Comparative Biomedical Sciences

Course offerings and research topics currently include, but are not limited to: cell biology, genomics, infectious diseases, developmental biology, immunology, cardiology, pharmacokinetics, oncology, toxicology, gastroenterology, neuroscience, reproductive physiology, biotechnology, microbiology, aquatic/wildlife biology, biomedical engineering, endocrinology, molecular biology, pulmonary biology, epidemiology, population medicine, health systems monitoring, transplantation and radiology.

Admission Requirements

All applications are reviewed by the Graduate Studies Committee of the CBS Program, composed of faculty members representing each area of the graduate program and a graduate student representative. Scores from the GRE are required for admission by all applicants except for applicants with a DVM degree. Candidates who do not have a DVM degree must have a baccalaureate degree or advanced degree from a college or university recognized as standard by a regional or general accrediting agency. Students with a 3.0 (on a 4.0 scale) undergraduate or DVM curriculum with appropriate course background will be considered for admission.

Doctoral Degree Requirements

Credit hour requirements for the Ph.D. degree are determined by the graduate student's committee with approval of the Director of Graduate Programs and the Graduate School.

Student Financial Support

Research assistantships are awarded to qualified candidates on the competitive basis by the College. These are for 12-month periods, and stipends are competitive with those of other programs. These positions are funded by the grants of individual faculty members and the state appropriations to the College and departments.

Other Relevant Information

The program is organized as seven areas of concentration which include: cell biology, immunology, population medicine, infectious diseases, pathology, pharmacology, and neuroscience. These provide extensive interdisciplinary training and maintain a highly effective liaison with graduate programs in other colleges of the university, as well as those of nearby Duke University and the University of North Carolina at Chapel Hill.

Degrees

- Comparative Biomedical Sciences (MS) (http://catalog.ncsu.edu/graduate/veterinary-medicine/comparative-biomedical-sciences/comparative-biomedical-sciences-ms/)
- Comparative Biomedical Sciences (PhD) (http://catalog.ncsu.edu/graduate/veterinary-medicine/comparative-biomedical-sciences/comparative-biomedical-sciences-phd/)
- Comparative Biomedical Sciences (PhD): Cell Biology Concentration (http://catalog.ncsu.edu/graduate/veterinary-medicine/comparative-biomedical-sciences/comparative-biomedical-sciences-phd-cell-biology-concentration/)
- Comparative Biomedical Sciences (PhD): Immunology Concentration (http://catalog.ncsu.edu/graduate/veterinary-medicine/comparative-biomedical-sciences/comparative-biomedical-sciences-phd-immunology-concentration/)
- Comparative Biomedical Sciences (PhD): Infectious Diseases Concentration (http://catalog.ncsu.edu/graduate/veterinary-medicine/comparative-biomedical-sciences/comparative-biomedical-sciences-phd-infectious-diseases-concentration/)
- Comparative Biomedical Sciences (PhD): Neurosciences Concentration (http://catalog.ncsu.edu/graduate/veterinary-medicine/comparative-biomedical-sciences/comparative-biomedical-sciences-phd-neurosciences-concentration/)
- Comparative Biomedical Sciences (PhD): Pathology Concentration (http://catalog.ncsu.edu/graduate/veterinary-medicine/comparative-biomedical-sciences/comparative-biomedical-sciences-phd-pathology-concentration/)
- Comparative Biomedical Sciences (PhD): Pharmacology Concentration (http://catalog.ncsu.edu/graduate/veterinary-medicine/comparative-biomedical-sciences/comparative-biomedical-sciences-phd-pharmacology-concentration/)
- Comparative Biomedical Science (Minor) (http://catalog.ncsu.edu/graduate/veterinary-medicine/comparative-biomedical-sciences/comparative-biomedical-science-minor/)

Faculty

Full Professors
Kenneth B. Adler
Glen William Almond
Kevin L. Anderson
Christopher M. Ashwell
Ronald E. Baynes
Adam Joseph Birkenheuer
Anthony T. Blikslager
James C. Bonner
Russell J. Borski
Matthew Breen
Edward Bealmear Breitschwerdt
Ke Cheng
Maria T Correa
Paula J Cray
Rocio Crespo
Frederick J. Fuller
John E. Gadsby
Troy Ghashghaei
Isabel M. Gimeno
John R. Godwin
Jody L. Gookin
Bruce Hammerberg
Lee-Ann Jaykus
Samuel L. Jones
Matthew D. Koci
Seth William Kullman
Duncan X. Lascelles
Scott M. Laster
Jerry M. Law
Keith E. Linder
Carolyn Jane Mattingly
Kathryn Montgome Meurs
Paul Edward Mozdziak
Natasha J. Olby
Mark G. Papich
Heather Patisaul
Jorge A. Piedrahita
Emilie Francesca Rissman
Philip L. Sannes
Barbara Sherry
Robert Charles Smart
Geoffrey W. Smith
Michael K. Stoskopf
Siddhartha Thakur
Jeffrey A. Yoder

Paul R. Hess
Megan E. Jacob
Cristina Lanzas
Sara K. Lyle
John Edward Meitzen
Nanette M. Nascone-Yoder
Michael Warren Nolan
Monique Danielle Pairis-Garcia
Xinxia Peng
Antonio Planchart
Marcelo Rodriguez-Puebla
Lauren V. Schnabel
Michael L. Sikes
Barrett D Slenning
Susan T. Tonkonogy

Assistant Professors
Belinda Sena Akpa
Tal Ben-Horin
Yevgeny Brudno
Benjamin John Callahan
Elisa Crisci
Glenn Paul Cruse
Christopher Matthew Dekaney
Liara M. Gonzalez
Margaret Elizabeth Gruen
Tobias Ernst Kaeser
Albert Jun Qi Keung
Raveendra Rangarao Kulkarni
Caroline Laplante
Elizabeth Lucas
Jennifer Ann Luff
Gustavo Machado
Kurt Marsden
Kelly Ann Meiklejohn
Kristen Michele Messenger
Santosh Kumar Mishra
Mary Katherine Sheats
Casey Michelle Theriot
Laurianne Chantal Van Landeghem

---

**Practice/Research/Teaching Professors**

Ricardo G. Maggi
Thierry Jean Marie Olivry

---

**Emeritus Faculty**

Harold J. Barnes
Talmage T. Brown Jr.
John Michael Cullen
Lloyd Norman Fleisher
Oscar J. Fletcher Jr.
Sarah Y. Gardner
Marlene L. Hauck
Cynthia L. Hemenway
Suzanne Kennedy-Stoskopf
Michael Green Levy
David H. Ley
Nancy A. Monteiro-Riviere
William M. Morrow
Paul E. Orndorff
W. Rich Redding
Jim E. Riviere
Malcolm C. Roberts
Barbara Lynn Sherman
Clifford Richard Swanson
Donald E. Thrall

---

**Adjunct Faculty**

Jennifer Lynn Davis
Janice A. Dye
Johanna Rebecca Elfenbein