

# 11<sup>TH</sup> OBESITY AND ENDOCRINOLOGY CONGRESS

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## Model systems in obesity and diabetes mellitus research: What can we learn from different species and methodological approaches?

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Diabetes mellitus together with cardiovascular disease is a leading cause of death worldwide. Aside known risk factors for diabetes mellitus such as obesity and genetic predisposition, chronic inflammation has been detected to be an indispensable feature in the pathogenesis of diabetes mellitus. Different types of diabetes mellitus exist and different model systems in diverse species are applied in research and treatment. We discuss the use of different species and morphofunctional approaches applied in current research for optimized treatment options such as pharmacological and immunomodulatory treatment as well as islet transplantation and generation of beta cells derived from pluripotent stem cells.

### Biography

Elisabeth Eppler is a Senior Scientist in the Department of Biomedicine, University of Basel, Switzerland. Previously, she was the Head of the research group neuro-endocrine-immune interactions, University of Zurich, Switzerland and was a Visiting Professor at the Faculty of Medicine, Dentistry & Health Sciences, University of Western Australia, Perth. She is a Council Member of the European Society for Comparative Endocrinology (ESCE) and European section of the International Federation of Comparative Endocrinological Societies (IFCES). She has published 40 papers in reputed journals and is an Editorial Board Member for *General & Comparative Endocrinology* and *Frontiers in Experimental Endocrinology*.

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