

# Humanized Mouse Program

## Why Choose Us?



- ✚ Experience and Expertise
- ✚ Customization
- ✚ Assay/Protocol development
- ✚ Project tracking

## Get your Research Grant Funded

Human-mouse chimeric models of the human immune system provide an excellent platform to perform translational and preclinical research.

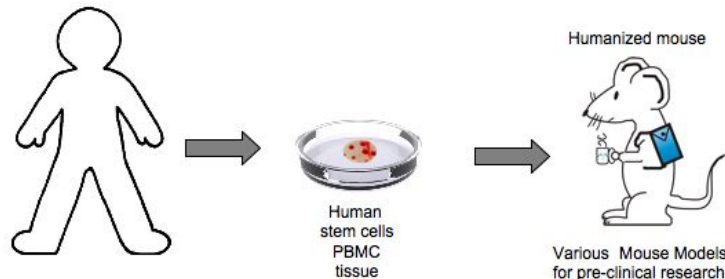
Dr. Wayne Marasco's laboratory in the Department of Cancer Immunology AIDS, DFCI, has established and characterized various *in vivo* mouse models of the human immune system.

Ongoing research has explored the feasibility of using these models for studying human immune responses in the context of immunization/infection and engineering of fully humanized antibodies.

Customized Hu-mouse models are in development to suit an array of research needs – from HIV infection models to regenerative medicine.



"Get your wheels spinning and give your research the 'Hu-mouse edge'."



## Mouse Models

Different human (Hu)-mouse chimeric models reported thus far in the literature can be broadly categorized into:

- **Hu-PBL-SCID:** where various immunodeficient mouse strains (NOD/SCID, NOD/SCID/gc<sup>-/-</sup>, Balb/c-Rag2<sup>-/-</sup>gc<sup>-/-</sup>) are repopulated with human peripheral blood lymphocytes (PBL).
- **SCID-Hu models (BLT):** where sub-renal implantation of human tissues are performed with the co-delivery of autologous scid repopulating cells.
- **Customized models:** We can discuss options that will best suit your research needs.
- **Hu-SRC-SCID:** where similar mouse strains are injected with scid repopulating cells (SRC), e.g., CD34<sup>+</sup> hematopoietic stem cells (HSC) isolated from human tissue.



Jump In...

## Eligibility

The Marasco Lab has been performing humanized mouse research since 2007. In June 2011, we launched the Humanized Mouse Program and opened our expertise to the research community. The humanized mouse program is open

to all academic institutions and corporate collaborators in the form of collaborative or sponsored research programs. We will help you every step of the way from the design and animal protocols to results.



Talk with the  
Experts  
~  
FREE  
Consultation

## About Us

We have over 4 years of experience in constructing several different types of humanized mouse models, some of which are described on our website and in our papers, others are being prepared for publication and/or are under development. Our experienced research staff can also customize the models to meet specific investigator needs. The vast majority of our stem cell studies are with adult human stem cells because that is our sweet spot. However iPSCs

and hESCs cells can easily be incorporated as well. We have active research programs in infectious diseases, tissue injury/regenerative stem cell medicine and in hematopoietic/immune system development. Importantly, we also have set up the infrastructure including broad animal protocols experienced research and surgical staff to initiate and execute research collaborations.

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## Confidentiality

We recognize the importance of strict confidentiality. We can initiate a Non-Disclosure Agreement (NDA) to begin detailed discussions about a specific research collaboration. Our collaborators can follow the progress of their project through a password protected extranet site.



## Getting Started

Investigators interested to use the humanized mice for their projects are invited to email and/or call us to discuss the project. After mutual agreement a short research plan (2 page maximum) should be submitted at least six months prior to the expected start date allowing for protocol development and Institutional Animal Care and Use Committee (IACUC) approval, animal

procurement and reconstitution time. We DO NOT stockpile humanized mice, they are constructed by order only. Proposals should include objectives, experimental design and the rationale behind the use of humanized mice. A funding source also needs to be identified. Finalized projects will be scheduled pending IACUC approval of the specific experiments proposed.

*We're on the Web!*

*See us at:*

**[www.Humouse.org](http://www.Humouse.org)**