



Journal of Diabetes Research

Special Issue on  
**Animal Models of Diabetes and Metabolic Disease  
2014**

CALL FOR PAPERS

Metabolic diseases including diabetes (and its complications), obesity, dyslipidemia, and hypertension are common diseases and frequently occur in combination. To study these diseases, many hereditary animal models have been reported, such as ob/ob mice, db/db mice, KK-Ay mice, Goto-Kakizaki (GK) rats, Zucker diabetic fatty (ZDF) rats, Otsuka Long-Evans Tokushima-fatty (OLETF) rats, spontaneously diabetic Torii (SDT) rats, spontaneously hypertensive rats (SHR), Watanabe heritable hyperlipidemic (WHHL) rabbits, and postprandial hypertriglyceridemia (PHT) rabbits. Chemical (e.g., streptozotocin (STZ) and alloxan) and diet (e.g., high sucrose, high fat, and high cholesterol) induced experimental animal models have been used generally for a long time, and genetically modified animals have also been used widely in recent decades. Although molecular biological techniques have become more important to clarify the mechanism of the diseases, the importance of animal model has not changed. The animal models are needed to reveal the pathophysiology of metabolic diseases, and the approach still provides helpful information to develop new therapies and drugs for these diseases. In this special issue, we aim at providing information on recent beneficial experimental animal models in this field, and up-to-date information on the pathophysiology, therapeutic drugs, and diagnosis of metabolic diseases using valuable animal models is also welcome.

We invite investigators to contribute original research as well as review articles that will stimulate the continuing efforts towards understanding the pathophysiology, developing new drugs, and creating new approaches to treat these diseases. We are particularly interested in articles that describe the recently developed experimental animal models, of both hereditary and genetically modified types. Comparing or suggesting the best models for each disease is also encouraged.

Potential topics include, but are not limited to:

- ▶ Animal models to evaluate and understand the pathophysiology of diabetes and other metabolic diseases
- ▶ New aspects of animal models to treat metabolic syndrome
- ▶ Pathophysiology and interventional studies of diabetes, obesity, dyslipidemia, arteriosclerosis, and hypertension using animal models
- ▶ Recent advances in treating diabetes and its complications from nonclinical studies

**Lead Guest Editor**

Tomohiko Sasase, Central  
Pharmaceutical Research Institute,  
Osaka, Japan  
[tomohiko.sasase@jt.com](mailto:tomohiko.sasase@jt.com)

**Guest Editors**

Norihide Yokoi, Kobe University, Kobe,  
Japan  
[yokoi@med.kobe-u.ac.jp](mailto:yokoi@med.kobe-u.ac.jp)

Marcus G. Pezsolesi, Harvard Medical  
School, Boston, USA  
[marcus.pezsolesi@joslin.harvard.edu](mailto:marcus.pezsolesi@joslin.harvard.edu)

Masami Shinohara, CLEA Japan, Inc.,  
Tokyo, Japan  
[shinohara-m@clea-japan.com](mailto:shinohara-m@clea-japan.com)

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