



Special Issue on
Sex/Gender Differences in Metabolism and Behavior: Influence of Sex Chromosomes and Hormones

CALL FOR PAPERS

Significant sex differences exist in the regulation of behavior and metabolism as well as development and progression of metabolic diseases such as obesity, diabetes, cardiovascular diseases, eating disorders, some types of gastrointestinal and reproductive disorders, cancers, and psychological and psychiatric disorders. Less attention has been paid to sex differences in various metabolic systems and to the potential influence of sex hormones on the above-mentioned metabolic diseases. The importance of sex differences and sex steroid effects lies both in inherent differences in structure, physiology, and function of different organ systems throughout the lifespan and in the impact of hormonal changes at different life stages, such as puberty, pregnancy, aging, and menopause. Recent research efforts and findings have greatly advanced our understanding of the roles of sex and sex hormones in physiological processes and functions as well as pathological development and progression of metabolic diseases. Nevertheless, many knowledge gaps and paradoxes still remain. In order to effectively develop novel therapeutic strategies that benefit patients of both sexes, a better understanding of mechanisms underlying the sex differences in behavior and metabolism and the influence of sex steroids is required.

Therefore, we invite investigators to contribute original research articles and reviews from basic and translational preclinical studies that stimulate the continuing efforts to understand the genetic, behavioral, physiological, cellular, and molecular mechanisms underlying sex-based differences in behavior and metabolism under physiological and pathological conditions.

Potential topics include, but are not limited to:

- ▶ Inherent sex-based differences in structure, physiology, and function of various organs related to the endocrine system
- ▶ Novel pathways employed by sex hormones and their receptors on the structure and function of multiple organ systems and behaviors
- ▶ Impact of hormonal changes at different life stages (e.g., puberty, pregnancy, aging, and menopause) on different metabolic systems and behaviors
- ▶ Central and peripheral actions of sex hormones (e.g., estrogen, progesterone, and testosterone), their receptors, and intracellular signaling pathways in the regulation of different metabolic systems and behaviors and related disease development and potential treatment strategies
- ▶ Latest technologies for evaluating and measuring sex-based differences in basic and translational preclinical research

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/ije/sdbm/>.

Lead Guest Editor

Haifei Shi, Miami University, Oxford, USA

shih@miamioh.edu

Guest Editors

Lynda M. Brown, North Carolina A&T State University, Greensboro, USA

lmbrown2@ncat.edu

Roshanak Rahimian, University of the Pacific, Stockton, USA

rrahimian@pacific.edu

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First Round of Reviews

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