Academic Departments

Three decades ago, UMMS held commencement ceremonies for its first class. Since then, more than 2,900 students have graduated to become health care professionals in virtually all fields of medicine and research. As an institution dedicated to the highest academic and ethical standards, our students expect effective preparation for the world of health care, which is changing at an unprecedented rate. To help students hone those skills required in the complex health care environment of the 21st century, UMMS has assembled a superior, dedicated faculty, supported by a strong foundation of academic departments that are continually evolving to meet the needs of our medical students, so they may realize their full potential as practitioners and researchers.

Information on pages 43-97 is provided by the departments and is current as of January 1, 2009.
Anesthesiology

Anesthesiology’s research efforts include studies into the:

- treatment of septic shock and acute respiratory distress syndrome and strategies to reduce catheter-related bloodstream infections;
- near-infrared spectroscopic measurement of hematocrit and of tissue pH, pO2 and oxygen saturation to use as guides for resuscitation; and
- biofilm formation on implanted medical devices.

The Department of Anesthesiology provides both third- and fourth-year medical students with a variety of educational experiences related to the perioperative management of patients. These include pre-operative evaluation, intra-operative management and post-operative care, including care in the SICU, in which the department is actively involved.

Rotations for third- and fourth-year students provide a practical experience in the fundamentals of airway management, endotracheal intubation, regional anesthetics and invasive monitoring. These rotations also focus on the pharmacology and physiologic alterations associated with the administration of an anesthetic. Students are exposed to the techniques of general anesthesia administration, as well as to a range of regional anesthetic procedures including spinal, epidural, intravenous and peripheral nerve blocks. Students learn ancillary methods of patient management during surgery, such as fluid and electrolyte replacement, acid base balance, controlled hypotension and cardiopulmonary bypass.

Third-year students gain experience at the University Campus, where they are exposed to trauma, cardiac, vascular, orthopedic, pediatric and off-site anesthesia cases, among others. Basic lectures on pre-operative patient assessment, choice of anesthesia and techniques of administration are presented to students who elect to take the anesthesia rotation during the third-year surgical clerkship.

Fourth-year elective rotations are designed to meet the needs of the medical student. In addition to required rotation time at the University Campus, students are given the option of rotating at any or all of our other residency training sites, in order to gain an exposure to a wide variety of anesthesia clinical settings. Sites include the UMass Memorial Medical Center Hahnmann Campus for ambulatory/regional anesthesia experience, the Memorial Campus for obstetric anesthesia and chronic pain management experience and the University Campus SICU.

A fourth-year student rotation focused on the management of critically ill surgical patients is also available. In addition, students have the option to participate in basic science investigations on biofilm formation by bacteria that are the common causes of device-related infections, and clinical studies that investigate the use of near-infrared spectroscopy to monitor tissue pH, oxygen saturation and PO2 in critically ill patients and various experimental therapies in the treatment of the acute respiratory distress syndrome and sepsis.

We welcome students to spend time with us and learn about the intricacies of anesthesiology, as well as the multiple career paths available within the specialty.

Anesthesiology Faculty

Professor and Chair

Stephen O. Heard, BSE, Princeton, 1975; MD, Texas, 1978

Professors

Mark Dershwitz, BA, Oakland, 1974; MD, PhD, Northwestern, 1982
Babs Soller, BS, Union College, 1975; MA, Princeton, 1977; PhD, 1980
Steven N. Treistman, BA, SUNY Binghamton, 1967; PhD, North Carolina, 1972

Clinical Professors

Danna Peterson, MB, ChB, Edinburgh, 1967
Shubjeet Kaur, BS, Delhi, 1978; MBBS, Mualana Azad, 1983

Clinical Associate Professors

Peter J. Foley, BA, New Hampshire, 1980; MS, Ball State, 1982; PhD, Purdue, 1986; MD, Medical College of Wisconsin, 1981
Farajallah Habib, MD, Alexandria, 1972
John Pullerits, MD, Toronto, 1975
Manisha S. Desai, MBBS, Baroda, 1982

Assistant Professors

Gustavo Angaramo, MD, University of Buenos Aires Medical School, 1988
Mahmoud Allouche, MD, Algiers, 1992
Nicholas J. Barnard, BS, Guy’s Hospital Medical, 1970; MBBS, 1973
Agata A. Boland, MD, Warsaw Medical, 1982
Ellice O. Cosar, MD, Sukurova, 1990
Eleanor M. Duduch, BS, Stonehill, 1979; MD, UMass Worcester, 1984
Khaledoun Faris, MD, Aleppo, 1991
Gilbert Fishbein, BA, Boston, 1978; MD, 1982
Christian González, BS, Florida; 1997, MD, Ponce, Puerto Rico, 2002
Geoffrey Hart, BA, Emory, 1976; MD, Thomas Jefferson, 1981
Chandra S. Joshi, MBBS, Christian Medical, 1980

* joint appointment

(continued)
Biochemistry & Molecular Pharmacology

Biochemistry & Molecular Pharmacology’s notable faculty include:

- two Howard Hughes Medical Institute investigators;
- a recipient of the Schering-Plough Award from the American Society of Biochemistry and Molecular Biology;
- a Pew Scholar and W. M. Keck Foundation Distinguished Young Scholar;
- two recipients of the Burroughs Wellcome Fund Career Awards in Biomedical Sciences;
- investigators awarded a five-year, $7.5 million NIH program grant focused on drug resistance in HIV protease and rational inhibitor design; and
- a chair elected to a two-year term as president of the Protein Society.

The Department of Biochemistry & Molecular Pharmacology provides medical students with an understanding of the molecular mechanisms underlying normal and disease processes in humans and the fundamental principles and biochemical and physiological bases of action for the major classes of drugs.

To accomplish this, the first-year Medical Biochemistry course is designed to incorporate the fundamental concepts of biochemistry in a series of lectures, clinical correlations, medical vignettes, problem-solving sessions and problem-based cases.

The second year consists of the two-semester Pharmacology course that familiarizes students with the most commonly prescribed drugs, as well as an understanding of the mechanism of action of the major classes of drugs. Key topics in the course include: general principles, drug actions on peripheral neuroeffector and other organ systems, chemotherapy and the effect of drugs on the central nervous system.
Mark Dershwitz, BA, Oakland, 1974; MD, PhD, Northwestern, 1982
*Stephen J. Doxsey, BS, Connecticut, 1977; PhD, Yale, 1987
Kendall Knight, BA, Clark, 1975; PhD, California, 1981
*David G. Lambright, BS, UMass Lowell; PhD, Stanford, 1992
Martin G. Marinus, BS, Otago, 1965; PhD, 1968
John R. McCullough, BA, Brooklyn, 1970; PhD, SUNY Downstate, 1980
*Craig L. Peterson, BS, Washington, 1983; PhD, California, 1988
Alonzo H. Ross, BA, Cornell, 1972; PhD, Stanford, 1977
William E. Royer Jr., BS, Pennsylvania State, 1976; PhD, Johns Hopkins, 1984
Celia A. Schiffer, BA, Chicago, 1986; PhD, California/San Francisco, 1992
Lawrence J. Stern, BA, Cornell, 1983; PhD, MIT, 1989
Zuoshang Xu, MD, Shanghai, 1982; PhD, Washington, 1990

Adjunct Professor
George E. Wright, BS, Illinois, 1963; PhD, 1967

Associate Professors
Job Dekker, BS, Utrecht, 1993; PhD, 1997
William R. Kobertz, BS, California/Berkeley, 1992; PhD, MIT, 1998
Charles G. Sagerström, BA, Macalester, 1987; PhD, Stanford, 1993

Research Associate Professors
James Evans, Ohio State; Northeastern
Omanand Koul, BS, Jammu and Kashmir, 1966; MS, Banaras Hindu, 1968; PhD, 1974
Sun Tam, BS, Boston College, 1984; PhD, Boston, 1990

Assistant Professors
Balaji Bhayravbhata, BS, Delhi, 1986; MS, 1988; MS, UMass Boston, 1990; PhD, Brandeis, 1997
Daniel Bolon, BS, New Hampshire, 1995; PhD, Yale, 2001
*Zdenka Matijasevic, BS, University of Zagreb, 1971; PhD, 1981
*Haley Melikian, BS, UMass Amherst, 1983; PhD, Emory, 1995
Stephen C. Miller, BS, Wisconsin, 1991; PhD, California/San Francisco, 1998
Mary Munson, BA, Washington, 1989; PhD, Yale, 1996
Oliver Rando, BA, Harvard, 1995; MD/PhD, Stanford, 2002
Nicholas R. Rhind, BA, BS, Brown, 1989; PhD, California/Berkeley, 1995
Sean Ryder, BS, Duke, 1997; PhD, California Institute of Technology, 2002
Scot A. Wolfe, BS, California Institute of Technology, 1990; MA, Harvard, 1992; PhD, 1996

Research Assistant Professors
Akbar Ali, BS, Punjab University, 1991; PhD, University of Karachi, 2001
Osman S. Bilsel, BA, Rochester, 1986; PhD, Washington, 1991
Hong Cao, BS, Beijing, 1984; MS, Tsinghua, 1987; PhD, Hiroshima, 1996
John D. Leszyk, BS, SUNY Oswego, 1984; PhD, Clarkson, 1987
Elisabet C. Mandon, BA, National (Laplata), 1982; MA, 1983; PhD, 1987
Jill A. Zitzewitz, BA, Carthage, 1986; MS, Washington, 1988; PhD, 1991

Adjunct Assistant Professor
Alice A. Gardner, BS, Fontbonne, 1990; PhD, St. Louis, 1998

Adjunct Research Assistant Professor
Jeffry C. Nichols, BS, Texas Tech, 1988; PhD, Rice, 1995

Instructors
Li Li, BS, Fudan University, 1987; PhD, University of Hong Kong, 1999
Ralph Zottola, BS, SUNY Binghamton, 1985; PhD, UMass Worcester, 1995

Research Instructor
Daniel Kelleher, BA, Holy Cross, 1969

“I chose UMass Medical School because I could sense that the faculty and students have great camaraderie. There is an emphasis on team learning.”

Annie Kruger
MD/PhD student

Annie received a master’s of science in public health degree from Harvard and then worked in the pharmaceutical consulting industry before pursuing a medical degree. She is looking forward to becoming a full-time physician-scientist and has received a taste of both clinical medicine and research at UMMS that has helped reveal her path.

“The curriculum teaches you how to ask questions no matter what field you choose.”
The Department of Cancer Biology was established in 2002 to provide the strongest basic science platform for cancer research at the University of Massachusetts Medical School. Housed on the fourth floor of the Aaron Lazare Medical Research Building, the department strives to develop outstanding basic research programs in all the fundamental cellular, molecular and genetic mechanisms involved in the malignant transformation and development of human cancer. Research areas represented in the department include the molecular analysis of cell proliferation and cell cycle checkpoints; the study of genes implicated in cellular motility and signal transduction; the elucidation of mechanisms that underlie tumor cell invasion and metastatic dissemination; the identification and functional analysis of cancer stem cells; and the establishment of genetic models of human cancer, especially acute leukemia and breast cancer.

Faculty members in the department are also actively engaged in the UMass Cancer Center, an interdisciplinary and transdepartmental cancer programs sponsored by the UMass Cancer Center, a unique venue to quickly and safely translate achievements from the basic sciences into novel opportunities for the prevention, diagnosis and treatment of human cancer.

The Department of Cancer Biology is distinguished by:
- a clear mission to understand basic and fundamental molecular abnormalities of human cancer; and
- a productive integration with interdisciplinary and transdepartmental cancer programs sponsored by the UMass Cancer Center, a unique venue to quickly and safely translate achievements from the basic sciences into novel opportunities for the prevention, diagnosis and treatment of human cancer.

Cancer Biology Faculty

Professor and Chair
Eleanor Eustis Farrington Chair in Cancer Research
Dario C. Altieri, MD, Milan, 1981

Professor and Vice Chair
Arthur M. Mercurio, BS, Rutgers, 1975; PhD, Columbia, 1981

Professors
Ali and John Pierce Chair in Pediatric Hematology/Oncology

Eric H. Baehrecke, BS, UMass Amherst, 1986; MS, Texas A&M, 1988; PhD, Wisconsin, 1992


Lucia Languino, PhD, Negri Institute of Pharmacology, 1984

Associate Professors
Steven Grossman, BA, Princeton, 1984; PhD, Chicago, 1989; MD, 1991

Michelle A. Kellihor, BA, Smith, 1981; MS, Yale, 1985; PhD, Tufts, 1991

Stephen Lyle, BA, Chicago, 1988; MS, 1988; PhD, 1993; MD, 1995

Leslie M. Shaw, BS, Trinity, 1987; PhD, Harvard, 1994

* joint appointment

Assistant Professors
Sharon B. Cantor, BS, Michigan, 1990; PhD, Tufts, 1997

Jianyuan Luo, BS, Peking, 1986; MS, 1990; PhD, Kentucky, 1999

Junhao Mao, BA, Zhejiang University, China, 1993; PhD, Rochester, 2002

Karl Simin, BS, Michigan, 1989; PhD, Utah, 2001

Merav Socolovsky, BA, Cambridge, 1983; MBBS, University College, 1986; PhD, Cambridge, 1993

Hayla Sluss, BA, Wheaton, 1988; PhD, UMass Worcester, 1998

Research Assistant Professors
Hira Lal Goel, MSc, Kurukshetra, 1998; PhD, NIPER, 2002

Hoi Pang Low, BS, Campbell University, 1982; MS, Georgia, 1990; PhD, Georgia, 1996

Paul Mak, BS, Boston, 1978; PhD, Northwestern, 1984

Instructors
Byoung Heon Kang, BS, Kaist, 1995; MS, Postech, 1997; PhD, 1999

Seema Paliwal, BS, Rohilkhand University, 1990; MS, Deemed University, 1993; PhD, Delhi University, 1999

Adjunct Faculty
David S. Garlick, BA, Brandeis, 1980; DVM, Tufts, 1985

Irwin Leav, BA, Ohio, 1959; DVM, 1965
Cell Biology

The Department of Cell Biology is notable for:
• a rank of 14 nationwide for research among medical school cell biology departments for the last 12 years;
• faculty consistently recognized for excellence in medical education; and
• its position as the lead department for human embryonic stem cell research and interdepartmental research program grants investigating nuclear structure and cancer, and cell structure and musculoskeletal disease.

Research in the Department of Cell Biology combines the use of molecular, cellular and in vivo genetic approaches to address structure-function relationships associated with control of cell growth and cell differentiation. Signal transduction mechanisms, cell motility, tumor suppression and metastasis, chromatin structure, as well as subnuclear assembly of the regulatory machinery that mediates the developmental expression of proliferation and tissue-specific genes in lineage committed cells and human embryonic stem cells, are investigated. The department provides training for MD, PhD and MD/PhD students in the underlying genetic, molecular and cellular bases of diseases, including muscular dystrophy, cancer, diabetes, osteopetrosis, osteoporosis, central nervous system defects and kidney disease.

Faculty bring their expertise into the first-year classroom as teachers of gross anatomy, neuroscience, histology, cell biology and human genetics—with all involving molecular, cellular and developmental concepts. They provide students with the opportunity to directly observe the normal structure of the human body at the gross and cellular levels, and to relate this experience to normal function and clinical problem solving.

Throughout the four-year curriculum, faculty contribute to additional courses, clerkships and electives that further prepare students for clinical practice. Departmental research and teaching programs emphasize interdisciplinary collaborations with colleagues in clinical and in other basic science departments.

