengthening the University’s interdisciplinary research and teaching on labor and labor relations issues. The Center’s primary areas of research and practice include: training and technical assistance to unions on labor relations and workplace issues; an undergraduate labor studies major and internship program; interventions to increase the organizational effectiveness of unions; the development and diffusion of constructive labor-management relations practices, particularly in the public sector; the formation and institutionalization of labor-community coalitions; and the impact of lean production systems on workers and labor relations practice in the North American auto industry.

Merrill Palmer Skillman Institute

Director: Peter Lichtenberg, Ph.D.
71 East Ferry Ave.
313-664-2500
https://mpsi.wayne.edu/

The Merrill-Palmer Skillman Institute is an interdisciplinary research institute focusing on urban children and families. It has a long and distinguished history as a research and educational institution, serving as a pioneer in the field of child development and early education. Since it became a part of Wayne State University in 1982, the Institute has encouraged collaborations among faculty from many departments within the University. The Institute emphasizes research, research training and community engagement and service in the areas of children’s health and development. Current research strengths range from pre-natal exposures and child development, infant mental health, cognitive development of high risk infants as well as adolescent health and development. The service programs of the Institute are an outgrowth of its research mission. MPSI operates one of the nation's oldest preschools. Community outreach and engagement through MPSI's Healthier Urban Families Program includes training of mental health workers who serve very young children in the care of public and non-profit agencies; consultation to education and child care organizations; workshops for teachers, parents and the public; and the annual Metropolitan Detroit Teen Conference.

Infant Mental Health: Dual-title degree programs in infant mental health are offered in conjunction with degrees sponsored by the Schools of Nursing, Education and Social Work. For curricula pertaining to these programs, please refer to the individual program and school/college sections in this bulletin.