

---

## 6. LITERATUR

### 6.1 Referenzliste

1. Anastasi A, Erspamer V, Bucci M. Isolation and structure of bombesin and alytesin, 2 analogous active peptides from the skin of the European amphibians Bombina and Alytes. *Experientia* 1971; 27:166-167.
2. Asakawa A, Inui A, Kaga T, et al. A role of ghrelin in neuroendocrine and behavioral responses to stress in mice. *Neuroendocrinology* 2001a; 74:143-147.
3. Asakawa A, Inui A, Kaga T, et al. Ghrelin is an appetite-stimulatory signal from stomach with structural resemblance to motilin. *Gastroenterology* 2001b; 120:337-345.
4. Au CL, Canny BJ, Farnworth PG, Giraud AS. Bombesin regulation of adrenocorticotropin release from ovine anterior pituitary cells. *Peptides* 1997; 18:995-1000.
5. Babcock AM, Barton C, Gunion MW, Rosenthal MJ. Bombesin-induced hypothermia and hypophagia are associated with plasma metabolic fuel alterations in the rat. *Physiol Behav* 1992; 51:933-938.
6. Banks WA, Tschöp M, Robinson SM, Heiman ML. Extent and direction of ghrelin transport across the blood-brain barrier is determined by its unique primary structure. *J Pharmacol Exp Ther* 2002; 302:822-827.
7. Barthel LK, Raymond PA. Improved method for obtaining 3-microns cryosections for immunocytochemistry. *J Histochem Cytochem* 1990; 38:1383-1388.
8. Batterham RL, Bloom SR. The gut hormone peptide YY regulates appetite. *Ann N Y Acad Sci* 2003; 994:162-168.

- 
9. Batterham RL, Cowley MA, Small CJ, et al. Gut hormone PYY(3-36) physiologically inhibits food intake. *Nature* 2002; 418:650-654.
  10. Battey J, Wada E, Corjay M, et al. Molecular genetic analysis of two distinct receptors for mammalian bombesin-like peptides. *J Natl Cancer Inst Monogr* 1992; (13):141-144.
  11. Bhogal R, Smith DM, Bloom SR. Investigation and characterization of binding sites for islet amyloid polypeptide in rat membranes. *Endocrinology* 1992; 130:906-913.
  12. Bodosi B, Gardi J, Hajdu I, Szentirmai E, Obal FJr, Krueger JM. Rhythms of ghrelin, leptin, and sleep in rats: effects of the normal diurnal cycle, restricted feeding, and sleep deprivation. *Am J Physiol Regul Integr Comp Physiol* 2004; 287:R1071-R1079.
  13. Bonaz B, De Giorgio R, Taché Y. Peripheral bombesin induces c-fos protein in the rat brain. *Brain Res* 1993; 600:353-357.
  14. Brown M, Rivier J, Vale W. Bombesin:potent effects on thermoregulation in the rat. *Science* 1977; 196:998-1000.
  15. Buyse M, Bado A, Dauge V. Leptin decreases feeding and exploratory behaviour via interactions with CCK(1) receptors in the rat. *Neuropharmacology* 2001; 40:818-825.
  16. Calisher SB, Avery DD. Injections of bombesin into the substantia nigra produce hypothermia and hypophagia in food-deprived rats. *Neuropharmacology* 1984; 23:1201-1206.
  17. Chalmers DT, Lovenberg TW, De Souza EB. Localization of novel corticotropin-releasing factor receptor (CRF2) mRNA expression to specific subcortical nuclei in rat brain: comparison with CRF1 receptor mRNA expression. *J Neurosci* 1995; 15:6340-6350.

