Comparative Biomedical Sciences

The Comparative Biomedical Sciences Graduate Program is a multidisciplinary graduate program with faculty who are employing state-of-the-art techniques to address interesting scientific problems in the basic and applied biomedical sciences. The Comparative Biomedical Sciences Graduate Program confers Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) degrees.

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.

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.

Comparative Biomedical Sciences Program Website (https://cvm.ncsu.edu/education/comparative-biomedical-sciences/)

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.

Applicant Information

- **Delivery Method:** On-Campus
- **Entrance Exam:** None
- **Interview Required:** None

Admission Deadlines

- **Fall:** December 1 or by special permission of the Director
- **Spring:** None
- **Summer:** None

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/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-sciences-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
Amit Sharma
Michael L. Sikes
Barrett D Slenning
Amol Suryawanshi
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
Kelley Varner
Jose Augusto Len Yin
Jian Zhang

Practice/Research/Teaching Professors
Alix Berglund
Phuong-Uyen Cao Dinh
Ke Huang
Ricardo G. Maggi
Thierry Jean Marie Olivry
Erin Frey Pearson
Cynthia Robveille

Teaching Assistant Professors
Emily Martin
Kristen Sullivan

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