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-cellbiology-concentration/)

- Comparative Biomedical Sciences (PhD): Immunology Concentration (http://catalog.ncsu.edu/graduate/veterinary-medicine/comparativebiomedical-sciences/comparative-biomedical-sciences-phdimmunology-concentration/)
- Comparative Biomedical Sciences (PhD): Infectious Diseases Concentration (http://catalog.ncsu.edu/graduate/veterinary-medicine/ comparative-biomedical-sciences/comparative-biomedical-sciencesphd-infectious-diseases-concentration/)
- Comparative Biomedical Sciences (PhD): Neurosciences
 Concentration (http://catalog.ncsu.edu/graduate/veterinary-medicine/ comparative-biomedical-sciences/comparative-biomedical-sciencesphd-neurosciences-concentration/)
- Comparative Biomedical Sciences (PhD): Pathology Concentration (http://catalog.ncsu.edu/graduate/veterinary-medicine/comparativebiomedical-sciences/comparative-biomedical-sciences-phdpathology-concentration/)
- Comparative Biomedical Sciences (PhD): Pharmacology Concentration (http://catalog.ncsu.edu/graduate/veterinary-medicine/ comparative-biomedical-sciences/comparative-biomedical-sciencesphd-pharmacology-concentration/)
- Comparative Biomedical Sciences (PhD): Population and Global Health (http://catalog.ncsu.edu/graduate/veterinary-medicine/ comparative-biomedical-sciences/comparative-biomedical-sciencesphd-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 Shobhan Gaddameedhi 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
Lisa Gamsjaeger
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

Practice/Research/Teaching Professors

Alix Berglund Phuong-Uyen Cao Dinh 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

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W. Rich Redding

Jim E. Riviere

Malcolm C. Roberts

Barbara Lynn Sherman

Clifford Richard Swanson

Donald E. Thrall