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 not required for admission. 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 and fellowships 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, neuroscience, infectious diseases, pathology, pharmacology, and population and global health. 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 (MS): Food Animals Concentration (PSM) (http://catalog.ncsu.edu/graduate/veterinary-medicine/comparative-biomedical-sciences/food-animals-psm-concentration/)
- 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 Sciences (PhD): Population and Global Health (http://catalog.ncsu.edu/graduate/veterinary-medicine/comparative-biomedical-sciences/comparative-biomedical-sciences-phd-population-med-vet-public-health-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
Yogesh Saini
Philip L. Sannes
Barbara Sherry
Robert Charles Smart
Geoffrey W. Smith
Joshua Stern
Michael K. Stoskopf
Siddhartha Thakur
Jun Tsuji
Jeffrey A. Yoder

Associate Professors

Petra Bizikova
Luke B. Borst
Nicolas Emile Buchler
Jonathan E. Fogle
Derek M. Foster
Michala de Linde Henriksen
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
Michael Sano
Lauren V. Schnabel
Michael L. Sikes
Barrett D Slenning
Susan T. Tonkonogy
Gregory Wilkerson

Assistant Professors

Belinda Sena Akpa
Abigail Armwood
Christa Baker
Tal Ben-Horin
Eric Robert Brooks
Yevgeny Brudno
Benjamin John Callahan
Elisa Crisci
Glenn Paul Cruse
Christopher Matthew Dekaney  
Liara M. Gonzalez  
Margaret Elizabeth Gruen  
Christopher Daniel Guilluy  
Jennifer Lauren Halleran  
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  
Hiroyuko Mochizuki  
Annie Oh  
Karen Min-Jee Park  
Kursten Veronica Pierce  
Michael Rahe  
Sarah Kathleen Rhea  
Breanna Jo Sheahan  
Mary Katherine Sheats  
Sarah Elizabeth Shelton  
Thiago Vilar Silva  
Panchan Sitthicharoenchai  
Eduardo Javier Lopez Soto  
Casey Michelle Theriot  
Laurianne Chantal Van Landeghem  
Jose Augusto Len Yin  

Ke Huang  
Ricardo G. Maggi  
Thierry Jean Marie Olivry  
Erin Frey Pearson  

Adjunct Faculty  
Hannah Atkins  
Jennifer Lynn Davis  
Janice A. Dye  
Johanna Rebecca Elfenbein  
Holly Roessner  
Elizabeth Caitlin Rose  
Alexander Tran  

Teaching Assistant Professor  
Kristen Sullivan  

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  

Practice/Research/Teaching Professors  
Alix Berglund  
Phuong-Uyen Cao Dinh
Barbara Lynn Sherman
Clifford Richard Swanson
Donald E. Thrall