Claudia Kappen, Associate Professor, Dr.rer.nat., University of Cologne. Role of transcriptional regulation in embryonic development; function and evolution of homeobox genes.

M. Patricia Leuschen, Associate Professor, Ph.D., UNMC. Neuroimmunology of multiple sclerosis.

Y. J. Ma, Assistant Professor, Ph.D., Oregon Health Science University. Mechanisms of reproductive aging.

Robert B. Norgren, Jr., Associate Professor, Ph.D., Columbia University. Developmental neurobiology.

Ernest D. Prentice, Professor, Associate Vice Chancellor, Ph.D., UNMC. Teaching methodology.

Jorge F. Rodriguez-Sierra, Professor, Ph.D., Rutgers University. Behavior; sexual differentiation of the brain.

Thomas H. Rosenquist, Professor and Vice Chancellor for Research, Ph.D., Louisiana State University. Role of neural crest in development of the major arteries, neural tube defects.

J. Michael Salbaum, Assistant Professor and Director, Mouse Genome Engineering Core Facility, Ph.D., Heidelberg. Genetic analysis of embryonic development.

J. Graham Sharp, Professor, Ph.D., University of Birmingham. Stem cell biology and tissue repair.

James D. Shull, Ardith and Anna Von Housen Professor and Chairman, Ph.D., University of Wisconsin. Identification of genetic determinants of cancer susceptibility.

Gordon L. Todd, Associate Professor, Ph.D., Medical College of Georgia. Teaching technology; Virtual histology.

James B. Turpen, Professor, Ph.D., Tulane University. Developmental immunobiology of xenopus.

J. G. van Waes, Assistant Professor, DVM, Ph.D., Texas A&M University. Cellular mechanisms generating craniofacial defects.

Courtesy Faculty:

Timothy Baxter, M.D., University of Colorado. Vascular biology.

Keith Johnson, Ph.D., University of Minnesota. Cadherin mediated cell adhesion.

Rajkumar V. Patil, Ph.D., University of Poona. Retinal ganglion cell death.

Samuel J. Pirruccello, M.D., UNMC. Hematopathology.

Toshimichi Shinohara, Ph.D., University of Kyoiku. Study of lens crystalline and retinal arrestin promoter & gene.

Margaret Wheelock, Ph.D., University of Minnesota. Cadherin mediated cell adhesion.
The Graduate Program in Genetics, Cell Biology and Anatomy is designed for qualified students who wish to pursue research and teaching careers in genetics, cell biology and the anatomical sciences. The program leads to the M.S./Ph.D. degrees.

Program of Study

Research programs in the Department of Genetics, Cell Biology and Anatomy include the broad areas of cell biology, developmental biology, genetics, neuroscience and innovative teaching technologies. Therefore, the department is involved in teaching a series of required core courses in these areas. Biomedical problems that are being addressed by investigators in this department include cancer; heart diseases; effects of radiation, drugs, and cytokines on cells; congenital abnormalities and reproductive biology.

Research Facilities

The Department of Genetics, Cell Biology and Anatomy is housed in Durham Research Center, the Munroe-Meyer Institute, Lied Transplant Center and Wittson Hall, and makes use of a wide range of resources available on the Medical Center campus. State of the art facilities are available at UNMC for virtually any kind of biomedical research, including contemporary cell and molecular biology. The department also participates in the M.D., Ph.D. scholar program and other interdepartmental programs on campus.

The department is also the home for several core facilities, such as Electron Microscopy, Microarray, Molecular Phenotyping, Mouse Genome Engineering and Virtual Microscopy. These facilities serve as central facilities for the entire campus.

Applying

Applicants must have a good academic record and a bachelor’s degree in biology, chemistry or a related discipline. The Graduate Record Examination’s General Test (verbal, quantitative, and analytical) is required by the Department of Genetics, Cell Biology and Anatomy. The deadline for consideration for financial aid is March 15th of each year. Additional information and application materials can be obtained from:

Dr. Shantaram S. Joshi, Chairman
Genetics, Cell Biology & Anatomy Graduate Program
University of Nebraska Medical Center
986395 Nebraska Medical Center
Omaha, NE 68198-6395
Phone: (402) 559-4165 or (402) 559-4030
Fax: (402)559-7328 E-mail: ssjoshi@unmc.edu

Financial Aid

Assistantships are available for qualified candidates at the NIH set stipend level. Assistantships include waiver of tuition and payment of all fees.

Faculty

Greg D. Bennett, Associate Professor, Ph.D., Washington State University. Environmentally induced birth defects.
Robert T. Binhammer, Professor, Ph.D., University of Texas. Head of Gross Anatomy and Neuroanatomy teaching.
David A. Crouse, Professor, Associate Vice Chancellor, Ph.D., University of Iowa. Regulation of hematopoietic stem cell compartment; Responsible for conduct in research.
Michael Dalton, Assistant Professor, Ph.D., University of Nebraska Medical Center. Cell biology.
Karen A. Gould, Assistant Professor, Ph.D. University of Wisconsin. Estrogen signaling in tumorigenesis and autoimmunity.
Shantaram S. Joshi, Professor, Ph.D., University of Bombay. Functional genomics and cellular/immunotherapy of B cell malignancy.