Cell Biology Faculty

Professor and Chair
Gerald L. Haidak, MD, and Zelda S. Haidak
Professor of Cell Biology

Gary S. Stein, BA, Hofstra, 1965; MS, 1966; PhD, Vermont, 1969

Professor and Vice Chair for Medical Education
Susan B. Gagliardi, BA, Radcliffe, 1965; PhD, Harvard, 1971

Professor and Vice Chair

Professors Emeriti
Sam L. Clark, MD, Harvard, 1949
Geraldine F. Gauthier, BS, Massachusetts College of Pharmacy, 1954; MS, 1955; AM, Radcliffe, 1956; PhD, 1962

Distinguished Professor
Sheldon Penman, BS, Pennsylvania State, 1954; PhD, Columbia, 1958

Professors
Howard Hughes Medical Institute Investigator; Blais University Chair in Molecular Medicine
*Craig C. Mello, BS, Brown, 1982; PhD, Harvard, 1990
George F. Booth Chair in the Basic Sciences
George B. Witman III, BA, California/Riverside, 1967; PhD, Yale, 1972

*Kethandapatti C. Balaji, MD, Madras Medical College (India), 1986
*Alexei Bogdanov, BA, Moscow State University, 1981; MS, 1983; PhD, All-Union Cardiology Research Center, 1989
Roger W. Craig, BS, Sydney University (Australia), 1969; PhD, King’s College (London), 1975
*Stephen J. Dossy, BS, Connecticut, 1977; PhD, Yale, 1987
*Raymond M. Dunn, BS, WPI, 1978; MD, Albany Medical, 1982
Harvey M. Florman, BA, Rutgers College, 1972; PhD, Pennsylvania, 1982
*M. F. Fuman, BA, Emory, 1983; MD, 1987
Deborah Harmon Hines, BS, LeMoyne-Owen, 1970; PhD, Tennessee, 1977
*Shalesh Kaushal, BS, Yale, 1983; MD, Johns Hopkins, 1988, PhD, MIT, 1993
*Lucia Languino, BS, University of Bari (Italy), 1981; PhD, Negri Institute, Milan, 1981
Jeanne B. Lawrence, BA, Stephens, 1973; MS, Rutgers, 1975; PhD, Brown, 1982
*Mary Lee, AB, Harvard-Radcliffe, 1979; MD, SUNY Buffalo, 1983
Jane B. Lian, BS, Fordham, 1965; MS, Rochester, 1967; PhD, Boston, 1972
Elizabeth J. Luna, BA, Southern Illinois, 1972; PhD, Stanford, 1977
Gerald A. Schwarting, BS, Connecticut, 1969; PhD, Munich, 1974
Greenfield Sluder, AB, Middlebury, 1968; PhD, Pennsylvania, 1976
Janet L. Stein, BS, Elizabethtown, 1968; MA, Princeton, 1971; PhD, 1975
*Yu-ii Wang, BS, National Taiwan, 1973; PhD, Harvard, 1980
Merrill K. Wolf, BA, Yale, 1945; MD, Case Western Reserve, 1956
*Robert B. Zurier, BS, Rutgers, 1955; MD, Texas/Southwestern, 1962

Adjunct Professors
Daniel Baran, BS, Boston College; MD, Rochester, 1973
Zvi Bar-Shavit, BS, Hebrew, 1973; MS, Weizmann Institute, 1976; PhD, 1981
Martin A. Montecino, MS, University of Concepcion (Chile), 1991; PhD, UMass Worcester, 1996
Abdul R. Shakoori, BS, Punjab, 1960; MS, 1962; DS, Hohenheim, 1972

* joint appointment
(Cell Biology Faculty continued)

**Associate Professors**

*Athena Andreadis*, BA, Harvard, 1977; PhD, MIT, 1984

*John M. Cooke*, AB, Providence, 1966; PhD, UMass Amherst, 1976

*Andrew H. Fischer*, BS, Cornell, 1979; MD, Brown, 1984

*Daniel Z. Fisher*, BA, Swarthmore, 1982; PhD, Rockefeller, 1987; MD, Cornell, 1988

*Anne M. Gilroy*, BA, Rhode Island, 1974; MA, San Jose State, 1980

*Yicktung T. Ip*, BS, National Defense, 1984; PhD, Iowa, 1989

*Marci Jones*, BA, Johns Hopkins; MD, Vermont College of Medicine, 1994

*Stephen N. Jones*, BA, Virginia, 1982; PhD, Vanderbilt, 1987

*Daniel Kilpatrick*, BA, California/San Diego, 1974; PhD, Duke, 1980


*Jeffrey A. Nickerson*, BS, Michigan State, 1976; PhD, 1985

*Cristiana Rastellini*, BS, Camillo Benso Conte di Cavour (Italy), 1992; MD, University of Rome, 1992


*Zuoshang Xu*, MD, Shanghai, 1982; PhD, Washington, 1990

**Research Associate Professors**


*Kelly P. Smith*, BA, Hendrix, 1981; MS, North Texas State, 1984; PhD, Texas, 1991

*John L. Woodhead*, BS, Massey, 1972; MS, 1974; PhD, 1979

**Adjunct Associate Professors**

*Pamela S. Becker*, AB, Harvard-Radcliffe, 1979; PhD, MD, Harvard, 1986

*Steven B. Keevary*, BA, CUNY/Queens, 1977; PhD, Mount Sinai, 1981

*Zheng Z. Bao*, BS, Fudan University (China), 1986; PhD, Illinois/Urbana, 1993

*Jeanne D. Keller*, AB, Radcliffe, 1951; MD, Boston, 1955

*David S. Lapointe*, BA, Pennsylvania, 1970; PhD, Florida, 1979

*María A. Morabito*, PhD, University La Sapienza (Italy), 1979

*Mary Munson*, BA, Washington University in St. Louis, 1989; PhD, Yale, 1996

*Nicholas R. Rhind*, BA, BS, Brown, 1989; PhD, California/Berkeley, 1995

*Jaime Rivera*, BS, Universidad Autónoma de Nuevo Leon (Mexico), 1990; PhD, Texas Health Science Center/Houston, 1997

*Jie Song*, BS, Fudan University, Shanghai, 1995; PhD, Michigan State, 1999

*Hong Zhang*, BS, Fudan University (China), 1991; PhD, Michigan State, 1998

**Research Assistant Professors**

*Paul J. Fanning*, BS, Merrimack, 1986; PhD, Harvard, 1999

*Lisa Hall*, BA, Colorado College, 1988; PhD, California/Davis, 1996

*Gregory H. Hendricks*, BS, Arizona State, 1976; MS, 1983; PhD, Vermont, 2000

*Timothy Henion*, BS, SUNY, 1986; PhD, Medical College of Pennsylvania, 1996; MS, Roswell Park, 1999

*Melissa J. Jungnickel*, BSc, Newcastle, 1993; PhD, 1999

*Karl-Ferdinand Lechtreck*, PhD, University of Cologne (Germany), 1991

*Xiang-Dong Li*, BS, East China University of Science and Technology, 1990; PhD, Shanghai Institute of Biochemistry, Chinese Academy of Science, 1996

*Ma Luong*, BA, Middlebury, 1995; PhD, UMass Worcester, 2003

*Zdenka Matijasevic*, BS, Zagreb, 1971; MS, 1976; PhD, 1982

*Jitesh Pratap*, BS, Delhi, 1989; MS, 1992; PhD, Punjab, 1998

*Keith A. Sutton*, BS, Edinburgh, 1991; PhD, 1995

**Adjunct Assistant Professors**

*Amjad Javed*, BS, Government College (Pakistan), 1987; MS, University of the Punjab (Pakistan), 1990; PhD, 2001

*Ronald Ignotz*, BA, Washington & Jefferson, 1975; PhD, Pittsburgh, 1984

**Instructors**


*Tripti Gaur*, MS, Pant University of Agriculture & Technology (India), 1996; PhD, University of Delhi (India), 2002

*Mohammed Q. Hassan*, BS, Bidhan Chandra Krishi, 1986; DVM, Indian Veterinary Research Institute, 1989; PhD, Indian Institute, 1995

*Rajini Mudhasani*, BS, Osmania, 1993; MS, Pune, 1996; PhD, Cleveland State, 2004

*Shirwin Pockwinse*, BA, New Hampshire, 1969

*Norio Takizawa*, BA, Hokkaido, 1992; MS, 1994; PhD, 1997

*Yumi Uetake*, BSc, Japan Women’s University, Tokyo, 1994; MS, Ochanomizu University (Japan), 1996; PhD, 1999

*Ronglin Xie*, MD, China Medical, 1978; MS, 1988

*Sayed K. Zaidi*, BS, Punjab University (Pakistan), 1995; MS, 1998; PhD, 2003

**Voluntary Faculty**

*David Hill*, BS, Montana, 1989; PhD, Washington State, 1998

* joint appointment
Emergency Medicine

The Department of Emergency Medicine holds the distinction of:
- being one of the beneficiaries of a dramatic $129 million renovation of the emergency department on the University Campus of UMass Memorial Medical Center, completed in 2006;
- having the busiest single aircraft air ambulance service in the country;
- caring for more than a 135,000 patients annually;
- having several specialized divisions with fellows in Ultrasound, Disaster Medicine and Emergency Management, Toxicology, Prehospital Care and;
- having a strong basic science and clinical research program.

The knowledge of life supportive measures as well as the recognition and management of common medical emergencies are fundamental for all medical students. Emergency Medicine faculty are committed to these priorities by providing instruction through lectures, workshops and bedside teaching throughout the four-year curriculum. The department offers career guidance and support by acting as individual advisors and preceptors as well as holding panel discussions several times a year.

During the first two years of study, faculty teach a variety of courses including Basic Life Support, Physical Diagnosis II (PDII) and enrichment electives in wilderness medicine. Students can opt to utilize the emergency department as their teaching site in PDII. The department also instructs with other disciplines in the Care for the Seriously Ill, Pharmacology and Cultural Awareness courses. A career in Emergency Medicine can be explored with faculty who are longitudinal program preceptors and advisors or by attending informative events coordinated with the student Emergency Medicine Interest Group (EMIG). Hands-on experiences in the simulation lab, suturing, airway and splinting workshops are offered during the academic year. Additionally, research and international emergency medicine opportunities are available. In the third year students spend a portion of their core surgery and pediatric outpatient experiences in the emergency department, participating in patient evaluations.

The department offers eight clerkships per month for fourth-year medical students to gain a broad understanding of acute care medicine. During this rotation, students play primary roles in patient assessment and care, develop problem-solving skills as well as learn a variety of procedures. Emphasis is placed on providing students with exposure to a wide range of conditions including those that are life-threatening and their immediate management. Prehospital experience including paramedic ambulance rides can also be included. The department also sponsors an emergency medicine research elective for fourth-year students that pairs the student with one of our research faculty in the laboratory or clinical areas of interest.

Emergency Medicine Faculty

Professor and Chair

Gregory A.Volturo, BS, Rutgers, 1978; MD, Loyola/Stritch, 1982

Professor Emeritus


Professors

Christopher H. Linden, BA, Amherst College, 1975; MD, UMass Worcester, 1979


Associate Professors

Edward W. Boyer, BA, Vanderbilt, 1983; MA, Columbia, 1984; PhD, 1988; MD, 1995


Constance G. Nichols, BS, King College, 1979; MD, Bowman Gray School of Medicine, 1983


Mary C. Burke, BA, Williams, 1979; MD, Boston, 1983; MHA, Clark, 1995

Robert P. Ferm, BA, Amherst College, 1977; MD, Yale, 1981

Assistant Professor and Vice Chair of Clinical Operations

Peter Paige, BS, LeMoyne College, 1985; MD, SUNY Syracuse, 1989

Assistant Professors

Harry Arters, BA, Assumption College, 1990; DO, Kirksville College of Osteopathic Medicine, 1995

Steven B. Bird, BS, Yale, 1991; MD, Northwestern, 1995


David E. Brush, BA, Miami, 1994; MD, Dartmouth, 1999

Michael Butler, BS, Tufts, 1989; MD, Texas Health Science, 1996

Ravi Channappa, BS, Bangleore University, 1994; MD, Kempegowda Institute of Medicine, 1998

L. Bryan Cheshire, BS/MS, South Alabama, 1987; MD, 1991

James Courtney, BS, St. Michael’s College, 1993; DO, New England College of Osteopathic Medicine, 2003


Jeffrey Cukor, BS, Tufts, 1990; MD, UMass Worcester, 1994

Joseph J. Currier, BA, Harvard, 1989; MD, Albany Medical School, 1994

Chad E. Darling, BS, Pittsburgh, 1993; MD, Dartmouth, 1997


Gayle M. Galletta, BS, Georgetown, 1991; MS, 1992; MD, 1997

(continued)
Marc A. Gautreau, BA, UMass Amherst, 1986; MA, Chicago Medical, 1991; MD, 1995
Katherine Harrison, BA, Yale, 1993; MD, UMass Worcester, 2001
Corey Harrison, BSc, Allegheny College, 1995; MD, SUNY Buffalo, 1999
Ronald Hayden, BA, Williams College, 1980; MD, Cincinnati College of Medicine, 1985; MBA, Illinois, 1990
Debra W. Heitmann, BA, NYU, 1985; MS, Pennsylvania, 1989; MD, 1994
Christina Hernon, BS, UMass Amherst, 1994; MD, UMass Worcester, 2002
Michael Hochberg, BA, Pace, 1996; MD, SUNY Buffalo, 2000
Katharyn Kennedy, MBChB, University College of Dublin, 1986
Andre B. Markarian, BS, Cornell, 1991; MD, Mount Sinai, 1996
Mariah McNamara, BA, Vermont, 1998; MD, 2002
Alexander Matolcsy, BS, Georgetown, 1966; MD, University of Vienna; 1975
Anthony Montoya, BA, San Jose State, 1993, MD, Pittsburgh, 2003
Marie T. Mullen, BA/BS, Texas A&M, 1991; MD, Texas Health Science, 1995
David Polan, BA, Cornell, 1998; MD, Jefferson Medical College, 2004
Marc Restuccia, BS, Boston College, 1980; MD, UMass Worcester, 1984
Sean Rhyee, BS, Michigan, 1996; MPH, 1998; MD, Rush University, 2002
Joyce Rosenfeld, BS, Illinois, 1979; MS, DePaul, 1982; MD, Mount Sinai, 1988
Veera Sudireddy, MD, Siddhartha Medical College, 1987
James Sullivan, BA, Johns Hopkins, 1986; MD, Robert Wood Johnson School of Medicine, 1995
Stacey N. Weisberg, BA, Rochester, 1995; MD, New Jersey Medical School, 1999
Paul A. Zgurzynski, BS, Boston College, 1991; MD, Georgetown, 1995

Instructors
Janine Gould, BA, Holy Cross, 1985; DO, New England College of Osteopathic Medicine, 1990
Allison E. LaRusso, BA, Saint Anselm, 1988; MD, UMass Worcester, 1999
Michelle Mendoza, BA, NYU, 2001; MD, 2005
Brian Mongillo, BA, Yale, 1982; MD, Tufts, 1989
Cynthia Moon, BA, Wellesley, 1998; MD, St. Louis, 2004
Christopher Rosenbaum, BA, Holy Cross, 1999; MD, Loyola, 2005
Steven F. Siraco, BS, UMass Amherst, 1986; MA, 1988; MD, UMass Worcester, 1992
Robert Srebnik, BA, SUNY Buffalo, 1976; MD, University of Rome Faculty of Medicine and Surgery, 1982
David S. St. Laurent, BS, Providence College, 1980; MD, UMass Worcester, 1985
Birendra K. Sinha, MD, Prince of Wales Medical College, 1974
Gregory Steinberg, BS, Tufts, 1985; MD, UMass Worcester, 1997

Emergency Medicine Faculty continued

Janine Gould, BA, Holy Cross, 1985; DO, New England College of Osteopathic Medicine, 1990
Allison E. LaRusso, BA, Saint Anselm, 1988; MD, UMass Worcester, 1999
Michelle Mendoza, BA, NYU, 2001; MD, 2005
Brian Mongillo, BA, Yale, 1982; MD, Tufts, 1989
Cynthia Moon, BA, Wellesley, 1998; MD, St. Louis, 2004
Christopher Rosenbaum, BA, Holy Cross, 1999; MD, Loyola, 2005
Steven F. Siraco, BS, UMass Amherst, 1986; MA, 1988; MD, UMass Worcester, 1992
Robert Srebnik, BA, SUNY Buffalo, 1976; MD, University of Rome Faculty of Medicine and Surgery, 1982
David S. St. Laurent, BS, Providence College, 1980; MD, UMass Worcester, 1985
Birendra K. Sinha, MD, Prince of Wales Medical College, 1974
Gregory Steinberg, BS, Tufts, 1985; MD, UMass Worcester, 1997

David S. St. Laurent, BS, Providence College, 1980; MD, UMass Worcester, 1985
Birendra K. Sinha, MD, Prince of Wales Medical College, 1974
Gregory Steinberg, BS, Tufts, 1985; MD, UMass Worcester, 1997
Family Medicine & Community Health

The Department of Family Medicine & Community Health’s faculty are:
- recognized nationally and by the University for their commitment to public service and community health;
- pioneers in community-based medical education; and
- nationally renowned leaders in faculty development.

One of the founding departments of UMass Medical School, the Department of Family Medicine & Community Health offers students a wide variety of educational, research and service activities. The department was ranked 14th among the nation’s medical schools by U.S. News & World Report in its “2010 America’s Best Graduate Schools” issue. Family Medicine faculty include a large number of family physicians working in a variety of settings across Central Massachusetts, ranging from urban and rural health centers to more traditional private practice settings.

Health care provided to underserved populations is also a major focus of the department. In Community Health, faculty interests include population medicine, prevention, evidence-based medicine, health care for the homeless and health policy. A leader in providing primary care and community-based educational experiences for the Medical School, the department’s undergraduate programs include involvement in several courses during the first and second years, such as the Physician, Patient and Society course, Epidemiology and the Community Medicine clerkship.

In addition to serving as student advisors, faculty members precept students in the Longitudinal Preceptorship Program, which places students with a practicing family physician in the community for several sessions each semester, allowing them to interact with patients and develop their interviewing skills. Faculty members also support the interclerkship programs dedicated to special issues such as domestic violence, environmental health and health care policy. For students interested in learning more about family practice, the department supports a student-run Family Medicine Interest Group, which meets several times each year.

Research opportunities in the department are varied, and student involvement is supported by several summer work study programs which have led to publication, national presentations and international experiences. Service opportunities include programs that link international health experiences with specialized educational tracks, designed to enhance cultural awareness.

