Advancement of In-vivo imaging technology -How to support the top researcher-



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The research method utilizing light as *in-vivo* imaging has benefits not only for scientifically observing the symptom occurring *in vivo* directly from our eyes but for giving us a chance to observe noninvasively experimental animals without sacrifice death from ethical point of view. I have been working on rats physically larger than mice to generate genetically-modified rats. The Luciferase Tg rat has been paid more attention from all over the world that it has been acting as an *in vivo* imaging tool without sacrificing the tissue or organ transplanted recipient animals. We should share these state-of-the-art tools internationally if we take contributions to further more patients into consideration.

The sharing of genetically-modified rats is not good enough to give a fruit to scientific research results. I have a dream to give a cutting-edge treatment to patients suffering from pain globally as soon as available through newly developed technology of mine on luminescent substances by sharing it with researchers in Japan and overseas.

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Professor Yasuteru Urano

Graduate School of Medicine and Faculty of Medicine, The University of Tokyo http://cbmi.m.u-tokyo.ac.jp/eng/research.html
Development of New Luminescence probe.

Professor Takashi Murakami

Faculty of Pharmacy, Takasaki University of Health and Welfare, Gunma, Japan http://www_takasaki-u.ac.jp/p_yaku/1577/
Generation of the Luciferase-expressing Human Cancer Gell Resource

Professor Yoji Hakamata

Department of Basic Science, School of Veterinary Nursing and Technology, Faculty of Veterinary Science, Nippon Veterinary and Life Science University, Tokyo, Japan

http://www.nvlu.ac.jp/

Handling of Cell and genetically modified animal

Dr. Shuang-Bai Zhou

Department of Plastic and Reconstructive Surgery Shanghai Ninth People's Hospital

http://en.sjtu.edu.cn/

Development of new treatment method in fat regeneration

Professor Shin Enosawa

Division of Advanced Medicine, Clinical Research Center, National Center for Child Health and Development, Tokyo, Japan

http://www.ncchd.go.jp/research.php#

Preparation of hepatocyte and lymphocytes obtained from Luc Tg rats