Presympathetic neurons innervating the brown fat in the paraventricular nucleus of the mouse hypothalamus that were retrogradely labelled with a GFP expressing pseudorabies virus (green). Costaining shows the localization of a novel group of parvalbumin positive neurons in the anterior hypothalamus (red). Cell nuclei are labeled in blue.

Credit: Susi Dudazy-Gralla and Jens Mittag, Department of Cell and Molecular Biology, Karolinska Institutet, Stockholm, Sweden

**REVIEW**

Why is type 1 diabetes increasing?
Francesco Maria Egro

**RESEARCH**

A novel first exon directs hormone-sensitive transcription of the pig prolactin receptor
Anke Schennink, Josephine F Trott, Bradley A Freking & Russell C Hovey

Orally efficacious novel small molecule 6-chloro-6-deoxy-1,2,3,4-tetra-O-galloyl-α-D-glucopyranose selectively and potently stimulates insulin receptor and alleviates diabetes
Yanyan Cao, Yunsheng Li, Jaekyung Kim, Yulin Ren, Klaus Himmeldirk, Yi Liu, Yanrong Qian, Fengming Liu & Xiaozhuo Chen

Lentiviral vector-mediated knockdown of Lrb in the arcuate nucleus promotes diet-induced obesity in rats
J Bian, X M Bai, Y L Zhao, L Zhang & Z J Liu

Aldosterone directly affects apelin expression and secretion in adipocytes
He Jiang, Xiao-Ping Ye, Zhong-Yin Yang, Ming Zhan, Hai-Ning Wang, Huang-Min Cao, Hui-Jun Xie, Chun-Ming Pan, Huai-Dong Song & Shuang-Xia Zhao

Hyperglycemia downregulates Connexin36 in pancreatic islets via the upregulation of ICER-1/ICER-1γ
Jacques-Antoine Haefliger, Françoise Rohner-Jeanrenaud, Dorothée Caille, Anne Charollais, Paolo Meda & Florent Allagnat

Decreased hippocampal mineralocorticoid:glucocorticoid receptor ratio is associated with low birth weight in female cynomolgus macaque neonates
Shirlene X Ong, Keefe Chng, Michael J Meaney & Jan P Buschdorf
GW9508 inhibits insulin secretion by activating ATP-sensitive potassium channels in rat pancreatic β-cells
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