The department’s major predoctoral focus for the third year is sponsorship of the six-week Family Practice clerkship. A required experience for all students, this clerkship places students in community-based practices. Sites include community health centers, family medicine residency training sites, HMOs and private practices. The department also sponsors the four-year Pathway on Serving Underserved and Multicultural Populations and the Rural Health Scholars Program, as well as graduate training programs in family medicine, sports medicine, preventive medicine, hospital medicine and general dentistry.

A variety of fourth-year electives are available to students interested in exploring additional areas of family medicine and community health. These include preceptorships in urban underserved areas, rural medicine, student health, Indian Health Service and global health. A subinternship in Family Practice is also available. Additionally, the department participates in the Senior Scholars Program, allowing students to choose from numerous areas of interest.

Family Medicine & Community Health Faculty

Professor and Chair

Professor Emerita
Mary K. Alexander, BS, Vermont, 1971; EdD, UMass Amherst, 1985

Professors
Dr. John Meyers Professor of Primary Care Medicine

Robert A. Baldor, BS, Vermont, 1977; MD, 1983
Lucy M. Candib, BA, Radcliffe, 1968; MD, Harvard, 1972

Marjorie A. Clay, BA, Oklahoma, 1969; MA, Northwestern, 1971; PhD, SUNY Buffalo, 1981


Michael A. Godkin, BS, London, 1968; MS, Ohio State, 1972; PhD, Clark, 1977

Jay S. Himmelstein, BA, Johns Hopkins, 1974; MD, Maryland, 1978; MPH, Harvard, 1980; MS, 1982

Jennifer Kelsey, BA, Smith, 1964; MPH, Yale, 1966; MPHil, 1968; PhD, 1969

Mark E. Quirk, BA, Bates, 1974; MEd, Boston College, 1975; EdD, Clark, 1982


Joel Weissman, SB, MCP, MIT, 1976; PhD, Brandeis, 1987

Clinical Professors
F. Alexander Blount, BA, Wesleyan, 1967; EdD, UMass Amherst, 1976

Leonard J. Morse, BA, American International, 1951; MD, Maryland, 1955

* joint appointment

(continued)
UMass Medical School boasts five investigators of the prestigious Howard Hughes Medical Institute within its collaborative faculty ranks. "A sense of excitement pervades the campus," says Dr. Aronin. "Research at UMMS has far-reaching effects in science and clinical application, as evidenced by the recent awards to faculty of the Nobel Prize in Medicine and the Lasker Award." Aronin emphasizes that student involvement in the Medical School’s varied programs provides a foundation upon which faculty study new ideas for improving clinical practice and understanding mechanisms of disease.

Neil Aronin, MD
Professor of Medicine, Cell Biology and Physiology

"Our faculty is young and energetic and already has achieved world renown, including top honors in diabetes, bone and mineral metabolism and the growing number of HHMI faculty."

Adjunct Professors

Roger Bibace, BA, British Columbia, 1949; PhD, Clark, 1957
Sharon Cermak, BS, Ohio, 1969; MS, Boston, 1971; EdD, 1981
Aviva Must, BA, NYU, 1976; MS, Tufts, 1987; PhD, Tufts, 1992
David Schottenfeld, AB, Hamilton, 1952; MD, Cornell, 1956; MSc, Harvard, 1963
David Sugarman, AB, Clark, 1974; MS, Yeshiva, 1976; PhD, 1982

Associate Professors

Patricia H. Bazemore, BA, Radcliffe, 1962; MD, Yale, 1966
Suzanne Cashman, BA, Tufts, 1969; MS, Cornell, 1974; ScD, Harvard, 1980
Robin E. Clark, BA, Appalachian State, 1974; MA, Connecticut, 1979; PhD, Brandeis, 1991
G. Dean Cleghorn, BA, Lee College, 1973; MS, Knoxville, 1977; EdD, 1978
Frank J. Domino, BA, Drew, 1982; MD, Texas, 1988
Michael C. Ennis, BA, Williams, 1979; MD, Rochester, 1983
Warren J. Ferguson, BS, UMass Amherst, 1977; MD, Boston, 1981
*Kenneth E. Fletcher, BA, DePauw, 1968; MFA, Iowa, 1977; MS/PhD, UMass Amherst, 1988
Shannon Jenkins, BA, North Carolina, 1993; MD, East Carolina, 1999
Roger S. Luckmann, BA, Yale, 1971; MD, Boston, 1976; MPH, California, 1986
*Joanne Nicholson, AB, Syracuse, 1973; MS, Pennsylvania State, 1978; PhD, 1979
Darlene M. O’Connor, BA, Westfield State, 1976; MA, Southern Illinois, 1981; PhD, Brandeis, 1987
Samuel Pickens, BA, Hope, 1950; MD, Wayne State, 1954
Michele P. Pugnaire, BS, McGill, 1976; MD, 1980
David Rosenfield, BA, Northwestern, 1967; MD, 1970

* joint appointment
Joseph R. Stenger, BA, Yale, 1975; MD, Connecticut, 1979

Charles P. Sweet, BA, Oberlin, 1971; MD, Boston, 1976; MPH, 1990

Clinical Associate Professors


Phillip O. Fournier, BA, Clark, 1981; MD, Tufts, 1986

Jeremy Golding, BA, Washington, 1983; MD, Case Western Reserve, 1987

Keith R. Hilliker, BA, Vermont, 1969; MD, 1974


Beth K. Mazycz, BS, Oregon, 1979; MD, George Washington, 1984

Peter C. McConarty, BA, Harvard, 1969; MD, Rochester, 1973


Anthony Valdini, BA, Syracuse, 1971; MD, SUNY Upstate, 1975; MS, New York Institute of Technology, 1988

Research Associate Professors

J. Lee Hargraves, MA, Montana, 1985; PhD, Boston College, 1994

Judith A. Savageau, BS, Northeastern, 1977; MPH, Yale, 1980

Adjunct Associate Professors

Jeffrey M. Borkan, BA, Michigan, 1979; MA, Case Western Reserve, 1982; MD, 1984; PhD, 1987

Linda Simoni-Wastila, BS, North Carolina, 1985; MPH, 1987; PhD, Brandeis, 1993

Randy F. Wertheimer, BA, Swarthmore, 1971; MD, Boston, 1977

Robert J. Wellman, BA, California/Los Angeles, 1965; MS, Long Island, 1973; PhD, Connecticut, 1982

Assistant Professors

Sassan Abdollahzadeh, BS, UMass Amherst, 1983; MS, Kansas, 1986; PhD, Clark, 1992


Mohammed Alhabbal, MD, Damascus University (Syria), 1994

Genevieve G. Anand, MBBS, Seth GS Medical, 1989; MPH, UMass Amherst, 2002

Nicholas Apostoleres, BA, Swarthmore, 1987; MA, Wesleyan, 1994; PhD, Clark, 2000

Carolyn Augart, BS, UMass Amherst; MD, UMass Worcester, 1999

Lakshmi Babu, MD, Kempegowda Institute of Medicine, Bangalore Univ. (India), 2005

Robert A. Babineau, Jr., BA, Notre Dame, 1969; MD, Tufts, 1973


*Paul J. Block, BA, Brandeis, 1973; MD, Boston, 1977

James B. Broadhurst, BA, Williams, 1974; MHA, Virginia Commonwealth, 1978; MD, Medical College of Virginia, 1982

Lisa Harrington Carter, BA, North Carolina, 1993; MD, 1999

*Matilde Castiel, BS, California State, 1977; MD, California, 1982

Felix Chang, BA, San Jose La Salle College, 1975; MD, Universidad de Guayaquil (Ecuador), 1986

Arabinda Chatterjee, MD, Calcutta, 1976; MS, 1979

Vasilios Chrysostomidis, BA, Holy Cross, 1996; DO, New England College of Osteopathic Medicine, 2000

Alan B. Chuman, BA, SUNY Binghamton, 1973; MA, Pittsburgh, 1975; MPH, 1976

Linda Clark, BA, Brandeis, 1988; MD, Eastern Virginia, 1995

Christine Clements-Stein, BSc, Northeastern, 1979; MPH, Boston, 1982; PhD, Brandeis, 1999

Jaca lyn Coghlin-Strom, BA, Middlebury, 1971; MD, Michigan, 1977; MPH, UMass Amherst, 1988


James F. Comes, BEd, Toledo, 1964; MSL, Case Western Reserve, 1971; EdD, Ball State, 1978; MS, 1990

Gerald P. Corcoran, BS, Boston College, 1961; MD, Vermont, 1965

Macario Corpuz, BS, Far Eastern University, 1983; MD, 1988

Kathleen M. Corrigan, BS, Providence, 1979; MD, Brown, 1993

Reynold J. Dahl, BA, Augustana, 1973; MD, Minnesota, 1976

Philip DeChavez, MD, Pennsylvania, 1999

Silvia DeGirolamo, MA, Suffolk, 2007; PsyD, Chicago School of Psychology, 2004

Dianna Deignan, MD, Robert Wood Johnson Med. School, 2004


Malabika Dey, MD, NRS Medical College of Calcutta, 1993

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*Sara G. Shields, MD, Rochester, 1973

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Jeffrey Geller, MD, SUNY/Buffalo, 1986

Kathleen M. Corrigan, BS, Providence, 1988

Reynold J. Dahl, BA, Augustana, 1973; MD, Minnesota, 1976

Philip DeChavez, MD, Pennsylvania, 1999

Silvia DeGirolamo, MA, Suffolk, 2007; PsyD, Chicago School of Psychology, 2004

Dianna Deignan, MD, Robert Wood Johnson Med. School, 2004


Malabika Dey, MD, NRS Medical College of Calcutta, 1993

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Dennis M. Dimitri, BA, Clark, 1975; MD, George Washington, 1979

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Chyke A. Doubeni, MBBS, Lagos (Nigeria), 1987; MPH, UMass Amherst, 2004

Scott C. Early, MD, Dartmouth, 1986

Elise Edgings-Pryce, MBBS, West Indies, 1980

Alan M. Ehrlich, BS, Rensselaer, 1980; MD, Medicine & Dentistry, 1984


Paul Eselion, BS, Southeastern Massachusetts, 1977; MD, UMass Worcester, 1984

*Leon Fay, MD, Cornell, 1977


Emily Ferrara, BS, Boston, 1980; MA, Lesley College, 2002


Judy Fleishman, BA, Boston, 1979; PhD, Texas, 1986

Kristin Foley, BS, Bates, 1993; DO, New England College of Osteopathic Medicine, 2001

Sharon E. Fox, BA, Duquesne, 1991; PhD, Illinois, 1996

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*Maria Garcia, BA, Rutgers, 1984; MD, Pennsylvania Medical, 1994

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Gerald S. Gleich, BA, Boston, 1975; MD, UMass Worcester, 1984

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*Elizabeth Gundersen, BS, William and Mary, 1994; MD, Virginia, 2000

*Jasen Gundersen, BS, Fairfield, 1996; MD, Connecticut, 2000

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John E. Harrington, AB, Holy Cross, 1972; MD, Case Western Reserve, 1976

Andrew Harris, BA, George Washington, 1983; MPH, Columbia, 1990; PhD, NYU, 2003

Ranjeev S. Hazarika, MD, Gauhati, 2000; MS, Harvard, 2002

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(continued)
(Family Medicine & Community Health continued)
Yasmin Hirji, MD, American (Beirut), 1981
Pablo Hernandez Iriago, BS, San Ignacio, 1988; MD, Venezuela, 1996
Caren Jacobson, BS, Boston, 1975; MD, Case Western Reserve, 1990
Eydie I. Kasendorf, BA, UMass Boston, 1978; MA, Clark, 1982; PhD, 1992
Candace J. Kim, BA, Colby, 1998, MD, American (British West Indies), 2002
Eugene A. Lalancette, BS, Holy Cross, 1956; PhD, Cornell, 1960; MD, Penn, 1970
Roxanne Latimer, BS/BA, Pepperdine, 1993; MD, Boston, 2001
Marsha A. Lavoie, BA, MIT, 1976; MS, California/Berkeley, 1983; MD, Harvard, 1987
Ann G. Lawthers, BA, Wellesley, 1974; MS, Harvard, 1979; DS, 1986
James Ledwith, BS, William and Mary, 1979; MD, Medical College of Virginia, 1983
Kathryn Lee, MD, Boston, 1999
Won-Chieh Lin, BS, Chung Yuan, 1988; MS, Rensselaer, 1993; MS, Minnesota, 1996; PhD, 2000
Mary E. Lindholm, BA, Pennsylvania, 1985; MD, 1989
Charmaine Lobo, MD, Baylor, 1997
Robert Luby, BA, Dartmouth, 1985; MD, Columbia, 1989
Heather Mackey-Fowler, MD, SUNY Upstate; 2003
Kiane M. Mahanian, MD, Thomas Jefferson University, 1997
Lee A. Mancini, BA, Harvard, 1995; MD, Jefferson Medical, 2000
Kathy Mariani, BS, Notre Dame, 1989; MD, Miami, 1994
Bela T. Matyas, MD, California/San Diego, 1985
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Terence Moran, BS, McGill, 1982; MD, Vermont, 1987
Valerie Moreland, BA, Point Loma, 1990; MD, Oklahoma, 1998
Daniel J. Mullins, BS, Cornell, 2000; MA, Spaulding, 2003; PsyD, 2006
Mary Kay Nordling, BA, George Washington, 1992; MD, 1998
Julie F. Ozaydin, PhD, Tufts, 1994
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James S. Pease, BA, Morningside, 1970; MD, Minnesota, 1974; MPH, Harvard, 1978
Valerie F. Pietry, BA, Johns Hopkins, 1983; MS, MIT, 1985; MD, Dartmouth, 1989
Stacy Potts, BS, Vermont, 1994; MD, 1998
Ronald P. Preston, PhD, Yale, 1977
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Melissa Rathmell, BS, MIT, 1984; MD, UMass Worcester, 1999
Parvane Rashidi-Birgani, MA, Shahid Beheshti University, Iran, 1993
Michael A. Reyes, BA, Boston, 1988; MA, 1988; MD, Loyola, 1998
Katherine Riggert, DO, New England College of Osteopathic Medicine, 2004
Blair Roberts, MS, Columbia, 1982; MPH, 1983; MD, Case Western Reserve, 1987
Jeanne M. Rousseau, BA, Brandeis, 1984; DO, New England College of Osteopathic Medicine, 1990
Pierre A. Rouzier, BS, California/Davis, 1979; MD, Southern California, 1984
Laurel A. Ruzicka, MD, UMass Worcester, 1995
Monisha Sarin, MBBS, Maulana Azad (India), 1984
Jeffrey Satnick, BA, Indiana, 1978; MD, Universidad Autonoma de Barcelona, 1982
Heidi Shah, BS, Yale, 1993; MD, Maryland, 1997
Hugh Silk, MD, McMaster University, 1998
Steven D. Staugaitis, BA, St. John’s, 1973; MA, 1975; PhD, 1980
J. Herbert Stevenson, BA, Vermont, 1993; MD, 1998
Sheila Stille, BA, Rochester, 1986; DMD, Connecticut, 1992
Martha Sullivan, BS, WPI, 1977; DDS, Case Western Reserve, 1983
Lise J. Tardif, BS, Laval, 1985; MD, 1989
Trinidad Telloz, BA, Harvard, 1985; MD, Dartmouth, 1997
Evan Teplow, BS, Middlebury, 1985; MD, Dartmouth, 1992
Stephen Topolksi, BS, Brandeis, 1991; MD, Maryland, 1995
Sheila Trugman, BA, Brandeis, 1975; MD, Boston, 1979
Aaron W. Way, DO, Lake Erie College of Osteopathic Medicine, 2005
Bernard A. Westerling III, BA, Holy Cross, 1969; MD, Tufts, 1973
*Peter B. Wilson, BA, Swarthmore, 1979; MD, Rush, 1984
Mary L. Zanetti, BS, North Adams State, 1980; MEd, UMass Amherst, 1999; EdD, 2002

Clinical Assistant Professors
Mark Snowise, MD, Tufts, 1996
Rodd G. Stockwell, MD, SUNY Stony Brook, 1998

Research Assistant Professors
Carol Curtin, BA, Trinity, 1980; MSW, Boston, 1982
Elaine R. Martin, BA, Boston, 1975; MLS, Chicago, 1976; BA, Simmons, 2005

Adjunct Assistant Professors
Robert C. Bradbury, BS, Holy Cross, 1967; MS, George Washington, 1971; MS, Ohio State, 1973; PhD, 1975
Courtney J. Jarvis, PharmD, Mass College of Pharmacy, 2000
Matthew Silva, PharmD, Mass College of Pharmacy, 2001
Heidi Standish, MS, Dalhousie, 1995; PhD, Oregon State, 1999
* joint appointment
Affiliates

