Companion animal models of inflammation and itch

Research emphasis:

Dr. Baeumer’s research focus is allergic inflammatory skin disease, most notably atopic dermatitis. His research group focuses on both the inflammatory aspect of disease as well as the “perception of itch,” i.e. the behavioral aspects of disease that can be determinative of patient outcomes. Using mouse models of allergic dermatitis, he evaluates disease mechanism and intervention through evaluation of inflammatory cell influx, immunohistochemistry and itch behavior by combining traditional basic science techniques with novel video monitoring. He is particularly interested in the role of antigen presenting cells in disease pathogenesis. Through collaboration with leading veterinary dermatologists, Dr. Baeumer utilizes atopic dermatitis dogs as a model for human disease.

Application:

- Atopic dermatitis
- Immune modulation
- Itch

Collaboration potential:

- In vivo/in vitro testing of novel drugs
- Testing novel formulations
- Evaluate novel pathways of allergy and itch

Selected publications:


