

Publications

Röthe J, **Kraft R**, Ricken A, Kaczmarek I, Matz-Soja M, Winter K, Dietzsch AN, Buchold J, Ludwig MG, Liebscher I, Schöneberg T, Thor D (2024) The mouse adhesion GPCR GPR116/ADGRF5 has a dual function in pancreatic islets regulating somatostatin release and islet development. *Commun Biol* 7:104.

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Peters A, Rabe P, Liebing AD, Krumbholz P, Nordström A, Jäger E, **Kraft R**, Stäubert C (2022) Hydroxycarboxylic acid receptor 3 and GPR84 – two metabolite-sensing G protein-coupled receptors with opposing functions in innate immune cells. *Pharmacol Res* 176:106047.

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Röthe* J, Thor* D, Winkler J, Knierim AB, Binder C, Huth S, **Kraft R**, Rothemund S, Schöneberg T, Prömel S (2019) Involvement of the adhesion GPCRs latrophilins in the regulation of insulin release. *Cell Rep* 26:1573-1584.

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Book chapters, dissertation, habilitation

- **Kraft R** (2001) Spannungsabhängige Ionenkanäle in humanen Hirntumorzellen. *Logos Verlag, Berlin* (Dissertation).
- **Kraft R**, Patt S (2004) Patch-Clamp-Technik. In: Molekulare Biotechnologie. Hrsg. Wink, M., Wiley-VCH, Weinheim, 247-254.
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- **Kraft R** (2010) Regulation zellulärer Funktionen durch Calcium-aktivierte und Calcium-permeable Kationenkanäle. Universität Leipzig (Habilitation).
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- **Kraft R** (2011) Patch Clamp Method. In: An Introduction to Molecular Biotechnology, 2nd Edition. Wink (Ed.), Wiley-VCH, Weinheim, 181-185.
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Abstracts

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- Michaelis M, Kraft R, Eilers J (2009) Pharmacological discrimination of store-operated calcium entry (SOCE) in cortical mouse neurons and microglial cells. *8th Leipzig Research Festival for Live Sciences*, Leipzig.
- Laube M, Jemlich U, Günther C, Kraft R, Liebert UG (2009) Increased levels of quinolinic acid alter the activity of NMDA receptors in primary rat cortical neurones with possible consequences in measles virus encephalitis. *8th Leipzig Research Festival for Live Sciences*, Leipzig.
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- Michaelis M, Braun A, Nieswandt B, Eilers J, **Kraft R** (2011) The calcium sensor STIM1 is required for store-operated calcium entry, purinergic calcium signals and functional responses in microglia. *10th European Meeting On Glial Cells In Health And Disease*, Prague.
- Ödemis V, Lipfert J, **Kraft R**, Abraham G, Engele J (2011) The presumed atypical chemokine receptor CXCR7 controls astrocytic migration and proliferation through G_{i/o} protein coupling. *10th Leipzig Research Festival for Live Sciences*, Leipzig.
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- Michaelis M, Braun A, Nieswandt B, Eilers J, **Kraft R** (2013) STIM and Orai proteins control calcium signaling and nucleotide-induced migration and phagocytosis in microglia. *92th Joint Meeting of the German Physiological Society*, Heidelberg.
- **Kraft R**, Hofmann S, Michaelis M, Eilers J, Nieswandt B (2015) Orai2 regulates store-operated Ca²⁺ entry (SOCE) and hypoxia-induced Ca²⁺ accumulation in cortical neurons. *Acta Physiol* 213(S699):69.
- Röthe J, **Kraft R**, Liebscher I, Schöneberg T, Thor D (2017) The adhesion GPCR GPR116 regulates insulin and somatostatin secretion in pancreatic islets. *60th German Congress for Endocrinology*, Würzburg.

Talks

- „TRPM3, an osmotically regulated cation channel“ (März 2003, 44. Frühjahrstagung der Deutschen Gesellschaft für Pharmakologie und Toxikologie, Mainz)
- „Characterization of the nonselective cation channel TRPM3“ (März 2004, 83. Tagung der Deutschen Physiologischen Gesellschaft, Leipzig)

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- „Die Kationenkanäle TRPM2 und TRPM3: Aktivierungsmechanismen und mögliche physiologische Bedeutung“ (Oktober 2004, Berliner Patch-Clamp-Colloquium, Institut für Physiologie, Charité CBF, Berlin)
- „Sphingosine activates the cation channel TRPM3“ (März 2005, 84. Tagung der Deutschen Physiologischen Gesellschaft, Göttingen)
- „TRPM cation channels: an overview“ (Juli 2005, Institut für Physiologie, Friedrich-Schiller-Universität Jena)
- „Kontrolle der Mikroglia-Funktion durch intrazelluläres Calcium und Ionenkanäle“ (Oktober 2006, Institut für Biologie, Universität Leipzig)
- „Pharmacology and possible function of TRP channels in microglia“ (Oktober 2007, Rudolf-Boehm-Institut für Pharmakologie und Toxikologie, Universität Leipzig)
- „Functional and molecular analysis of glutamate receptors in human midbrain-derived neural precursor cells“ (März 2009, 88. Tagung der Deutschen Physiologischen Gesellschaft, Gießen)
- „Pharmacological discrimination of store-operated calcium entry (SOCE) mechanisms in different cell types“ (November 2009, DFG Research Center for Biomedizin, Vascular Biology, Rudolf-Virchow-Zentrum Würzburg)
- „STIM2 controls store-operated Ca^{2+} entry (SOCE) and ischemia-induced Ca^{2+} accumulation in cortical mouse neurons“ (März 2010, Joint Meeting of the Scandinavian and German Physiological Societies, Kopenhagen)
- „Speicher-operierter Calciumeinstrom (SOCE) in Neuronen und Mikroglia“ (September 2011, 1. Symposium der Jungen Physiologen, Leipzig)
- „STIM1 and STIM2 control store-operated calcium entry and purinergic responses in microglia“ (März 2012, 91. Tagung der Deutschen Physiologischen Gesellschaft, Dresden)
- „Store-operated calcium entry (SOCE) in microglia“ (Juli 2015, Zelluläre Neurowissenschaften, Max-Delbrück-Centrum Berlin)