- 
18. Chalmers DT, Lovenberg TW, Grigoriadis DE, Behan DP, De Souza EB. Corticotrophin-releasing factor receptors: from molecular biology to drug design. *Trends Pharmacol Sci* 1996; 17:166-172.
  19. Chance WT, Balasubramaniam A, Thomas I, Fischer JE. Amylin increases transport of tyrosine and tryptophan into the brain. *Brain Res* 1992; 593:20-24.
  20. Clancy B, Cauller LJ. Reduction of background autofluorescence in brain sections following immersion in sodium borohydride. *J Neurosci Methods* 1998; 83:97-102.
  21. Cowley MA, Smith RG, Diano S, et al. The distribution and mechanism of action of ghrelin in the CNS demonstrates a novel hypothalamic circuit regulating energy homeostasis. *Neuron* 2003; 37:649-661.
  22. Cummings DE, Purnell JQ, Frayo RS, Schmidova K, Wisse BE, Weigle DS. A preprandial rise in plasma ghrelin levels suggests a role in meal initiation in humans. *Diabetes* 2001; 50:1714-1719.
  23. Date Y, Kojima M, Hosoda H, et al. Ghrelin, a novel growth hormone-releasing acylated peptide, is synthesized in a distinct endocrine cell type in the gastrointestinal tracts of rats and humans. *Endocrinology* 2000; 141:4255-4261.
  24. Date Y, Murakami N, Toshinai K, et al. The role of the gastric afferent vagal nerve in ghrelin-induced feeding and growth hormone secretion in rats. *Gastroenterology* 2002; 123:1120-1128.
  25. Date Y, Toshinai K, Koda S, et al. Peripheral Interaction of Ghrelin with Cholecystokinin on Feeding Regulation. *Endocrinology* 2005; 146:3518-3525.
  26. De Vriese C, Gregoire F, Lema-Kisoka R, Waelbroeck M, Robberecht P, Delporte C. Ghrelin degradation by serum and tissue homogenates: identification of the cleavage sites. *Endocrinology* 2004; 145:4997-5005.

- 
27. Dhariwal AP, Antunesrodrigues J, Reeser F, Chowers I, McCann SM. Purification of hypothalamic corticotrophin-releasing factor (CRF) of ovine origin. Proc Soc Exp Biol Med 1966; 121:8-12.
  28. Dragunow M, Faull R. The use of c-fos as a metabolic marker in neuronal pathway tracing. J Neurosci Methods 1989; 29:261-265.
  29. Emond M, Schwartz GJ, Ladenheim EE, Moran TH. Central leptin modulates behavioral and neural responsivity to CCK. Am J Physiol 1999; 276:R1545-R1549.
  30. Erspamer V, Erpamer GF, Inselvini M. Some pharmacological actions of alytesin and bombesin. J Pharm Pharmacol 1970; 22:875-876.
  31. Fathi Z, Corjay MH, Shapira H, et al. BRS-3: a novel bombesin receptor subtype selectively expressed in testis and lung carcinoma cells. J Biol Chem 1993; 268:5979-5984.
  32. Fathi Z, Way JW, Corjay MH, Viallet J, Sausville EA, Battey JF. Bombesin receptor structure and expression in human lung carcinoma cell lines. J Cell Biochem Suppl 1996; 24:237-246.
  33. Friedman JM. The function of leptin in nutrition, weight, and physiology. Nutr Rev 2002; 60:S1-S14.
  34. Gedulin B, Cooper GJ, Young AA. Amylin secretion from the perfused pancreas: dissociation from insulin and abnormal elevation in insulin-resistant diabetic rats. Biochem Biophys Res Commun 1991; 180:782-789.
  35. Geisler S, Andres KH, Veh RW. Morphologic and cytochemical criteria for the identification and delineation of individual subnuclei within the lateral habenular complex of the rat. J Comp Neurol 2003; 458:78-97.