Danuta J. Antkowiak, MD, Poznan, 1981
Gary H. Asher, BS, Randolph-Macon, 1967; MD, Medical College of Virginia, 1971
Al Bashevin, BS, Connecticut, 1973; MSW, Boston, 1978
Alan J. Calhoun, BA, Wittenberg, 1971; MD, SUNY, 1975
Neil F. Cannon, BS, Fairfield, 1968; MD, Maryland, 1972
Jeffrey Cohen, BA, CCNY, 1971; MD, New York Medical, 1989
Paul H. Etkind, BA, Clark, 1974; MPH, Yale, 1976
William G. Ferrarone, BA, Holy Cross, 1978; MS, Simmons, 1983; PhD, California School of Professional Psychology, 1989
Sunita Godiwala, MBBS, Grant Medical, 1981
Paul L. Hart, MD, Memorial University, Newfoundland, 1993
Michael E. Huppert, BA, St. John’s, 1969; MPH, Michigan, 1971
*Cheong H. Kim, MD, Seoul, 1963
Marilyn P. Leeds, BA, Brandeis, 1975; MPH, Michigan, 1976
Monica Lowell, BA, Brown, 1977
Francis J. McLaughlin, BA, MB, Dublin, 1974
Dean A. Morrel, BA, Drew, 1982; DO, University of Osteopathic Medicine, 1986
Keith C. Nobil, BA, California/San Diego, 1976; MD, Southern California, 1980
Edwin M. Ortiz, BA, Ineramerican, 1953; MD, Georgetown, 1957
Ronald F. Pike, BA, Assumption, 1971; MD, Rome, 1976
Dominick F. Roto, DO, New England College of Osteopathic Medicine, 1989
Richard J. Rubin, BS, Iowa, 1970; MD, Chicago Medical, 1974
Richard A. Rudnick, BA, Swarthmore, 1974; MD, Boston, 1979
Susan M. Young, BS, Boston, 1986; MD, UMass Worcester, 1991

Instructors

Janet C. Abrahamian, MD, Leeds, 1979
Sarah T. Adams, BS, St. John’s, MA, Anna Maria College, 2001
Rani Alexander, MD, Boston, 2000
Shaun Alfreds, BS, UMass Amherst, 2000; MBA, Maine, 2003
Seryn Mikhail Angelis, MS, St. George University of Medicine, 1999
Frederick Baker, BA, Boston, 1985; MD, Howard, 1991
Christopher J. Bechara, MD, Rush Medical College, 1998
Nancy K. Berley, MD, Albert Einstein College of Medicine, 2002
Ellen E. Bernard, DO, New England College of Osteopathic Medicine, 1999
Jeffry D. Blake, MD, University of Western Ontario, 1984
William J. Blake, MD, New York Medical, 1947
Christina Biejan, MD, Bucharest, 1987; MPH, UMass, 2001
Alexandra Bonardi, BS, McGill, 1991; MS, Columbia, 1994; MHA, Suffolk, 2001
Kelton M. Burbank, MD, UMass Worcester, 1991
Miguel F. Cabrera, MD, National University of Trujillo, 1975
Joanne Calista, BA, Harvard, 1984; MS, Columbia, 1991
Carol S. Cancro, MD, Brown, 1993
Nita Chatterjee, MD, Srinagar (India), 1975
Thomas Clay, DO, Kirksville College of Osteopathic Medicine, 1975
M. Kevin Cozzi, BA, Kansas, 1992; MD, 1996
Linda Cragin, BA, Tufts; MS, Harvard
Andrea Damour Martincucci, MD, Georgetown, 1990
Michael L. Dem, MD, Boston, 1977
Lori DiLorenzo, BS, Cornell, 1994; MD, Pennsylvania, 1998
Leah E. Doret, MD, UMass Worcester, 2003
Deborah L. Drexler, BS, Boston, 1981; JD, Northeastern, 1992
Tricia Doney, BA, Virginia Polytechnic, 1979; MPH, UMass, 1990
Kimberly Ebb, MD, Emory, 1994
Ronald G. Ebb, MD, Boston, 1999
Daniel H. Ervin, DO, Ohio College of Osteopathic Medicine, 1990
Carmen P. Fater, MD, Temple, 1987
Zoila T. Feldman, MS, Harvard, 1979
Gerald J. Fitzpatrick, MD, Autonomous (Guadalajara), 1987
William Foley, BA, Holy Cross, 1995; DO, New England College of Osteopathic Medicine, 2001
Paula Fontaine, BA, Connecticut, 1991; DPM, Barry, 1995
Murray Frank, BA, NYU, 1951; MSW, Columbia, 1954; PhD, Brandeis, 1974
Daniel F. Freitas, BS, Boston College, 1984; MD, Brown, 1988
Robert A. Friedman, MD, New York Medical College, 1980
Ingrid Fuller, MD, Glasgow, 1987
Donna M. Gallagher, BS, Emmanuel, 1978; MS, Simmons, 1983
Imeda A. Garcia, MD, University of Santos Tomas, 1992
Matthew Gardner, MD, Pennsylvania, 1996
Theresa Glenn, BA, Smith, 1992; MPH, UMass Amherst, 1995
Kathy Opal Goff, MD, UMass Worcester, 1996
Lois Green, BA, Bryn Mawr, 1952; MPA, Clark, 1978
Kent Greenwood, MD, Tufts, 1986
Jill Grimes, BS, Baylor, 1988; MD, 1991
John P. Gusha, BA, Assumption, 1980; BS, WPI, 1980; DMD, Boston, 1984
Aysha Hameed, MD, Kakatiya Medical College, Osmania University, 1978
David Havlin, MD, Ohio State, 1980
Theodor T. Herwig, MD, Cincinnati, 1987
Heidi Holland, BA, UMass Amherst, 1986; MEA, UMass Boston, 1991
Debra Hurwitz, BSN, UMass Dartmouth, 1978; MBA, Rhode Island, 1983
Dilip M. Jain, MD, M.R. Medical, 1989; MA, UMass Amherst, 2001; PhD, 2003
Dolph M. Jain, MD, M.R. Medical, 1983
Kenneth Janes, MD, Tufts, 1968
Darla Karos, BA, Dentistry of New Jersey, 1986
Zoila T. Feldman, MD, Harvard, 1979
Gerald J. Fitzpatrick, MD, Autonomous (Guadalajara), 1987
William Foley, BA, Holy Cross, 1995; DO, New England College of Osteopathic Medicine, 2001
Paula Fontaine, BA, Connecticut, 1991; DPM, Barry, 1995
Murray Frank, BA, NYU, 1951; MSW, Columbia, 1954; PhD, Brandeis, 1974
Daniel F. Freitas, BS, Boston College, 1984; MD, Brown, 1988
Robert A. Friedman, MD, New York Medical College, 1980
Ingrid Fuller, MD, Glasgow, 1987
Donna M. Gallagher, BS, Emmanuel, 1978; MS, Simmons, 1983
Imeda A. Garcia, MD, University of Santos Tomas, 1992
Matthew Gardner, MD, Pennsylvania, 1996
Theresa Glenn, BA, Smith, 1992; MPH, UMass Amherst, 1995
Kathy Opal Goff, MD, UMass Worcester, 1996
Lois Green, BA, Bryn Mawr, 1952; MPA, Clark, 1978
Kent Greenwood, MD, Tufts, 1986
Jill Grimes, BS, Baylor, 1988; MD, 1991
John P. Gusha, BA, Assumption, 1980; BS, WPI, 1980; DMD, Boston, 1984
Aysha Hameed, MD, Kakatiya Medical College, Osmania University, 1978
David Havlin, MD, Ohio State, 1980
Theodor T. Herwig, MD, Cincinnati, 1987
Heidi Holland, BA, UMass Amherst, 1986; MEA, UMass Boston, 1991
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Dilip M. Jain, MD, M.R. Medical, 1983
Kenneth Janes, MD, Tufts, 1968
Darla Karos, MD, University of Medicine and Dentistry of New Jersey, 1986
Stefan Karos, MD, University of Medicine and Dentistry of New Jersey, 1986
Mary Ellen Keough, BA, American, 1970; MPH, Boston, 1980
Inna Ketsler, MD, Texas, 1987
Stephen K. Lane, MD, UMass Worcester, 1998
Anna Langman, MD, Ben Gurion, Israel, 1998
* joint appointment
(continued)
Leonard Levin, BS, Boston, 1984; MS, Simmons, 1996; MA, Andover Newton Theological School, 2003
Stephen J. Levine, AB, Cornell, 1968; MD, SUNY Buffalo, 1972
Richard Levault, DO, Philadelphia College of Osteopathic Medicine, 1980
*Roberck Levlin, DMD
George Lewinnek, MD, Harvard, 1967
Shippen Li, MD, UMass Worcester, 1987
Ernest P. Liacopulos, BA, Clark, 1984; DDS, Georgetown, 1989
Tomas F. Lichauco, MD, University of Philippines College of Medicine, 1982
Benjamin Lieberman, BA, Tufts, 1994; MD, Tel Aviv, 1998
Thomas J. Linberg, MD, Ross University School of Medicine, 2000
Gregory Little, MD, Texas, 1994
Linda Long-Bellil, BA, Yale, 1984; JD, Boston, 1987; MA, Brandeis, 2000
Michael Lowney, DO, New England College of Osteopathic Medicine, 1982
Myron Maron, BA, Boston, 1971; MD, 1977
Cara Marshall, BS, Florida, 1993; MD, 1996
Edith H. Mas, BA, Radcliffe, 1964; MS, Columbia, 1969
Jeanne Mase, MD, UMass Worcester, 1990
Elizabeth McGovern, BS, Haverford, 1991; MD, Pittsburgh, 1997
Ellen McMahan, BS, Tufts, 1994; MD, Dartmouth-Brown, 1998
Holly K. Michaelson, MD, Temple, 1997
Donald Miller, MD, SUNY Downstate, 1981
Valerie Molinano-Gudas, RN, St. Mary’s School of Nursing, 1966; BS, 1972; OD, NE College of Optometry, 1974
Lisa M. Morris, MS
*Helene K. Murphy, MD
Zainab A. Nawab, MD, Rural Medical College, University of Pune, 1996
Dan S. Nguyen, MD, UMass Worcester, 1998
Meeta S. Nguyen, MD, Utah, 1996
Glennon J. O’Grady, BS, Holy Cross, 1981; MD, Tufts, 1985
Gabriel J. Ochoa, BS, Instituto Colombiano de Educacion, 1961; DDS, Universidad de Antioquia, 1968; CAGS, Temple, 1980
Miguel Olmedo, AS, Bunker Hill, 1994; BSN, UMass Boston, 1996; MS, 2000
Nancy E. Otovic, MPH, Tufts, 1986; MD, St. George’s, 1995
Naveen Pandaraboyina, MD, Gandhi (India), 1991
Faith Hailward Paterson, BA, Queen’s University, 1981; MD, McMaster, 1992
Michele Pici, DO, New York College of Osteopathic Medicine, 1986
Michael Polseno, BA, Clark, 1976; DC, Palmer College of Chiropractic Medicine, 1979
Lyn Riza, BA, Beloit, 1980; MS, Fitchburg State, 1997
Jan Rockwood, MD, UMass Worcester, 1986
Katherine Rosenfeld, MD, George Washington, 1991
Shiva Saboori, MD, Tufts, 1988
Leyla Sahin, MD, Alberta, 1992
Lana J. Sargent, BS, UMass Amherst, 1998; RN, Regis College, 2003; FNP, 2004; GNP, 2005
Kristin N. Schofield, BA, Rutgers, 1993; MD, Jefferson Medical, 1997
Gregory R. Seiler, MD, UMass Worcester, 1994
Robert Shelton, Jr., MD/PhD, Virginia, 1985
Laura K. Silk, MD, UMass Worcester, 2000
Henry Simkin, MD, Boston, 1983
Jonathan E. Snider, BA, Brandeis, 1992; MD, Albert Einstein, 1996
Roger L. Snow, BA, Missouri, 1969;
MD, North Carolina, 1974
Natasha N. Sodhi, BS, Dalhousie, 1987; MD, 1991
Edward D. Sprague, BS, Bates, 1974;
MD, Vermont, 1979
Cindy H. Steinberg, BA, Brandeis, 1990;
MD, UMass Worcester, 1994
John Stevenson, BS, California, 1992;
MD, Albany, 2001
Rodd Stockwell, BA, Harvard, 1991; MD, SUNY Stony Brook, 1992
Barbara Sullivan, BSN, Rhode Island College, 1979; MS, UMass Amherst, 1995
Jean C. Sullivan, BA, Mount Holyoke, 1977; JD, Boston, 1984
Lisa D. Sweeney, BA, Holy Cross, 1989;
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Julia L. Terry, BA, Wellesley, 1963; MPH, Boston, 1984
Babatunde Thomas, BA, Brown, 1994;
MD, Tufts, 2000
Andrew J. Ting, BS, Michigan, 1988; MPH, MA, Boston, 1991; MD, 1996
Audrey A. Tracey, MD, Boston, 1995
Michael Tutty, BA, Western New England College, 1994; MA, Clark/UMass Worcester,
1996
Tammy E. Vargas, MD, Universidad Nacional Pedro, 1987
Beverly F. Wedda, BA, Holy Cross, 1983;
MD, Uniformed Services University of the Health Sciences, 1987
Oren Weisberg, MD, Yeshiva, 1998
Thomas Weisman, BA, Haverford, 1975;
MS, MIT, 1980; MD, Cincinnati, 1984
Jennifer W. Weyler, MD, The Medical College of Pennsylvania, 1992
Colette Whiteby, MD, Brown, 1996
Edison Wong, MD, Columbia, 1991
*Fifield P. Workum, MD, Columbia, 1969
Sarah F. Zakaria, MD, Quaid-E Azam Medical College, Islamia University, 1995

Clinical Instructors
Penelope J. Dillon, BA, Rochester, 1972;
BS, 1974; MS, Pace, 1985
Laura M. Garber, BA, Boston, 1985; MD, Yale, 1993

Adjunct Instructors
Sarah E. Anderson, AB, Vasser College, 1997;
MS, Tufts, 2002; PhD, Tufts, 2006
J. Matthew Sholl, BA, Bucknell, 1993;
MD, Dartmouth, 1997
Giselle A. Thornhill, MD, Albany, 1980;
MD, Harvard, 1994
Janet L. Vale, BSc, Melbourne, 1966; MSc,
Melbourne, 1970; PhD, Leeds, 1975
Robert Weitzman, MD, Albany, 1982
* joint appointment
The Department of Medicine participates extensively in and promotes broadly the education of medical students in several venues and across the undergraduate curriculum by fostering faculty leadership as course directors, classroom teachers, inpatient and outpatient clinical educators, mentors and advisors, and as lecturers in clinical and basic research seminars. Department faculty teach students to develop a comprehensive and in-depth understanding of the pathophysiology of disease; techniques for history taking, physical examination and generation of a differential diagnosis and management plans; the impact of illness on the patient; and wellness promotion and disease prevention. Throughout the four-year curriculum, the department works to ensure that students are well-trained in general internal medicine, are exposed to key aspects of the subspecialties of Medicine, and are prepared clinically and academically for internship and residency in all disciplines.

The Department of Medicine introduces first-year students to medical interviewing and clinical problem-solving in the Physician, Patient and Society (PPS-I) course. In the Longitudinal Preceptorship Program, first-year students serve as observers in General Internal Medicine offices and participate in the first phase of Physical Diagnosis (PD-1), which emphasizes normal physical findings and their relationship to anatomy and physiology.

Faculty members are involved extensively in the second-year curriculum. They direct and staff the Physical Diagnosis course (PD-II) in which second-year students are taught the elements of history-taking and physical examination of patients with a variety of diseases. They assist in the PPS-II course, wherein students begin to develop clinical skills including the generation of problem lists, differential diagnoses, management plans, admission notes, medical orders and progress notes, as well as in critical analysis and use of medical literature. In addition, department faculty members play major teaching and leadership roles in interdepartmental courses, including Medical Microbiology, Biology of Disease and Pharmacology. Faculty members also teach in the Caring for the Seriously Ill selective and the Therapeutics elective.

Third-year students participate in a comprehensive 12-week clerkship in Medicine, comprising eight weeks in the inpatient setting and four weeks in a primary care internal medicine office setting. A rigorous core curriculum is provided through regularly scheduled conferences and seminars. Selective opportunities are provided in medicine subspecialties as well. Department faculty members serve as small group facilitators for third-year Interclerkship programs. A senior geriatrician is director of the End of Third Year Assessment program and directs curriculum integration in the UMMS Simulation Center.

The majority of fourth-year students select Medicine as the discipline for their required subinternship experience; this inpatient block provides students with more advanced, challenging and responsible roles in patient management than the third-year clerkship. The department also provides electives for fourth-year students in a variety of disciplines, including cardiovascular medicine, dermatology, diabetes, endocrinology, gastroenterology, general medicine/primary care, geriatric medicine, hematology/oncology, infectious diseases,
preventive/behavioral medicine, pulmonary medicine, renal medicine and rheumatology, as well as in intensive care medicine. Research opportunities are provided in medical subspecialties and general medicine through the Senior Scholars Program. The department encourages students to participate in laboratory-based and clinical research projects during their time in medical school.

