About Us

The California National Primate Research Center (CNPRC) is a part of the National Primate Research Centers Program and is dedicated to improving human and animal health. The CNPRC is one of seven such centers supported by the National Center for Research Resources, a division of the National Institutes of Health (NIH).

The National Primate Research Centers are a unique resource for investigators studying human health and disease, offering the opportunity to assess the causes of disease, and new treatment methods in nonhuman primate models that closely recapitulate humans. Research performed at the CNPRC and other National Primate Research Centers provides necessary information before proceeding to clinical trials in humans, leading to new drugs, therapies and surgical procedures that benefit human health and quality of life.

The Respiratory Diseases Research Unit is one of four research units within the CNPRC. Their mission is to define the cellular and molecular mechanisms of respiratory diseases. Research themes include lung development, environmental toxicity, mucosal immunology and infectious disease.

Contacts:

Respiratory Diseases Unit:
Lisa Miller, Ph.D.
lmiller@ucdavis.edu
530-754-7546

Pulmonary Function Laboratory:
Ed Schelegle Ph.D.
esschelegle@ucdavis.edu
530 752 1177

Inhalation Exposure Facility:
pcexfac@ucdavis.edu
530-752-0447

Computational Imaging Core:
CICtechsupport@primate.ucdavis.edu
530-752-2368
Research using Translational Models of Human Lung Disease

Research using nonhuman primate models of lung disease, may be conducted by independent investigators, with the assistance of CNPRC Service Cores. Scientists and staff associated with each of the Cores provide consultation in experimental design, sample collection, and data analysis, and offer assays that utilize species-specific reagents wherever possible. Core scientists can also work with users to develop new assays to meet research needs.

Inhalation Exposure Core
This core facility has extensive experience in exposures of oxidant gases, reactive gases, liquid or particulate aerosols, mixed gas and aerosols, allergens and microbes. In addition to exposing both small and large species, studies can be conducted on cell cultures.

Clinical Laboratory/Immunology and Pathogen Detection Resources Core
Our Clinical Laboratory/Immunology and Pathogen Detection Resources Core provides routine services including hematology, clinical chemistry, immunology, flow cytometry and pathogen detection. In addition to these services, unique reagents can be made available, including biological specimens, allergens, viral stocks, DNA and species-specific reagents.

Pulmonary Function Testing Laboratory
The Pulmonary Function Lab provides measurements of baseline airway resistance and static lung mechanics, responsiveness testing to allergens, functional responsiveness to aerosol therapies and CT scans with pulmonary mechanics.

Multimodal Imaging Core
The Multimodal Imaging Core can provide state-of-the-art in vivo and in vitro imaging methods (microPET, PET-CT, optical; ultrasound; light, fluorescent and confocal microscopy) combined with the latest stereological methods to quantify morphologic changes associated with the process under study.