- 
36. Geisler S, Heilmann H, Veh RW. An optimized method for simultaneous demonstration of neurons and myelinated fiber tracts for delineation of individual trunco- and palliothalamic nuclei in the mammalian brain. *Histochem Cell Biol* 2002; 117:69-79.
  37. Gibbs J. Effect of bombesin on feeding behavior. *Life Sci* 1985; 37:147-153.
  38. Gibbs J, Fauser DJ, Rowe EA, Rolls BJ, Rolls ET, Maddison SP. Bombesin suppresses feeding in rats. *Nature* 1979; 282:208-210.
  39. Gibbs J, Kulkosky PJ, Smith GP. Effects of peripheral and central bombesin on feeding behavior of rats. *Peptides* 1981; 2:179-183.
  40. Gibbs J, Smith GP. Satiety: the roles of peptides from the stomach and the intestine. *Fed Proc* 1986; 45:1391-1395.
  41. Gorbulev V, Akhundova A, Buchner H, Fahrenholz F. Molecular cloning of a new bombesin receptor subtype expressed in uterus during pregnancy. *Eur J Biochem* 1992; 208:405-410.
  42. Gray TS. Amygdaloid CRF pathways. Role in autonomic, neuroendocrine, and behavioral responses to stress. *Ann N Y Acad Sci* 1993; 697:53-60.
  43. Gray TS, Magnuson DJ. Neuropeptide neuronal efferents from the bed nucleus of the stria terminalis and central amygdaloid nucleus to the dorsal vagal complex in the rat. *J Comp Neurol* 1987; 262:365-374.
  44. Guan XM, Yu H, Palyha OC, et al. Distribution of mRNA encoding the growth hormone secretagogue receptor in brain and peripheral tissues. *Brain Res Mol Brain Res* 1997; 48:23-29.

- 
45. Guilmeau S, Nagain-Domaine C, Buyse M, Tsocas A, Roze C, Bado A. Modulation of exocrine pancreatic secretion by leptin through CCK(1)-receptors and afferent vagal fibres in the rat. *Eur J Pharmacol* 2002; 447:99-107.
  46. Halford JC. Pharmacology of appetite suppression: implication for the treatment of obesity. *Curr Drug Targets* 2001; 2:353-370.
  47. Heinrichs SC, Cole BJ, Pich EM, Menzaghi F, Koob GF, Hauger RL. Endogenous corticotropin-releasing factor modulates feeding induced by neuropeptide Y or a tail-pinch stressor. *Peptides* 1992a; 13:879-884.
  48. Heinrichs SC, Koob GF. Corticotropin-releasing factor modulates dietary preference in nutritionally and physically stressed rats. *Psychopharmacology* 1992; 109:177-184.
  49. Heinrichs SC, Lapsansky J, Lovenberg TW, De Souza EB, Chalmers DT. Corticotropin-releasing factor CRF1, but not CRF2, receptors mediate anxiogenic-like behavior. *Regul Pept* 1997a; 71:15-21.
  50. Heinrichs SC, Menzaghi F, Pich EM, Hauger RL, Koob GF. Corticotropin-releasing factor in the paraventricular nucleus modulates feeding induced by neuropeptide Y. *Brain Res* 1993; 611:18-24.
  51. Heinrichs SC, Min H, Tamraz S, Carmouche M, Boehme SA, Vale WW. Anti-sexual and anxiogenic behavioral consequences of corticotropin-releasing factor overexpression are centrally mediated. *Psychoneuroendocrinology* 1997b; 22:215-224.
  52. Heinrichs SC, Pich EM, Miczek KA, Britton KT, Koob GF. Corticotropin-releasing factor antagonist reduces emotionality in socially defeated rats via direct neurotropic action. *Brain Res* 1992b; 581:190-197.

- 
53. Hewson AK, Dickson SL. Systemic administration of ghrelin induces Fos and Egr-1 proteins in the hypothalamic arcuate nucleus of fasted and fed rats. *J Neuroendocrinol* 2000; 12:1047-1049.
54. Hillebrand JJ, de Wied D, Adan RA. Neuropeptides, food intake and body weight regulation: a hypothalamic focus. *Peptides* 2002; 23:2283-2306.
55. Hoffman GE, Smith MS, Verbalis JG. c-Fos and related immediate early gene products as markers of activity in neuroendocrine systems. *Front Neuroendocrinol* 1993; 14:173-213.
56. Hosoda H, Doi K, Nagaya N, et al. Optimum collection and storage conditions for ghrelin measurements: octanoyl modification of ghrelin is rapidly hydrolyzed to desacyl ghrelin in blood samples. *Clin Chem* 2004; 50:1077-1080.
57. Howard AD, Feighner SD, Cully DF, et al. A receptor in pituitary and hypothalamus that functions in growth hormone release. *Science* 1996; 273:974-977.
58. Itoh S, Takashima A, Itoh T, Morimoto T. Open-field behavior of rats following intracerebroventricular administration of neuromedin B, neuromedin C, and related amphibian peptides. *Jpn J Physiol* 1994; 44:271-281.
59. Jolicœur FB, Michaud JN, Rivest R, et al. Neurobehavioral profile of neuropeptide Y. *Brain Res Bull* 1991; 26:265-268.
60. Kahn SE, Fujimoto WY, D'Alessio DA, Ensinck JW, Porte DJr. Glucose stimulates and potentiates islet amyloid polypeptide secretion by the B-cell. *Horm Metab Res* 1991; 23:577-580.
61. Kalra SP, Ueno N, Kalra PS. Stimulation of appetite by ghrelin is regulated by leptin restraint: peripheral and central sites of action. *J Nutr* 2005; 135:1331-1335.

- 
62. Kent P, Anisman H, Merali Z. Central bombesin activates the hypothalamic-pituitary-adrenal axis. Effects on regional levels and release of corticotropin-releasing hormone and arginine-vasopressin. *Neuroendocrinology* 2001a; 73:203-214.
63. Kent P, Bedard T, Khan S, Anisman H, Merali Z. Bombesin-induced HPA and sympathetic activation requires CRH receptors. *Peptides* 2001b; 22:57-65.
64. Kobelt P, Tebbe JJ, Tjandra I, et al. Two immunocytochemical protocols for immunofluorescent detection of c-Fos positive neurons in the rat brain. *Brain Res Brain Res Protoc* 2004; 13:45-52.
65. Kobelt P, Tebbe JJ, Tjandra I, et al. CCK inhibits the orexigenic effect of peripheral ghrelin. *Am J Physiol Regul Integr Comp Physiol* 2005; 288:R751-R758.
66. Koda S, Date Y, Murakami N, et al. The Role of the Vagal Nerve in Peripheral PYY3-36-Induced Feeding Reduction in Rats. *Endocrinology* 2005; 146:2369-2375.
67. Kojima M, Hosoda H, Date Y, Nakazato M, Matsuo H, Kangawa K. Ghrelin is a growth-hormone-releasing acylated peptide from stomach. *Nature* 1999; 402:656-660.
68. Kojima M, Kangawa K. Ghrelin: structure and function. *Physiol Rev* 2005; 85:495-522.
69. Konturek SJ, Konturek JW, Pawlik T, Brzozowski T. Brain-gut axis and its role in the control of food intake. *J Physiol Pharmacol* 2004; 55:137-154.
70. Kotz CM, Briggs JE, Grace MK, Levine AS, Billington CJ. Divergence of the feeding and thermogenic pathways influenced by NPY in the hypothalamic PVN of the rat. *Am J Physiol* 1998; 275:R471-R477.
71. Kovacs KJ. c-Fos as a transcription factor: a stressful (re)view from a functional map. *Neurochem Int* 1998; 33:287-297.

- 
72. Ladenheim EE, Hampton LL, Whitney AC, White WO, Battey JF, Moran TH. Disruptions in feeding and body weight control in gastrin-releasing peptide receptor deficient mice. *J Endocrinol* 2002; 174:273-281.
73. Ladenheim EE, Ritter RC. Low-dose fourth ventricular bombesin selectively suppresses food intake. *Am J Physiol* 1988; 255:R988-R993.
74. Ladenheim EE, Ritter RC. Caudal hindbrain participation in the suppression of feeding by central and peripheral bombesin. *Am J Physiol* 1993; 264:R1229-R1234.
75. Ladenheim EE, Wohn A, White WO, Schwartz GJ, Moran TH. Inhibition of gastric emptying by bombesin-like peptides is dependent upon cholecystokinin-A receptor activation. *Regul Pept* 1999; 84:101-106.
76. Langhans W, Scharrer E. Regulation of food intake. *Z Ernährungswiss* 1990; 29:79-96.
77. Lanteri-Minet M, Isnardon P, de Pommery J, Menetrey D. Spinal and hindbrain structures involved in viscerception and visceronociception as revealed by the expression of Fos, Jun and Krox-24 proteins. *Neuroscience* 1993; 55:737-753.
78. Leibowitz SF, Shor-Posner G. Brain serotonin and eating behavior. *Appetite* 1986; 7:1-14.
79. Lewis K, Li C, Perrin MH, et al. Identification of urocortin III, an additional member of the corticotropin-releasing factor (CRF) family with high affinity for the CRF2 receptor. *Proc Natl Acad Sci U S A* 2001; 98:7570-7575.
80. Li BH, Rowland NE. Peripherally and centrally administered bombesin induce Fos-like immunoreactivity in different brain regions in rats. *Regul Pept* 1996; 62:167-172.

- 
81. Li Y, Wu X, Zhao Y, Chen S, Owyang C. Ghrelin acts on the dorsal vagal complex to stimulate pancreatic protein secretion. *Am J Physiol Gastrointest Liver Physiol* 2006; 290:G1350-G1358.
  82. Lovenberg TW, Liaw CW, Grigoriadis DE, et al. Cloning and characterization of a functionally distinct corticotropin-releasing factor receptor subtype from rat brain. *Proc Natl Acad Sci U S A* 1995; 92:836-840.
  83. Lu QH, Swierczek JS, Zhu XG, Greeley GH Jr, Thompson JC. Central versus peripheral effects of bombesin on the release of gastrointestinal hormones in dogs. *J Neurosci Res* 1986; 16:553-559.
  84. Lu S, Guan JL, Wang QP, et al. Immunocytochemical observation of ghrelin-containing neurons in the rat arcuate nucleus. *Neurosci Lett* 2002; 321:157-160.
  85. Lutz TA, Althaus J, Rossi R, Scharrer E. Anorectic effect of amylin is not transmitted by capsaicin-sensitive nerve fibers. *Am J Physiol* 1998a; 274:R1777-R1782.
  86. Lutz TA, Del Prete E, Scharrer E. Reduction of food intake in rats by intraperitoneal injection of low doses of amylin. *Physiol Behav* 1994; 55:891-895.
  87. Lutz TA, Del Prete E, Scharrer E. Subdiaphragmatic vagotomy does not influence the anorectic effect of amylin. *Peptides* 1995a; 16:457-462.
  88. Lutz TA, Geary N, Szabady MM, Del Prete E, Scharrer E. Amylin decreases meal size in rats. *Physiol Behav* 1995b; 58:1197-1202.
  89. Lutz TA, Pieber TR, Walzer B, Del Prete E, Scharrer E. Different influence of CGRP (8-37), an amylin and CGRP antagonist, on the anorectic effects of cholecystokinin and bombesin in diabetic and normal rats. *Peptides* 1997; 18:643-649.