**Medicine Faculty**

**Professor and Chair**

Richard M. Haidack Professor of Medicine
Robert W. Finberg, AB, Chicago, 1971; MD, Albert Einstein, 1974

**Professors and Vice Chairs**

Barbara and Nathan Greenberg Chair in Biomedical Research
Elliot J. Androphy, AB, Brandeis, 1975; MD, Rochester, 1979


Julia D. Andrieni, BA, Vassar, 1983; MD, SUNY Story Brook, 1996

**Professors Emeriti**

William and Doris Krupp Professor of Medicine
Aldo A. Rossini, BS, Dayton, 1963; MD, St. Louis, 1968


Richard L. Bishop, BS, Tufts, 1962; MD, 1966


Mary E. Costanza, AB, Radcliffe, 1958; MA, MD, Rochester, 1968

Charles H. Emerson, BS, Randolph-Macon, 1963; MD, Virginia, 1967

Jon Kabat-Zinn, BS, Haverford, 1960; PhD, MIT, 1971

*Liberto Pechet, MD, Hebrew, 1952
Robert B. Zurier, BS, Rutgers, 1955; MD, Texas Southwestern, 1962

*Irma O. Szymanski, MD, Helsinki, 1958
Robert B. Zurier, BS, Rutgers, 1955; MD, Texas Southwestern, 1962

**Professors**

Barbara Helen Smith Chair in Preventive and Behavioral Medicine
Judith K. Ockene, BS, CCNY, 1964; MA, 1966; MEd, Boston College, 1974; PhD, 1979

* joint appointment

Gladys Smith Martin Chair in Oncology
Alan G. Rosmarin, AB, Vassar, 1977; MD, UMDNJ-Rutgers, 1981

Edward Budnitz, MD, Professor of Cardiovascular Medicine
Joel M. Gore, BA, Brandeis, 1971; MS, Boston, 1974; MD, Calgary, 1977

Dr. John Meyers Professor of Primary Care Medicine

David J. and Barbara D. Milliken Professor of Preventive Cardiology
Ira S. Ockene, BS, CCNY, 1962; MD, Albert Einstein, 1966

Athanasius A. Anagnostou, MD, Aristotelian, 1968; MA, Brown, 1984


Gerard P. Aurigemma, BA, Harvard, 1975; MD, 1979

Doreen B. Brettler, BA, Mt. Holyoke, 1967; MD, Stanford, 1973

Sarah H. Cheeseman, AB, Mt. Holyoke, 1969; MD, Wisconsin, 1973

Marjorie A. Clay, BA, Oklahoma, 1969; MA, Northwestern, 1971; PhD, SUNY Buffalo, 1981

David M. Clive, BA, NYU, 1970; MD, Case Western Reserve, 1976

“Even though UMass Medical School is top-ranked, the students are non-competitive. They and the faculty want you to succeed. It’s a lot of work, but strength comes from within yourself, not in response to everyone else.”

Naomi Lawrence-Reid
Class of 2011

Naomi served as Student Body Committee co-president and provided input to the Medical School’s curriculum redesign project. One change she is excited about is the opportunity for students to explore numerous electives earlier on in their education rather than after their third year is complete. “There is an important part of learning that can’t be taught in the classroom, and that is the doctor-patient experience.”
<table>
<thead>
<tr>
<th>Name</th>
<th>Institution 1</th>
<th>Institution 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jennifer S. Daly</td>
<td>BA, Sarah Lawrence, 1973</td>
<td>MD, Columbia, 1978</td>
</tr>
<tr>
<td>Deborah M. DeMarco</td>
<td>BS, Long Island, 1976</td>
<td>MA, California, 1979; MD, NYU, 1983</td>
</tr>
<tr>
<td><em>James G. Dobson</em></td>
<td>BS, Central Connecticut State, 1965; MA, Wesleyan, 1967; PhD, Virginia, 1971</td>
<td></td>
</tr>
<tr>
<td>A. Gray Ellrodt</td>
<td>BA, Princeton, 1970</td>
<td>MD, Tufts, 1964</td>
</tr>
<tr>
<td>Francis A. Ennis</td>
<td>AB, Boston College, 1960</td>
<td>MD, Tufts, 1964</td>
</tr>
<tr>
<td>Anthony L. Esposito</td>
<td>BA, Bowdoin, 1970</td>
<td>MD, Tufts, 1974</td>
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<tr>
<td>Edward D. Folland</td>
<td>BA, Yale, 1966; MD, Harvard, 1970</td>
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<tr>
<td>William H. Gaasch</td>
<td>BS, Michigan, 1959; MD, 1963</td>
<td></td>
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<tr>
<td><em>Michael A. Godkin</em></td>
<td>BS, London, 1968; MS, Ohio State, 1972; PhD, Clark, 1977</td>
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<tr>
<td>Robert J. Goldberg</td>
<td>BS, UMass Amherst, 1972; MS, Tufts, 1973; PhD, Johns Hopkins, 1978</td>
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<tr>
<td>Douglas T. Golenbock</td>
<td>BS, Michigan/Ann Arbor, 1975</td>
<td>MD, Tufts, 1974</td>
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<tr>
<td>Ellen M. Gravallese</td>
<td>MD, Columbia, College of Physicians and Surgeons, 1981</td>
<td></td>
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<tr>
<td>Dale L. Greiner</td>
<td>BS, Iowa, 1974; PhD, 1978</td>
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<tr>
<td><em>Jay S. Himmelstein</em></td>
<td>BA, Johns Hopkins, 1974; MD, Maryland, 1978; MPH, Harvard, 1980; MS, 1982</td>
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<tr>
<td><em>Robert E. Humphreys</em></td>
<td>BA, Yale, 1964; PhD, 1969; MD, 1970</td>
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<tr>
<td>Richard S. Irwin</td>
<td>BS, Tufts, 1964; MD, 1968</td>
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<tr>
<td>Jennifer L. Kelsey</td>
<td>BA, Smith, 1964; MPH, Yale, 1966; MPhil, 1968; PhD, 1969</td>
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<tr>
<td>Hardy Komfeld</td>
<td>BA, Bennington College, 1974; MD, Boston, 1978</td>
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<tr>
<td>Stuart M. Levitz</td>
<td>BA, NYU, 1975; MD, 1979</td>
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<tr>
<td>Craig M. Lilly</td>
<td>BS, Oregon, 1980; MD, Oregon Health Sciences, 1984</td>
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<tr>
<td>J. Mark Madison</td>
<td>BA, Carleton, 1975</td>
<td>MD, Harvard, 1979</td>
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<tr>
<td>Mary E. Maloney</td>
<td>BA, Connecticut College, 1973; MD, Vermont College, 1977</td>
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<tr>
<td><em>Alan D. Michelson</em></td>
<td>MBBS, Adelaide, 1973</td>
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<tr>
<td>Linda A. Pape</td>
<td>BA, SUNY Potsdam, 1965</td>
<td>MD, Medical College of Pennsylvania, 1972</td>
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<tr>
<td>John A. Paraskos</td>
<td>BS, Tufts, 1960; MD, 1964</td>
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<tr>
<td>Rashmi V. Patwardhan</td>
<td>MBBS, Bombay, 1973; MD, 1976</td>
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<tr>
<td>Robert A. Phillips</td>
<td>MD, PhD, Mount Sinai, 1980</td>
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<tr>
<td>Peter A. Rice</td>
<td>BS, Yale, 1964; MD, Pennsylvania, 1969</td>
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<tr>
<td>Alan Rothman</td>
<td>BA, Boston, 1979; MD, 1983</td>
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<tr>
<td><em>Katherine F. Ruiz de Luzuriaga</em></td>
<td>BS, MIT, 1978; MS, 1980; Tufts, 1984</td>
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<tr>
<td>Peter B. Schneider</td>
<td>AB, Harvard, 1955; MD, 1959</td>
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<tr>
<td><em>L. Michael Snyder</em></td>
<td>AB, Brown, 1957; MD, Chicago Medical, 1962</td>
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<tr>
<td>David H. Spodick</td>
<td>AB, Bard, 1947; MD, New York Medical, 1950</td>
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<tr>
<td>Oscar E. Starobin</td>
<td>AB, Harvard, 1950; MD, 1954</td>
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<tr>
<td>Jeffrey S. Stoff</td>
<td>BS, Hobart, 1964; MD, SUNY Buffalo, 1968</td>
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<tr>
<td>Gyongyi Szabo</td>
<td>MD, Debrecen, 1984; PhD, Hungarian Academy of Sciences, 1991</td>
<td></td>
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<tr>
<td>Bonnie H. Weiner</td>
<td>BA, Mills College, 1970; MD, Oregon, 1974</td>
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<tr>
<td>Robert Weinstein</td>
<td>MD, NYU, 1975</td>
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<tr>
<td>Karen Wass</td>
<td>BA, Texas, 1980; MD, 1985</td>
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<tr>
<td>John K. Zawacki</td>
<td>BA, Holy Cross, 1963; MD, Tufts, 1968</td>
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**Clinical Professors**

<table>
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<tr>
<th>Name</th>
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<tr>
<td>Robert M. Black</td>
<td>BS, Pittsburgh, 1969; MD, Washington, 1975</td>
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<tr>
<td>Laszlo-Vasile Leb</td>
<td>MD, Tigru Mures, 1957</td>
<td></td>
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<tr>
<td>Leonard J. Morse</td>
<td>BA, American International, 1951; MD, Maryland, 1955</td>
<td></td>
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<tr>
<td>Marjorie Safran</td>
<td>AB, Rochester, 1970; MD, SUNY Downstate, 1977</td>
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<tr>
<td>Mark J. Scharf</td>
<td>BA, Chicago, 1978; MD, Emory, 1982</td>
<td></td>
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<tr>
<td>Robert A. Yood</td>
<td>BA, Yale, 1970; MD, Oregon, 1974</td>
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**Research Professors**

<table>
<thead>
<tr>
<th>Name</th>
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<tr>
<td><em>Frederick A. Anderson Jr.</em></td>
<td>BS, BA, Tufts, 1971; MS, WPI, 1975; PhD, 1984</td>
<td></td>
</tr>
<tr>
<td>Edward H. Leiter</td>
<td>BS, Princeton, 1964; MS, Emory, 1966; PhD, 1968</td>
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<tr>
<td>Leonard D. Shultz</td>
<td>BA, Northeastern, 1967; PhD, UMass, 1972</td>
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**Adjunct Professors**

<table>
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<tr>
<th>Name</th>
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<tr>
<td>Martin I. Broder</td>
<td>MD, Case Western Reserve, 1961</td>
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**Associate Professors**

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<tr>
<th>Name</th>
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<tr>
<td>Raj K. Anand</td>
<td>MBBS, King George’s, 1958; MD, Lucknow, 1962</td>
<td></td>
</tr>
<tr>
<td>Peter H. Bagley</td>
<td>BA, Columbia, 1975; MD, George Washington, 1980</td>
<td></td>
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<tr>
<td>Graham F. Barnard</td>
<td>BS, Southhampton, 1972; PhD, 1975; MD, Stanford, 1985</td>
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<tr>
<td>Rita Bortell</td>
<td>BS, Florida, 1975; MS, 1981; PhD, 1987</td>
<td></td>
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<tr>
<td>Ricardo A. Cordon</td>
<td>BA, San Carlos, 1960; MD, 1967</td>
<td></td>
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<tr>
<td>Sybil L. Crawford</td>
<td>BS, Carnegie-Mellon, 1983; MS, 1985; PhD, 1988</td>
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<tr>
<td>Henri F. Cuénoud</td>
<td>BS, Calvin, 1971; MD, Geneva, 1977</td>
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<tr>
<td>Seth T. Dahlberg</td>
<td>BA, Williams, 1977; MD, 1981</td>
<td></td>
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<tr>
<td>Kathryn L. Edmiston</td>
<td>BA, Chicago, 1978; MD, 1982</td>
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<tr>
<td>James E. Fanale</td>
<td>BS, Pennsylvania State, 1973; MD, Chicago Medical, 1976</td>
<td></td>
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<tr>
<td>Terry S. Field</td>
<td>BA, Tufts, 1967; MS, Instructional Systems, 1971; MPH, Boston, 1988; DSc, 1993</td>
<td></td>
</tr>
<tr>
<td>Daniel Z. Fisher</td>
<td>BA, Swarthmore, 1982; PhD, Rockefeller, 1987; MD, Cornell, 1988</td>
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<tr>
<td>Sharonne Green</td>
<td>BA, Queens, 1983; MD, Eastern Virginia, 1986</td>
<td></td>
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<tr>
<td>JeanMarie Houghton</td>
<td>BA, Rutgers, 1985; MD, New Jersey, 1989; PhD, 2001</td>
<td></td>
</tr>
<tr>
<td>Elise A. Jacques</td>
<td>BA, Anna Maria, 1969; MD, Medical College of Pennsylvania, 1973</td>
<td></td>
</tr>
</tbody>
</table>

* joint appointment

(continued)
(Medicine Faculty continued)

Daniel H. Libraty, BS, California/Los Angeles, 1985; MD, California/San Diego, 1989
Shan Lu, MD, Nanjing, 1982; PhD, UMass Worcester, 1990; MHA, Clark, 1991
Richard G. Masson, AB, Providence, 1963; MD, Albany Medical, 1967
Dominic J. Nompieggi, AB, Georgetown, 1972; MS, 1974; PhD, 1977; MD, 1982
Lori A. Pbert, BA, Connecticut, 1982; MA, West Virginia, 1985; PhD, 1988
George W. Reed, BA, Washington College, 1975; PhD, Maryland, 1983
Milagros C. Rosal, BA, Catholic, 1981; MS, Nova, 1986; MS, 1989; PhD, 1992
Lawrence S. Rosenthal, BS, Trinity, 1981; MA, Clark, 1984; PhD, 1987; MD, Albert Einstein, 1990
Saki F. Santorelli, BA, Western Kentucky, 1970; MA, Lesley, 1983; EdD, UMass Amherst, 1992
Jang B. Singh, MBBS, Delhi, 1964
Nicholas A. Smyrnios, BS, Tufts, 1981; MD, Albany Medical, 1985
Guenter L. Spangenberg, MD, Friedrich Alexander, 1958
Frederick A. Spencer, AB, Dartmouth, 1985; MD, McGill, 1991
Katherine S. Upchurch, AB, Sweet Briar, 1972; MD, Duke, 1976
Harvey Zimbler, BS, Michigan, 1968; MD, Illinois, 1972

Clinical Associate Professors

Howard J. Alfred, BA, Trinity, 1970; MD, SUNY Downstate, 1974
Nancy E. Bennet, BA, Harvard, 1972; MD, 1979
Robert E. Bassette, BA, Holy Cross, 1961; MD, Georgetown, 1965
Albert A. Crimaldi, BS, Providence, 1970; PhD, Pittsburgh, 1976; MD, 1982
Steven M. Davis, BA, Vermont, 1976; MD, 1980
George H. Eypper, BS, Yale, 1967; MD, Vermont, 1976
Pang-Yen Fan, BA, Boston, 1981; MD, 1985
Allen W. Filiberti, BS, SUNY Stony Brook, 1972; MD, Mount Sinai, 1978
David S. Hatem, BS, Boston College, 1981; MD, Tufts, 1985
David A. Kaufman, BS, McGill, 1974; MD, Queen's, 1980
Karen G. Kelly, BA, Swarthmore College, 1973; MD, Yale, 1977
Glenn R. Kershaw, BA, Gettysburg, 1968; MD, Medical College of Wisconsin, 1974
Peter E. Krim, BA, Clark, 1978; MD, Boston, 1982
Steven A. Leveston, MD, Louisville, 1973
John M. Levey, BA, Princeton, 1983; MD, Texas, 1987
Lynn Li, BA, Brandeis, 1971; MD, Harvard, 1975
Nancy Y. Liu, BA, Oberlin, 1977; MD, Case Western Reserve, 1982
John P. Lock, BA, Assumption, 1968; MD, St. Louis, 1972
Brian J. Maday, BS, Bucknell, 1982; MD, New York Medical, 1986
Gertrude W. Manchester, BS, Tufts, 1973; MD, Yale, 1978
Richard A. Palken, BS, Tufts, 1980; MD, 1988
Behzad Parhizgar, BS, Shiraz, 1969; MD, 1974
John R. Person, BA, Dartmouth, 1969; MD, New York Medical, 1973
Mark C. Pettus, BA, Boston, 1979; MD, UMass Worcester, 1983
Stephen M. Pezzella, BA, Holy Cross, 1969; MD, St. Louis, 1973
*Phyllis Pollack, BS, Michigan, 1972; MD, Harvard, 1977
Joel H. Popkin, BA, New York, 1970; MD, SUNY Downstate, 1974
John I. Reed, BA, Williams, 1973; MD, Rochester, 1977
James J. Rooney, MD, New York Medical, 1974
Howard J. Sachs, BA, Clark, 1981; MD, SUNY Stony Brook, 1985
Stacia R. Sailer, BS, Wesleyan, 1984; MD, Jefferson Medical, 1988
Ninad N. Samant, BS, SUNY Stony Brook, 1986; MD, SUNY Syracuse, 1990
Oren P. Schaefler, BS, Cornell, 1980; MD, Dartmouth, 1986
Christopher W. Seidler, BA, Hampshire, 1982; MD, Rutgers, 1986
Jerome I. Starr, BS, Michigan, 1963; MD, 1966
Michael Thompson, BA, Colby, 1979; MD, UMass Worcester, 1986
John M. Tumolo, BS, Tufts, 1976; MD, Boston, 1980
Wahid Wassef, BA, Boston, 1980; MD, 1984
Bruce R. Weinstein, BS, Duke, 1975; MD, SUNY Downstate, 1980

