

### ***Call for papers on the pathology of humanized mouse models***

Over the last decade, the use of chimeric humanized mouse models engrafted with a variety of tissues and cells of human origin has become one of the experimental paradigms most frequently used in translational research. This has been possible thanks to the establishment of genetically engineered mice with severely impaired innate and adaptive immune systems, such as NSG or NOG mice, offering a highly permissive recipient environment for the functional integration of the xenotransplanted human components.

Humanized mouse models have been successfully employed for diverse experimental applications, including patient-derived tumor xenograft (PDX) models, preclinical testing of cellular immunotherapies, and other non-neoplastic human diseases. However, a series of unintended post-transplant disorders have been characterized in recent years. These disorders are clinically relevant for mouse recipients, limiting their usage, especially for longer-term studies, and represent potential experimental confounders for interpreting preclinical data.

Given the increasing importance of humanized mice, raising awareness of inherent limitations and unintended consequences of human chimerism is paramount to better understanding the preclinical relevance and translational potential of these models. To this aim, veterinary and comparative pathologists working with immunocompromised and humanized mouse models are uniquely positioned to help define the spectrum of experimentally induced and spontaneous (infectious and noninfectious) conditions affecting these chimeric animals through intentional pathological characterization.

Therefore, the journal *Veterinary Pathology* is issuing a call for papers for a special issue on "The Pathology of Humanized Mouse Models" and encourages submission of primary research papers.

*Veterinary Pathology* (<http://journals.sagepub.com/home/vet>) is the journal of the American College of Veterinary Pathologists, the European College of Veterinary Pathologists, and the Japanese College of Veterinary Pathologists.

Research papers for the special issue should focus on one or more of the following aspects:

- (1) Description of naturally occurring diseases (infectious and noninfectious) of immunocompromised mouse strains used for humanization.
- (2) Description of post-transplant experimentally induced conditions affecting immunocompromised mice used for humanization.
- (3) Assessment of the pathology endpoints in preclinical studies using mouse recipients for human cellular immunotherapies.
- (4) Approaches to study the nature and extent of chimerism in humanized mice.
- (5) Beyond humans, description of chimeric mouse models xenotransplanted with tissues or cells from non-human species.
- (6) Beyond mice, description of humanized models employing non-murine immunocompromised animals as recipients.

Interested authors are advised to send a short abstract summary or prospectus to the guest editors, Dr. Charles Assenmacher ([chasse@vet.upenn.edu](mailto:chasse@vet.upenn.edu)), Dr. Enrico Radaelli ([enrada@vet.upenn.edu](mailto:enrada@vet.upenn.edu)), and Dr. Pedro Ruivo ([prruivo@ucdavis.edu](mailto:prruivo@ucdavis.edu)) before submitting a manuscript. Please submit abstracts for consideration by Monday, September 30, 2024. Upon review, corresponding authors will be contacted via e-mail regarding the status of their proposal(s) and the next steps.

*Veterinary Pathology* publishes basic and applied research involving domestic, laboratory, and zoo animals, wildlife, poultry, and other animals. The scope of the journal includes novel descriptions of pathologic changes, clinical pathology and clinical-pathologic correlations for natural and experimental diseases of animals, investigations of the molecular and cellular mechanisms of disease (general pathology) and other aspects of pathogenesis, descriptions and use of animal models of human disease, and studies of pharmaceutical and environmental hazards. Manuscripts considered for publication must:

1. have significant importance to animal and/or human health,
2. include new knowledge supported by valid data,
3. address disease mechanisms (pathogenesis, pathophysiology), or pathologic findings in important new or emerging diseases or clinicopathologic correlations,
4. AND be of sufficiently broad interest to be of substantial value to veterinary pathologists.