Research Associate Professors

Evelyn A. Kurt-Jones, BS, Tufts, 1974; PhD, Connecticut, 1983
David V. Serreze, BS, Maine, 1979; MS, 1982; PhD, 1990

Adjunct Associate Professor

Richard R. Libertson, BS, Cornell, 1963; MD, Chicago Medical, 1968

Adjunct Research Associate Professor

Ellen F. Fynn, BS, Maine, 1986; PhD, Jefferson Medical, 1991

Assistant Professors

George Abraham, MBBS, Christian Medical, 1988; MD, 1992
Philip Adams, BS, Fordham, 1978; MD, Noreste, 1982
Ammar Al-Zoubi, MD, Aleppo, 1988
Omar Ali, MD, Tufts, 1996
Tony Almakdisi, MD, University of Damascus Medical School, 1992
Caroline B. Alper, BS, UMass Boston, 1987; MD, UMass Worcester, 1993
Curuchi Anand, MD, Calcutta University, 1985
Susan E. Andrade, BS, Rhode Island, 1988; ScD, Harvard, 1994
Julia D. Andrieni, BA, Vassar, 1983; MD, SUNY Stony Brook, 1996

* joint appointment
Joseph A. Antaki, BS, Florida, 1983; MD, Miami, 1987
Nadeem Anwar, BS, Atchison College (Pakistan), 1983; MBBS, Punjab, 1989
Jayashri R. Aragam, MD, Bangalore, 1978
Paula J. Aucoin, BA, Catholic, 1973; MD, Georgetown, 1977
Elizabeth T. Austin, BA, Mount Holyoke, 1985; MA, Concordia, 1992; Psy, Denver, 1999
Zheng Z. Bao, BS, Fudan, 1986; PhD, Illinois, 1993
Kurt G. Baringhaus, BA, Washington, 1990; MD, St. Louis, 1995
Clifford J. Behmer, MS, MIT, 1978; MD, UMass Worcester, 1985
Michael M. Bergman, BS, UMass Amherst, 1978; MD, Tufts, 1982
Paul Berman, BA, Michigan, 1959; MD, Syracuse, 1963
Kanishka Bhattacharya, MBBS, Calcutta, 1983
Bonnie J. Bidinger, BA, Cornell, 1994; MD, 1998
Gordon T. Bird, BS, Union, 1968; MD, Albany/Union, 1972
Michael B. Blackman, AB, Brown, 1987; MD, 1997; MBA, Michigan, 1990
Noel A. Blagg, AB, Oberlin, 1968; MD, Boston, 1974
June M. Blanco, BS, UMass Amherst; MD, UMass Worcester, 1995
Paul J. Block, BA, Brandeis, 1973; MD, Boston, 1977
Elaine Z. Borgen, BS, Bentley, 1985; MA, Harvard, 1998; PhD, Massachusetts School of Professional Psychology, 2000
Irene B. Bosch, BS, Central De Venezuela, 1985; PhD, Harvard, 1994
Talal J. Bou-Harb, MD, St. Joseph Faculty, 1991
*Carol A. Bova, BS, Salem State, 1979; MS, UMass Worcester, 1988; PhD, Boston College, 1998
Becky A. Briesacher, BA, California/Berkeley, 1986; MA, Williams, 1988; PhD, Maryland, 2001
Clifford A. Browning, AB, Holy Cross, 1971; MS, Jefferson Medical, 1975
Scott L. Brownstein, BS, Syracuse, 1983; MS, Georgetown, 1984; MD, 1989
John F. Burnham Jr., BA, Colby, 1969; MD, Noreste, 1979
Maureen M. Burns, BA, Holy Cross, 1988; MD, UMass Worcester, 1993
Donald P. Burt, BS, Trinity, 1973; MD, New Jersey, 1983
Rebecca P. Caine, AB, Cornell, 1992; MD, Pennsylvania, 1998
James F. Carmody, PhD, Iowa, 1971
Maria A. Casal, BS, Stonehill, 1983; MD, UMass Worcester, 1987
Matilde Castiel, BS, California State, 1977; MD, California/San Francisco, 1982
Jason J. Chen, BS, Shangdong, 1982; MA, Columbia, 1985; MPhil, 1988; PhD, 1991
David Chiriboga, MD, Universidad Central del Ecuador, 1988; MPH, UMass Amherst, 1993
Nidhi Cholar, MD, Punjab, 1993
Te-Hui W. Chou, BS, Tunghai, 1978; PhD, Clark, 1984
Arthur A. Church, AB, Boston, 1964; MD, George Washington, 1968
Mary Dawn T. Co, BA, Bryn Mawr, 1989; MD, Medical College of Pennsylvania, 1994
Joseph H. Cohen III, AB, Dartmouth, 1979; MD, Medical College of Pennsylvania, 1984
Joel L. Colker, BS, Yale, 1957; MD, Cornell, 1961
Ursula P. Collinson, MD, Albert-Ludwigs, 1991
Raffaella M. Colzani, MD, Milan, 1990
Thomas Consolati, BA, Colgate, 1988; MD, UMass Worcester, 1993
Kyle Ann Cooper, MD, Harvard, 1985
William J. Crooks IV, BS, Notre Dame, 1975; MS, 1978; MD, Tufts, 1982
Paula M. Cullinane, BS, Stonehill, 1980; MD, Boston, 1988; MPH, 1993
Brian P. Cunningham, BA, Yale, 1965; MD, Pennsylvania, 1969
*Andrew W. Danyluk, BA, Rutgers, 1977; MD, Johns Hopkins, 1981
Raul E. Davaro, MD, Buenos Aires, 1984
Maria B. Delrosario, BS, Dickinson, 1982; MD, Pennsylvania State, 1988
William J. DeMarco, AB, Holy Cross, 1980; DO, New England College of Osteopathic Medicine, 1984
Christine J. Donahue, BA, Williams, 1989; MD, UMass Worcester, 1995
Susan E. Donohue, BA, Mt. Holyoke, 1984; MD, Boston, 1988
Thomas Dunzendorfer, MD, Goethe (Germany), 1987
Kimberly D. Eisenstock, MD, UMass Worcester, 2002
Ashraf F. Elkerm, MD, Alexandria, 1982
Raul B. Endriga, AA, St. Thomas, 1953; MD, 1958
Julian Esteban, BS, Philipines, 1986; MS, 1989; MS, Michigan, 2001
Michael F. Ethier, BS, Worcester State, 1971; MS, 1978; PhD, WPI, 1996
Sharon C. Eypper, BS, Wayne State, 1978; MD, Michigan, 1982
David R. Fields, BA, Virginia, 1980; MD, Medical College of Virginia, 1984
David R. Finck, BA, Columbia, 1970; MD, Tufts, 1974
Melissa A. Fischer, BA, Columbia, 1988; MS, NYU, 1996; MA, Stanford, 2001
Katherine A. Fitzgerald, BS, Cork, 1995; PhD, Trinity, 1999
*Alan J. Flint, BA, Tufts, 1985; MD, Pittsburgh, 1989; MPH, California/Berkeley, 1995
Peta Flock, MD, Heinrich-Heine (Germany), 1992
Mario F. Flores-Cardillo, MD, Universidad de Carlos de Guatemala, 1992
James M. Flynn, BS, UMass Amherst, 1987; MD, UMass Worcester, 1992
Katherine K. Fong, BA, Rochester, 1975; MD, SUNY Buffalo, 1979
Ellis M. Fribush, AB, Hamilton, 1955; MD, Albany Medical, 1959
Julia M. Gallagher, BA, Amherst, 1986; MD, UMass Worcester, 1995
Maria Garcia, BA, Rutgers, 1984; MD, Pennsylvania Medical, 1994
Thomas Gassert, MD, University of Medicine and Dentistry of New Jersey, 1992
V. Susan George, MD, National (Singapore), 1989
*Laura Gibson, BA, Yale, 1987; MD, UMass Worcester, 1994
* joint appointment (continued)
Lyle E. Kantor, BA, SUNY Buffalo, 1972; MA, Bowling Green State, 1976; PhD, 1979

* joint appointment
Stephen Nelson, BA, Roger Williams, 1973; MS, Rhode Island, 1980; DO, New England College of Osteopathic Medicine, 1984
Michael C. Newstein, BS, Cornell, 1984; MD, PhD, Brown, 1992
Mary O’Brien, BA, Holy Cross, 1987; MD, SUNY Stony Brook, 1991
William T. O’Connor, BA, Holy Cross, 1970; MD, Creighton, 1974
Nneka Onwubueke, MBBS, Lagos, 1990
Sean P. O’Reilly, BS, Miami, 1996; MD, UMass Worcester, 2000
Luigi Pacifico, BA, Brandeis, 1983; DO, Health Sciences, 1988
Sherry Lynn Pagato, BA, Oakland, 1995; MA, Western Michigan, 1998; PhD, 2001
Anthony A. Pellegrino, BS, MIT, 1974; MS, 1974; MD, UMass Worcester, 1986
Larry J. Pellish, BS, Union, 1968; MD, NYU, 1972
Nancy E. Phillips, BA, California, 1974; PhD, Colorado, 1980
Bilal Piperdi, MD, Hacetettepe, 1997
Andrew J. Plager, BS, Amherst, 1980; MS, Columbia, 1982; MD, SUNY Buffalo, 1987
Ninan Polackal, MBBS, St. John’s, 1993
Elise H. Pyun, BA, Boston, 1981; MD, 1985
Fares Qureiyeh, MD, Aleppo, 1996
Sanjay Ram, MD, Bombay University, 1991
Jason Rashkin, BS, Tufts, 1994; MD, SUNY Syracuse, 1998
Sarah Reiff-Hekking, BA, Depauw, 1987; MA, SUNY Stony Brook, 1994; PhD, 1997
Jonathan H. Robbins, BA, Case Western Reserve, 1967; MD, Tufts, 1971
Dionyssios A. Robotis, MD, Athens, 1985
*Charles Rosenbaum, BA, Vermont, 1963; MD, 1967
Karen F. Rothman, MD, Boston, 1981
Ritu Sachdev, MBBS, Maulana Azad, 1999
Prabhasadanan G. Sadhujan, MBBS, Kottayam Medical College (India), 1980
Ralph J. Sama, BA, Holy Cross, 1974; MD, UMass Worcester, 1978
Julian Sanchez-Cruz, MD, Universidad Nacional Pedro Henriquez Urena (Dominican Republic), 1990
Andrew Schamess, BA, Sarah Lawrence, 1986; MD, UMass Worcester, 1991
Ira J. Schmeikin, BS, CUNY, 1982; SUNY Buffalo, 1984
Alice A. Schmuckal Williams, BA, Western State, 1977; MD, Colorado, 1986
Mark L. Schrank, BA, NYU, 1979; MD, SUNY, 1983
Paul S. Schwartz, BA, Antioch, 1960; MD, Washington, 1964
Joseph D. Scuderi, BS, SUNY Stony Brook, 1988; MS, Albert Einstein, 1992; MD, PhD, 1996
Kala Seetharaman, MBBS, Government Medical, 1982
Jerrianne Seger, BS, Michigan State, 1973; MD, Wayne State, 1977
Neeta S. Shah, MD, Topiwala National, 1981
Vladimir Shaminin, MS, Novosibirsk State, 1980; PhD, Novosibirsk Institute, 1990
Veena R. Shankar, MD, Bangalore, 1992
Ellen L. Sharenow, BA, Florida, 1979; MA, Western Michigan, 1985; PhD, 1993
Ishwara N. Sharma, MBBS, Punjab, 1967
Zahra S. Sheik, MD, Nishtar Medical College, 1995; MPH, New York Medical College, 2002
David S. Shepro, BA, Boston, 1980; MD, UMass Worcester, 1984
Bruce J. Shickmanter, MD, SUNY Syracuse, 1974
Shahrzad Shidfar, BA, Shiraz Medical School, 1995
Neal Silverman, BA, California, 1989; PhD, MIT, 1996
Dianne L. Silvestri, BS, Butler, 1970; MD, Indiana, 1974
Beata Skowronska, MD, Silesian University, 1992
L. Rebecca Spanagel, BA, Rochester, 1984; MD, 1988
Morris Spierer, BA, Yeshiva, 1965; MD, Albert Einstein, 1969
Anon Srikiatkhachorn, MD, Chiang Mai (Thailand), 1983
Beata Stancel-Grabias, MD, Gdansk (Poland), 1993
Daniel M. Steigman, BA, Columbia, 1978; MD, Boston, 1982
Gary M. Tanguay, BS, Providence, 1973; MD, Boston, 1977
Masanori Terajima, MD, Tohoku, 1988; PhD, 1994
Robert J. Terlato, BS, Manhattan, 1983; ME, Rensselaer, 1984; MD, New York Medical, 1988
Emil L. G. Tigas, BS, Philippines, 1993; MD, 1993
Jennifer Tija, BA, Boston, 1994; MD, Boston Medical, 1994
Mira S. T. Torres, BS, Philippines, 1993; MD, 1993
Matthew J. Trainor, BA, Colby, 1994; MS, Trinity (Dublin), 2001
*Maichi T. Tran, PharmD, Massachusetts College of Pharmacy; PhD, 2002
Christopher Trancynger, BS, SUNY Stony Brook, 1981; MD, NYU, 1985
Thomas L. Treadwell, AB, Dartmouth, 1974; MD, 1977
Spyridon Triantos, MD, Athens, 1993
Marjan Vahedi, MD, Shiraz Medical School, 1995
Rohit D. Vakil, MD, Baroda, 1967
Thomas J. Vaughan, BS, Boston College, 1977; MD, Indiana, 1981
Craig S. Vinch, BA, Tufts, 1988; MD, Harvard, 1994
Alberto Visintin, PhD, Triesti, 1995
Sowmya Viswanathan, BA, Calicut (India), 1983; MBBS, Madurai Medical, 1988
Philip S. Volastro, AB, Canisius, 1962; MD, Rochester, 1966
Douglas C. Waite, BA, Wheaton, 1984; MD, University of Medicine and Dentistry of New Jersey, 1988
Arthur H. Wasser, BA, Virginia, 1958; MD, 1962
Mireya A. Wessolosky, MD, Venezuela, 1989
Barbara J. Whalon, BA, Kalamazoo, 1975; PhD, Connecticut, 1993
Winthrop F. Whitcomb, BA, Wesleyan, 1984; MD, Jefferson Medical, 1989
Gregory T. Williams, BA, Hamilton, 1981; MD, New York Medical, 1986
David A. Wilner, BS, Tufts, 1975; MD, 1979
Peter B. Wilson, BA, Swarthmore, 1979; MD, Rush, 1984
Gary L. Wolf, MD, Boston, 1975; MD, 1979
* joint appointment
(continued)
(Medicine Faculty continued)

**Fifield Workum Jr.**, BA, Harvard, 1961; MD, Columbia, 1969

**Majid Yazdani**, BA, Boston, 1989; MS, 1990; MD, 1994

**Malathit Yella**, MBBS, Mysore (India), 1992

**E. Russell Young**, BA, Gettysburg, 1981; DO, New England College of Osteopathic Medicine, 1985

**Shakeeb Yunus**, MD, MBBS, University of Punjab, 1993

**Jian Houa Zhou**, BS, Fudan, 1987; MS, 1989; PhD, Pittsburgh, 1994

**Iva Zivna**, MD, Charles University, Prague, 1995

**Jaroslav Zivny**, MD, Charles University, Prague, 1995


**Clinical Assistant Professors**

**Peter Gibson**, BS, Brown, 1987; MD, University of Cincinnati College of Medicine, 1994

**Raymond R. Zhou**, MD, Fujian, 1984; MS, Beijing, 1989; PhD, Iowa, 1994

**Research Assistant Professors**

**Sunita Guliati**, MD, University of Rangoon, 1972

**Richard F. Koz, Jr.**, BS, Maine, 1984

**Wenjun Li**, BS, Fudan (China), 1986; MS, Chinese Academy of Sciences, 1990; MS, UMass Amherst, 1996; MS, 1997; PhD, 2003

**Pranoti Mandrekar**, BS, Bombay, 1984; MS, 1986; PhD, 1991

**Shixia Wang**, DVM, Agricultural (China), 1985; PhD, Chinese Academy of Preventive Medicine, 1995


**Adjunct Assistant Professors**

**Ronald J. Debellis**, BS, Nevada/Reno, 1985; PharmD, Pacific, 1988

**Leon Fay**, MD, Cornell, 1977

**Pritesh J. Gandhi**, BPharm, Mass College of Pharmacy, 1997; DPharm, 1997


**Senior Affiliates**


**Affiliates**


* joint appointment


**Tumer E. Bynum**, BA, Oklahoma, 1961; MD, 1964

**Helen M. Carter**, BA, Bryn Mawr, 1984; MD, Temple, 1989

**Harshad V. Chitre**, MBBS, LTM Medical, 1975

**Nandini Chitre**, MS, Baroda, 1979


**Mary S. Donnelly**, BA, Marquette, 1970; MD, Case Western Reserve, 1974


**Satish P. Gupta**, MBBS, Punjab, 1959; MD, 1964

**John E. Kelly**, BS, Tulane, 1972; MD, 1976

**Sandra Kristiansen**, MD, Autonoma (Mexico), 1978

**Robert A. Lebow**, BA, SUNY Buffalo, 1966; MD, SUNY Downstate, 1977

**Darrolyn Lindsey**, BA, Wagner, 1977; MD, University of Medicine and Dentistry of New Jersey, 1983


**Bogdan Nedelescu**, MD, Carol Davila, 1996

**Michael A. Rosner**, BS, MIT, 1960; MD, NYU, 1964

**Nancy M. Said**, MBChB, Alexandria, 1975

**Sameh S. Said**, MBChB, Alexandria, 1969

**Peter P. Tomaiolo**, BA, Saint Anselm, 1965; MD, Bologna, 1970

**Rene A. Umanzor**, MD, Autonomous School of Medical Sciences of Central America, 1993

**Instructors**

**Usama M. Abdel-Motal**, PhD, Karolinska Institute Medical School, 1996

**Sarika Aggarwal**, PhD, Michigan Technological, 1995

**Sarika Aggarwal**, MBBS, Grant Medical/Bombay, 1987

**Demosthenes K. Agiomavritis**, BA, Merrimack, 1975; MD, Athens, 1980

**Ali A. Amini**, MD, Pahlavi, 1975

**John L. Athas**, BA, Boston, 1973; MD, Guadalajara, 1979

**Durga Bathini**, MD, Gandhi Medical College, 2000

**Saroj Bhartiya**, MD, Calcutta University, 1992

**Danielle L. Brook**, MD, Columbia, College of Physicians and Surgeons, 1999

**Gilbert Bovar**, MD, SUNY Brooklyn, 1983

**Michael D. Burday**, BA, Rutgers, 1972; MD, Georgetown, 1976


**Charles E. Cavagnaro III**, BS, Cornell, 1978; MD, 1982


**Fiorindo J. Celona**, BA, Boston College, 1965; MD, New Jersey College of Medicine, 1970


**Henry D. Childs**, BA, Harvard, 1958; MD, Boston, 1971

**Carl S. Clark**, BS, McGill, 1975; MD, UMass Worcester, 1979


**Nicolina C. Davis**, BS, Colgate, 1987; MD, Albany, 1991


**Philip J. dilorio Jr.**, BA, Merrimack, 1987; PhD, Connecticut, 1995

**Sharon Dilley**, BA, Merrimack, 1987; PhD, Connecticut, 1995

**Angela Dolganovic**, PhD, University of Medicine and Pharmacy (Moldova), 1993

**Nancy Dragoon**, MD, SUNY Stony Brook, 1984

**Edward Driscoll**, BA, Pennsylvania, 1966; MD, Maryland, 1976

**Paul F. Dufault**, BS, Holy Cross, 1978; MD, Tufts, 1982

**David W. Duhme**, MD, Harvard, 1970

**Morris P. Elevado**, BS, Notre Dame, 1993; MD, SUNY Buffalo, 1997

**Brenda Eze**, BS, Wisconsin/Milwaukee, 1977; MD, 1981

**David A. Fahey**, BA, Amherst, 1982; MD, PhD, Boston, 1989

**Neal M. Fallis**, AB, Boston, 1967; MD, 1971


**Kathleen I. Flynn**, BS, Boston College, 1995; MD, Tufts, 2001
Deborah A. Ford, MD, UMass Worcester, 1983
Robert J. Fraser, AB, Colgate, 1974; MD, UMass Worcester, 1978
William M. Gaines, BS, Michigan, 1979; MD, Cornell, 1983
Frederick Georgian, MD, Boston, 1981
Gerald C. Gladstone, AB, Harvard, 1972; MD, Tufts, 1976
Rashel Goodkin, MD, Harvard, 1998
Sabitha R. Gopalswamy, MD, Madurai (India), 1989
Ethel J. Gordon, BA, Southern Illinois, 1969; MS, Northeastern, 1988; PhD, Rutgers, 1994
Piotr Grabias, BS, Waclaw Slerpinski Lyceum, 1984; MD, Gdansk Medical, 1990
Richard A. Greene, BS, Rhode Island, 1975; MD, Albany Medical, 1999
George Groussis, BA, Brandeis, 1985; MS, New York Medical, 1988; MD, Chicago Medical, 1993
raj Rani Gupta, BS, Rajasthan, 1977; MD, 1981
Tatiana A. Hamawi, BS, UMass Amherst, 1989; MD, Mount Sinai, 1994
Janet R. Hardy, BS, Concordia, 1983; MPH, Miami, 1988; MS, McGill, 1991; PhD, Yale, 2004
Bradley E. Harris, BS, California/Berkeley, 1986; MD, Tufts, 1993
Robert Honig, BA, Michigan, 1972; MD, SUNY Downstate, 1976
Suhasini R. Iyer, MBBS, Bombay, 1982; MD, 1984
Chirag R. Jani, MD, New York Methodist Hospital, 1998
Krzysztof Kacprzak, MD, Wroclaw, Poland, 1983
Maria C. Kim, BA, Boston, 1984; MD, 1993
Ronald W. Klare, BA, Columbia, 1971; MD, NYU, 1975
Susan G. Krantz, BS, SUNY, 1983; MS, Johns Hopkins, 1987; MD, Hahnemann, 1991
Donna M. Krauth, BS, Holy Cross, 1978; MD, Dartmouth, 1981
Deepti Kumar, MD, Delhi, 1992
Alice N. Lee, BS, Yale, 1993; MD, Washington, 1999
Jan F. Leitao-Pina, BS, Dartmouth, 1988; MD, UMass Worcester, 1992
David A. Levitin, BS, Pittsburgh, 1968; MD, Duke, 1972
Kristine M. Lisi, BS, Fairfield, 1990; MD, Medical College of Pennsylvania, 1994
Merle F. MacNeil, BS, St. Francis Xavier, 1964; MD, Ottawa, 1968
David Maguire, BS, Georgetown, 1970; MD, 1978
Alexander Mahendran, MBBS, Ceylon, 1965
Dennis W. Maki, AB, Holy Cross, 1970; MD, Vermont, 1974
Daniel R. Massarelli, BS, Georgetown, 1981; MD, 1985
Anuja Mathew, BS, Women’s Christian, 1989; MS, Christian Medical, 1992; PhD, UMass Worcester, 1999
Anupam Mathur, MD, Medical College Amritsar, 1982
Fred E. Mensch, BA, Rochester, 1973; MD, Albany Medical, 1977
Sherry Singh Mohapatra, BS, Simon Fraser, 1995; MD, St. George’s, 2000
Arthur V. Moore, MS, SUNY Stony Brook, 1968; MA, 1970; MD, Cornell, 1983
Susan P. Moran, BA, Emmanuel, 1972; MD, SUNY Downstate, 1977
Dennis E. Murphy, BS, Providence, 1981; MD, UMass Worcester, 1985
George Nasinyuky, MD, Connecticut, 1976
Kavita Navani, MBBS, BJ Medical, 1985; MD, 1990
Kelly J. Callahan, BS, Tufts, 1989; MD, UMass Worcester, 1993
Barbara Glendzik, BFA, Colorado, 1979; MPH, UMass Amherst, 2000
Richard N. Orino, BA, Brown, 1980; MD, 1983
Ronald J. Pantano, BA, Providence, 1967; MD, Bologna, 1974
John C. Platt, MD, Pennsylvania, 1977
Dorota K. Poluha, MD, Medical Academy, 1988; PhD, 1990
Caleb M. Radebe, BS, Southern College, 1992; MD, Loma Linda, 1988
Roopa Reddy, BA, Mt. Carmel, 1981; MD, Bangalore, 1986
Ann Michele Ricard, MBBS, New South Wales, 1971
Bruce Rosen, BS, Michigan, 1980; MS, Tufts, 1984; MD, UMass Worcester, 1993
Elana Rosenbaum, MS, MSW
Thomas L. Rosenfeld, BA, CUNY/Queens, 1974; MD, Medical College of Virginia, 1978
Ronald G. Rossetti, BS, UMass Amherst, 1971; MPH, 1991
Steven E. Salomons, BA, California, 1968; MD, California/San Francisco, 1972
Afroz S. Saquib, MBBS, Nagpur, 1995
Frederic H. Schwartz, BA, Trinity, 1980; MD, Hahnemann, 1984
Arthur C. Sgalla, BS, Providence, 1969; MD, SUNY Buffalo, 1973
Jutamas Shaugnessy, MD, Chiang Mai University, 1992; MA, Boston; PhD, 2001
Maryann Shea, BS, McGill, 1984; MS, Boston, 1989; MD, 1994
Shyla Shrinath, MD, Mysore (India), 1988
Majul Shukla, MD, Gandhi Medical College, 1974
Kanwarjit S. Sidhu, BS, Government (India), 1969; MD, 1973
Surinderpal K. Sidhu, MD, Government (India), 1974
David L. Snook, BS, Albright, 1980; MD, Pennsylvania State, 1984
Dilip Kumar Subbarao, MD, Indore (India), 1973
Steven F. Taraborelli, BS, Providence, 1970; MD, St. Louis, 1974
Nehal P. Thakkar, MBBS, Bangalore (India), 1999
Jancy Thomas, MD, Mahatma Gandhi Medical College, 1993
Elizabeth P. Toomajian, BA, Augustana, 1977; MSN, Texas/Austin, 1981
Jayanthi Valdeeswaran, MD, Stanley Medical College (India), 1993
Gert-Paul Walter, MD, Tufts, 1984
David E. Weinstock, BS, Hobart, 1991; DO, Philadelphia College of Osteopathic Medicine, 1999
Richard M. Wholey, DO, Philadelphia College of Osteopathic Medicine, 2008; PhD, 1991
Hajeri Spanta, MD, UMass Worcester, 2009
Gert-Paul Walter, MD, Tufts, 1984
David E. Weinstock, BS, Hobart, 1991; DO, Philadelphia College of Osteopathic Medicine, 1999
Richard M. Wholey, DO, Philadelphia College of Osteopathic Medicine, 2008; PhD, 1991
Hajeri Spanta, MD, UMass Worcester, 2009
Clinical Instructor
Susan N. Tarrant, BA, Hollins, 1970; MA, Cornell, 1974
Molecular Genetics & Microbiology

Molecular Genetics & Microbiology features:
• numerous faculty who have received Outstanding Medical Educator awards;
• research focused on specific genes that regulate disease processes, host defense mechanisms and basic cellular controls; and
• investigators who exploit classic, molecular and genomic approaches to the genetics of several model systems.

Medical Microbiology, offered through the Department of Molecular Genetics & Microbiology, is a first- and second-year medical school course that provides students with the basic knowledge necessary to understand and intervene in the infectious disease process.

An underlying tenet of the educational approach is that the practice of medicine will be linked more and more closely with the expanding knowledge of basic biological phenomena. Thus, the first part of the course covers the basic biology of bacteria and viruses, with the curriculum emphasizing the molecular mechanisms of microbial processes that are targets or potential targets for antibacterial or antiviral chemotherapy. In the second part of the course, students learn about the pathogenic mechanisms employed by microbes to establish human infection, cause tissue damage, and spread to other hosts. Finally, the acquired knowledge of the biology and pathogenic strategies of these microorganisms is used as a foundation for students to learn how to diagnose, treat and prevent human infectious disease.

Immunology, taught in the second year of the curriculum as a component of the Biology of Disease course, focuses on basic host defenses to disease. While part of an independent course, the principles of immunology nevertheless reinforce and clarify the key concepts of microbiology.

Molecular Genetics & Microbiology Faculty

Professor and Chair
Allan Jacobson, BA, Queens, 1966; PhD, Brandeis, 1971

Professors
Barbara and Nathan Greenberg Chair in Biomedical Research
*Elliot Androphy, AB, Brandeis, 1975; MD, Rochester, 1979
Richard M. Haidack Professor of Medicine
*Robert W. Finberg, AB, Chicago, 1971; MD, Albert Einstein, 1974
All and John Pierce Chair in Pediatric Hematology/Oncology
David J. Freeland Professor of AIDS Research
*Mario Stevenson, BS, Glasgow, 1979; PhD, Strathclyde, 1984

*Sarah H. Cheeseman, AB, Mt. Holyoke, 1969; MD, Wisconsin, 1973
*Francis A. Ennis, AB, Boston College, 1960; MD, Tufts, 1964
*Torence R. Flotte, BS, New Orleans, 1982; MD, Louisiana State, 1986
Guangping Gao, BM, West China University of Medical Sciences, 1982; MS, Florida International University, 1990; PhD, 1994
*Douglas T. Golenbock, MD, Michigan/Ann Arbor, 1980
John M. Leong, BA, Brown, 1979; MD, PhD, 1987
Stuart M. Levitz, BA, NYU, 1975; MD, 1979
Trudy G. Morrison, BA, Wellesley, 1967; PhD, Tufts, 1972
Beth A. McCormick, BA, New Hampshire, 1986; PhD, Rhode Island, 1990

*Anthony R. Poteete, AB, Harvard, 1973; PhD, MIT, 1977
*Janet M. Stavnezer, BA, Swarthmore, 1966; PhD, Johns Hopkins, 1971
*John L. Sullivan, BS, LeMoyne, 1968; MD, SUNY Upstate, 1972
*Michael R. Volkert, BS, Wisconsin, 1971; MS, Iowa State, 1973; PhD, Rutgers, 1977
*Raymond M. Welsh Jr., BS, UMass Amherst, 1967; PhD, 1972

Professor Emeritus
Donald J. Tipper, BS, University of Birmingham (UK), 1956; PhD, 1959

Adjunct Professor
Ronald C. Desrosiers, BA, Boston, 1970; PhD, Michigan State, 1975; MS, Harvard, 1991

Associate Professors
Richard E. Baker, BS, William & Mary, 1975; PhD, Pennsylvania State, 1980
Paul R. Dobner, BA, SUNY Buffalo, 1975; MA, Columbia, 1976; MPhil, 1979; PhD, 1981
Rachel M. Gerstein, BA, Smith, 1984; PhD, Brandeis, 1990
Jon D. Goguen, BS, Fitchburg State, 1974; MS, UMass Amherst, 1977; PhD, 1980
Ronald M. Iorio, BA, UMass Boston, 1969; MS, Boston College, 1972; PhD, 1979
Duane D. Jenness, BS, Oregon State, 1974; PhD, California/Berkeley, 1980
Timothy F. Kowalik, BS, Belmont Abbey, 1982; MS, Utah State, 1986; PhD, 1989
*Egil Lien, MS, Norwegian Institute of Technology, 1992; PhD, Norwegian University of Science and Technology, 1997.
Dannel McCollum, BS, Illinois/Urbana, 1987; PhD, California/San Diego, 1993
Peter M. Przybysz, BS, California/Los Angeles, 1983; PhD, California/San Francisco, 1992
*Neal Silverman, BA, California/Berkeley, 1989; PhD, MIT, 1996
Robert T. Woodland, BS, Villanova, 1967; MS, Ohio State, 1969; PhD, Pennsylvania, 1974

Adjunct Associate Professors
*Marc E. Uknis, MD, Temple, 1990

* joint appointment
Assistant Professors

Brian J. Akerley, BS, Bates, 1988; PhD, California/Los Angeles, 1995
Victor R. Boyartchuk, MS, Kiev National, 1989; PhD, California/Berkeley, 1998
Kenan C. Murphy, BA, Catholic, 1976; PhD, Maryland, 1983
Christopher M. Sassetti, BS, Santa Clara, 1990; PhD, California/San Francisco, 1999
Cuong Vuong, PhD, University of Tübingen, 2000
JeanMarie Houghton, MD, University of Medicine and Dentistry of New Jersey, 1989

Research Assistant Professors

Feng He, BS, Beijing Agricultural, 1985; MS, National Institute of Agronomy, 1988; PhD, 1991
David A. Mangus, BA, Ohio Wesleyan, 1987; PhD, Indiana, 1994
Carol E. Schrader, BA, Wesleyan, 1984; PhD, Pennsylvania, 1992

Adjunct Assistant Professors

Kimberly A. Schandel, BS, Pennsylvania State, 1983; PhD, Duke, 1990
Alex Sloutsky, MS, Moscow State University, 1974; PhD, 1979

Instructors

Kadambavanasund Papavinasasundaram, BS, MS, Tamil Nadu Agricultural University, Coimbatore, India; PhD, University of Sydney, 1990
Sandy M. Wong, BS, California/Los Angeles, 1983; PhD, 1996

“There is a clear commitment to the broad education of students at UMass Medical School.”

Anne C. Larkin, MD
Associate Professor of Surgery
Co-director of the High-Risk Breast Cancer Program

Dr. Larkin and her colleagues are dedicated to moving medical education forward in this era of drastic changes in health care. Students are also actively engaged in the curriculum. "I am amazed by the creativity and thoughtfulness of our medical students. They have incredibly diverse backgrounds, but all come with a common goal: to be the best physicians possible," says Larkin. "When they complete their training here and move on to various residencies, there is no doubt in my mind that they are the best.”
Molecular Medicine

Molecular Medicine’s stellar faculty includes:

- the co-recipient of the 2006 Nobel Prize in Physiology or Medicine;
- three Howard Hughes Medical Institute Investigators;
- the director of the Center for AIDS Research, funded by the National Institutes of Health;
- the director of the Diabetes and Endocrinology Research Center, funded by the National Institutes of Health;
- the co-recipient of the 2008 Lasker Award for Basic Medical Research; and
- two members of the National Academy of Science.

Molecular Medicine is characterized by a diverse faculty of both basic biomedical scientists and physician-scientists. The program scientists occupies its own modern 80,000-square-foot research building adjacent to the Medical School campus—Biotech Two—and includes additional faculty appointments in the Program in Gene Function and Expression. The program’s strategy for scientific development has been to assemble outstanding investigators with overlapping scientific interests who apply their unique knowledge to molecular mechanisms that underlie physiological processes and associated diseases. Areas of expertise include chemistry; structural biology; biochemistry; cell, developmental and molecular biology; cell signaling and regulation; genomics and proteomics; genetics; and immunology and virology. Molecular Medicine faculty are active in teaching these disciplines in both core and advanced courses to graduate and medical students.

The laboratory groups in the program are led by academic leaders in their respective fields of biology and medicine. Strong research programs related to cancer biology are also represented. The multidisciplinary nature of the program has led to scientific collaboration and diversity, providing an exceptional training ground for students and postdoctoral fellows alike.

Molecular Medicine Faculty

Professor and Chair

Michael P. Czech, PhD, Brown, 1967; MA, Duke, 1969; PhD, Brown, 1972

Professors

Silverman Chair in Natural Sciences
Victor R. Ambros, PhD, MIT, 1975; PhD, MIT, 1979

Howard Hughes Medical Institute Investigator; Nobel Laureate 2006; Blais University Chair in Molecular Medicine
Roger J. Davis, PhD, Cambridge, 1979; MPhil, 1980; MA, PhD, 1983

Howard Hughes Medical Institute Investigator; Lambi and Sarah Adams Chair in Genetic Research
David J. Frealender Professor of AIDS Research
Michael R. Green, PhD, Wisconsin, 1974; MD, PhD, Washington, 1981

Howard Hughes Medical Institute Investigator; Nobel Laureate 2008
Craig C. Mello, BS, Brown, 1982; PhD, Harvard, 1990

David J. Frealender Professor of AIDS Research
Mario Stevenson, BS, Glasgow, 1979; PhD, Strathclyde, 1984

Silvia Corvera, BS, Madrid, 1975; MD, Autonoma (Mexico), 1982; MS, 1984

Stephen J. Doxsey, PhD, 1984

Heinrich G. Göttingler, PhD, Munich, 1976; MD, Yale, 1987

Dale Greiner, BS, Iowa, 1974, PhD, 1978

Jason Kim, BS, California/Irvine, 1991; PhD, Southern California, 1996

David G. Lambright, BS, UMass Lowell, 1998; PhD, Stanford, 1992

Katherine Luzuriaga, SB, MIT, 1978; SM, 1980; MD, Tufts, 1984

Craig L. Peterson, PhD, Washington, 1983; PhD, California/Los Angeles, 1988

Joel D. Richter,BA, Indiana, 1974; MS, Arizona State, 1976; PhD, 1979

Gary B. Schneider, BS, Wisconsin, 1969; PhD, Five College Cooperative Program, 1973

John L. Sullivan, BS, LeMoyne, 1968; MD, SUNY Upstate, 1972

William E. Theurkauf, BA, Brandeis, 1980; PhD, 1988

Associate Professors

Ingolf Bach, BS, Konstanz, 1984; MS, 1989; PhD, Paris, 1993

Lucio H. Castilla, MS, Buenos Aires, 1988; PhD, Michigan, 1995


Yicktung T. Ip, BS, National Defense, Taipei, 1984; PhD, Iowa, 1989

Paul D. Kaufman, BA, California/Berkeley, 1985; PhD, MIT, 1992

Nathan Lawson, BA, Rhode Island, 1994; PhD, Yale, 1999

Brian Lewis, BS, California/Los Angeles, 1991; PhD, Johns Hopkins, 1997

Gregory J. Pazour, BS, South Dakota State, 1986; PhD, Minnesota, 1991

Heidi A. Tissenbaum, BS, Montreal, 1986; MS, Ottawa, 1988; PhD, Harvard, 1997

Fumihiko Urano, MD, Tokyo, 1994; PhD, 1998

Marion Walhout, BS, The Netherlands, 1992; PhD, 1997

Lan Xu, MS, Dalhousie, 1993; PhD, California/San Diego, 1998

Assistant Professors

Usha Acharya, BS, Madras, 1985; MS, 1987; PhD, Bangalore, 1992

Michael H. Brodsky, BA, California/Berkeley, 1989; PhD, MIT, 1996

Kirsten A. Hagstrom, BA, Oberlin, 1989; MA, Princeton, 1993; PhD, 1998

Lambertus van den Berg, MS, Utrecht, 1990; PhD, 1994

Yong-Xu Wang, BS, Beijing, 1989; PhD, Iowa, 1999

Maria L. Zapp, BA, Wilson, 1980; PhD, Baylor, 1989

Research Professor

Gary R. Ostroff, BS, Delaware Valley, 1976; PhD, Delaware, 1982

Research Associate Professors

Lawrence Lifshitz, BA, Harvard, 1980; MS, North Carolina, 1983; PhD, 1987

Clive Standley, BSc, Imperial College, London, 1983; PhD, 1986

Research Assistant Professors

Karl D. Bellvé, BS, UMass Amherst, 1990; PhD, Maryland, 1996

Anil K. Chawla, MS, Punjab, 1980; PhD, CUNY, 1988

Darryl Conte, BS, Rensselaer, 1992; PhD, SUNY Albany, 2000

Andrea Foulkes, BA, Brown, 1994; ScD, Harvard, 2000
Kevin E. Fogarty, BS, Worcester Polytechnic Institute, 1975; MS, 1978
Paul Furciniti, BS, WPI, 1971; PhD, New Hampshire, 1975
Adison L. Guilherme, BS, Rio de Janeiro, 1989; PhD, 1994
Shaohui Huang, BA, Kansas, 1993; PhD, 1998
Norman J. Kennedy, BA, Dartmouth, 1990; PhD, Vermont, 1999
Ellen Kittler, BA, Arkansas, 1978; PhD, Virginia, 1989
Lori J. Lorenz, BS, Purdue, 1981; PhD, Brandeis, 1990
Angela Mann, BS, Glasgow, 1979; PhD, 1984
Vishwajeet Puri, BS, Panjab, 1991; MS, 1993; PhD, 1998
Mark E. Sharkey, MS, Assumption, 1985; PhD, Clark, 1993
Masaki Shirayama, BS, Tokyo, 1990; MS, 1992; PhD, 1995
Juerg Straubhaar, MS, Berne, 1980; MS, Brandeis, 2003; PhD, Clemson, 1991
Simon M. Swingler, BS, Reading, 1988; PhD, Warwick, 1992
Rossella G. Tupler, MD, Brescia, 1985; PhD, Pavia, 1993
Joseph V. Virbasius, BS, WPI, 1985; PhD, Northwestern, 1991

Instructors
M. Inmaculada Barrasa, BS, Autónoma, Spain, 1991; PhD, 1996
Eric Campeau, BSc, McGill, 1992; PhD, 1999
Madhumita Das, BS, Calcutta, 1990; MS, 1994; PhD, Jadavpur/Calcutta, 2001
Dae Young Jung, BS, Sangmyung, South Korea, 1989; PhD, 2001
Hwi-Jin Ko, BS, Sung Kyun Kwan, South Korea, 1994; MS, 1998; PhD, Seoul National, 2005
Paul Peters, BA, Holy Cross, 1990; MS, Purdue, 1993; PhD, 1996
Sergei Popov, MD, Kishinev, 1976; PhD, 1990
John S. Reece Hoyes, BS, James Cook, Australia, 1996; PhD, 2001
Jovenal San Agustin, BS, Mindanao State, 1974; MS, Philippines, 1979; PhD, Wisconsin, 1988
Natalia Sharova, PhD, D.I. Ivanovski Institute, 1984
Ernesto R. Soto Villatoro, BS/MS Universidad del Valle de Guatamala, 1999; PhD, Worcester Polytechnic Institute, 2005
Claire Louise Standen, BSc, Bath, United Kingdom, 1996; PhD, Kings College, London, 2002
Qionglin Zhou, BS, Jiangxi, 1982; PhD, London, 1996

Neurobiology

Neurobiology faculty conduct cutting-edge research into the:
• assembly and plasticity of synapses, the structures through which nerve cells communicate with each other;
• development and function of glia that may identify targets for pharmaceutical intervention in spinal cord injuries or neurodegenerative disease;
• mechanisms of neural circuitry formation and its impact on the developing brain;
• mechanisms of learning and memory in fruit flies and behavioral plasticity in worms, and their relevance to those of humans; and
• mechanisms of circadian rhythm generation in insects and mammals that are therapeutic targets for some sleep and psychiatric disorders.

Brain function embodies the very essence of the human experience, as well as that of our relatives in the animal kingdom, and its study represents one of the most exciting scientific endeavors. Established in 2001, the Department of Neurobiology is the driving force for basic neuroscience research on campus. Housed on one floor of the Aaron Lazare Medical Research Building, the department’s activities encompass the study of neurological development, with implications for disorders ranging from Sudden Infant Death Syndrome to Alzheimer’s disease.

Department faculty are focused on elucidating fundamental mechanisms of brain function using model genetic systems and unconventional models, such as the monarch butterfly. These research results will add to the understanding of the roles of genes and their protein products in normal neuronal and glial function, with the goal of finding innovative therapies to prevent, combat, and cure neurological and psychiatric disorders.

Neurobiology Faculty

Professor and Chair
Higgins Family Professor of Neuroscience
Steven M. Repport, BS, Nebraska, 1973; MD, 1973; MA, Harvard, 1993

Professor and Vice Chair
Vivian Budnik, BS, Chile, 1983; PhD, Brandeis, 1988

Professor
David R. Weaver, BS, Michigan State, 1981; PhD, 1985

Associate Professors
Patrick Emery, License, Geneva, 1990; Diploma, 1992; PhD, 1996
Tzumin Lee, MD, National Yang-Ming Medical College, 1989; MS, 1992; PhD, Johns Hopkins, 2003
Scott Waddell, BSc, Dundee, 1991; PhD, London, 1996

Assistant Professors
Howard Hughes Medical Institute
Marc R. Freeman, BS, Eastern Connecticut State, 1993; PhD, Yale, 1995

Research Assistant Professor
Takeshi Awasaki, BS, Hokkaido, 1990; MS, 1992; PhD, 1995
The Department of Neurology acquaints students with diseases that affect the nervous system and equips them with fundamental skills in clinically relevant neuroscience, neurologic diagnosis and management. Because neurological disorders are common among patients in virtually every medical specialty, this instruction is designed for students entering all branches of medicine.

During the first year, medical students learn neuro-anatomy and physical diagnosis in courses that stress clinical correlations of neuro-anatomic principles. A second-year neuroscience course, Mind, Brain and Behavior II, introduces students to nervous system disorders, emphasizing observational methods, regional problems, specific diseases and clinical patterns. Clinical neurological problems also are explored in the second year.

The major portion of clinical neurology instruction is carried out during the fourth-year Neurology clerkship. Students spend one month on the inpatient, consult or ambulatory service at one of the teaching hospitals affiliated with the Medical School. Seminars and lectures discussing major clinical problems are conducted weekly and elective programs are offered in the department’s clinical and basic research laboratories.

Faculty basic research interests include the neurophysiology of vision; the biology of respiratory and circulatory control; the molecular genetics, structure and function of nerve and muscle ion channels; approaches to understanding the causes and therapies for neurodegenerative disorders, with an emphasis on ALS and Alzheimer’s disease, the molecular basis of circadian rhythms and neural stem cell biology. Clinical research interests include the neurology of aging and Alzheimer’s disease, epilepsy, Parkinson’s disease, multiple system atrophy, multiple sclerosis, neuromuscular disorders and cerebrovascular disease.

In 2006, the department received national recognition by the Association of University Professors of Neurology (AUPN) for the highest portion of medical school class members entering neurology, as compared to all other medical schools in the United States.
Associate Professors

Lloyd M. Alderson, MD, UMass Worcester, 1988
Lawrence J. Hayward, BS, Washington, 1982; PhD, Baylor, 1987; MD, 1989
Sandra L. Horowitz, BS, McGill, 1972; MD, 1976
John Landers, BS, Rensselaer, 1990; PhD, Pennsylvania, 1995
Joan M. Swearer, BA, Macalester, 1979; MA, New School for Social Research, 1985; PhD, 1991

Clinical Associate Professors

Isabella R. Bella, BA, Bryn Mawr, 1985; MD, Pittsburgh, 1989
Neeta Garg, MBBS, S.M.S. Medical College, Jaipur, 1987
Ann L. Mitchell, BA, Radcliffe, 1974; MD, Mount Sinai, 1978
Thomas F. Mullins III, BA, Holy Cross, 1967; MD, Jefferson Medical, 1971
Jayant G. Phadke, MD, Mahatma Ghandi, 1977; MD, Aberdeen, 1986
Catherine A. Phillips, BA, Oberlin, 1979; MD, California/San Francisco, 1983
Paula D. Ravin, BA, Yale, 1975; MD, Wayne State, 1980
William A. Tosches, BA, Holy Cross, 1967; MD, Loyola, 1971

Assistant Professors

Daryl Bosco, BS, SUNY Binghamton, 1996; PhD, Brandeis, 2003
Eileen M. Deibert, BS, Trenton State, 1985; MD, Temple, 1993
Steven P. Donhowe, BA, Carleton, 1972; MD, Iowa, 1979
Premananada Indic, PhD, Cochin University of Science & Technology, 2001
Gary R. Keilson, BS, UMass Amherst, 1974; MS, Harvard, 1976; MD, Virginia, 1987
Alexander Kloman, BA, Dartmouth, 1980; MD, 1986
Hoi Pang Low, BS, Campbell, 1982; MS, Georgia, 1990; PhD, 1996
Andrzej Przybyszewski, MSc, Warsaw Technical, 1973; MA, Warsaw, 1978; PhD, Warsaw Medical Academy, 1981
Elisabeth Salisbury, PhD, SUNY, 1993
G. Thomas Stowe, BS, Eartham, 1965; MD, Tufts, 1969
Ashutosh Tiwari, BS, All India Institute of Medical Sciences, 1991; MS, Jamia Millia Lamia, 1993; PhD, Jawaharlal Nehru, 1999
Laurence J. Ufford, MD, Mount Sinai, 2002
Marina Zaretskya, MD, Kiev State, 1986

Clinical Assistant Professors

Raphael Carandang, BS, Ateneo De Manila, 1991; MD, East Ramon Magaysay Memorial Medical Center, Philippines, 1995
Brian Dessureau, BA, Colgate, 1993; MA, Clark, 1997; PhD, 2001
Mark Gibson, BA, Florida, 1993; MD, Mayo Medical School, 2000
Wiley Hall, BS, Lehigh, 1996; MD, MCP-Hahnemann, 1999
Carolina Ionete, MD, Carol Davila, Bucharest, 1989; PhD, 2002
Jane Morris, BA, Smith College, 1996; MD, Oregon Health Sciences, 2001
Susanne Muehschlegel, MD, Philipps University, Germany, 2002
Shashidhara Nanjundaswamy, MBBS, Bangalore Medical College, 1985
Jaishree Narayanan, MBBS, Madras, 1989; PhD, Illinois/Urbana, 1994
Peter Novak, MD, Komensky, Slovak Republic, 1986; PhD, Czech Academy of Sciences, 1995
Andreja Packard, MD, Zagreb, 1991; PhD, UMass Amherst, 1999
Lan Qin, MD, Capital Institute of Medicine, 1986; PhD, Indiana, 1995
Muhammad Ramzan, MD, Sindh, 1989
Ellen Salurand, BS, Toronto, 1979; MBA, York, 1983; MD, Albany Medical, 1992
Naren B. Sodha, MBBS, Bombay, 1970
Mikhail Vydrin, MD, First Moscow, 1972; PhD, 1980

Instructors

Shirin Haddady, MD, Tehran, 1992
William H. Stoothoff, BA, Colorado, 1998; PhD, Alabama, 2004
Banu Sundar, MBBS, Sri Ramachandra Medical College, India, 1993

Affiliates

Zahra Ayub, MBBS, Fatima Jinnah, 1987
Elizabeth W. Henrikson, BA, Barnard College, 1974; MEd, Columbia, 1975; PhD, UMass Amherst, 1988
Herbert G. Markley, BA, Johns Hopkins, 1968; MD, Maryland, 1972