- 
90. Lutz TA, Senn M, Althaus J, Del Prete E, Ehrenspurger F, Scharrer E. Lesion of the area postrema/nucleus of the solitary tract (AP/NTS) attenuates the anorectic effects of amylin and calcitonin gene-related peptide (CGRP) in rats. *Peptides* 1998b; 19:309-317.
91. Lutz TA, Tschudy S, Mollet A, Geary N, Scharrer E. Dopamine D(2) receptors mediate amylin's acute satiety effect. *Am J Physiol Regul Integr Comp Physiol* 2001; 280:R1697-R1703.
92. Madaus S, Schusdziarra V, Seufferlein T, Classen M. Effect of gastrin-releasing peptide (GRP1-27), neuromedin-C (GRP18-27), and neuromedin-B on gastrin and somatostatin secretion from the rat stomach. *Z Gastroenterol* 1989; 27:449-454.
93. Matson CA, Ritter RC. Long-term CCK-leptin synergy suggests a role for CCK in the regulation of body weight. *Am J Physiol* 1999; 276:R1038-R1045.
94. Matsuno M, Matsui T, Iwasaki A, Arakawa Y. Role of acetylcholine and gastrin-releasing peptide (GRP) in gastrin secretion. *J Gastroenterol* 1997; 32:579-586.
95. Mayer J. Regulation of energy intake and the body weight: the glucostatic and lipostatic hypothesis. *Ann NY Acad Sci* 1955; 63:14-42.
96. McDonald TJ, Jornvall H, Nilsson G, et al. Characterization of a gastrin releasing peptide from porcine non-antral gastric tissue. *Biochem Biophys Res Commun* 1979; 90:227-233.
97. Michaud D, Anisman H, Merali Z. Capsaicin-sensitive fibers are required for the anorexic action of systemic but not central bombesin. *Am J Physiol* 1999; 276:R1617-R1622.
98. Minamino N, Kangawa K, Matsuo H. Neuromedin B: a novel bombesin-like peptide identified in porcine spinal cord. *Biochem Biophys Res Commun* 1983; 114:541-548.

- 
99. Minamino N, Kangawa K, Matsuo H. Neuromedin C: a bombesin-like peptide identified in porcine spinal cord. *Biochem Biophys Res Commun* 1984; 119:14-20.
100. Minamino N, Kangawa K, Matsuo H. Neuromedin B and neuromedin C. Two mammalian bombesin-like peptides identified in porcine spinal cord and brain. *Ann N Y Acad Sci* 1988; 547:373-390.
101. Mitsukawa T, Takemura J, Asai J, et al. Islet amyloid polypeptide response to glucose, insulin, and somatostatin analogue administration. *Diabetes* 1990; 39:639-642.
102. Mollet A, Lutz TA, Meier S, Riediger T, Rushing PA, Scharrer E. Histamine H1 receptors mediate the anorectic action of the pancreatic hormone amylin. *Am J Physiol Regul Integr Comp Physiol* 2001; 281:R1442-R1448.
103. Moody TW, Merali Z. Bombesin-like peptides and associated receptors within the brain: distribution and behavioral implications. *Peptides* 2004; 25:511-520.
104. Morley JE, Flood JF. Amylin decreases food intake in mice. *Peptides* 1991; 12:865-869.
105. Morley JE, Flood JF, Horowitz M, Morley PM, Walter MJ. Modulation of food intake by peripherally administered amylin. *Am J Physiol* 1994; 267:R178-R184.
106. Morris MJ, Nguyen T. Does neuropeptide Y contribute to the anorectic action of amylin? *Peptides* 2001; 22:541-546.
107. Mönnikes H, Heymann-Mönnikes I, Taché Y. CRF in the paraventricular nucleus of the hypothalamus induces dose-related behavioral profile in rats. *Brain Res* 1992a; 574:70-76.
108. Mönnikes H, Lauer G, Arnold R. Peripheral administration of cholecystokinin activates c-fos expression in the locus coeruleus/subcoeruleus nucleus, dorsal vagal complex and

- 
- paraventricular nucleus via capsaicin-sensitive vagal afferents and CCK-A receptors in the rat. *Brain Res* 1997; 770:277-288.
109. Mönnikes H, Schmidt BG, Raybould HE, Taché Y. CRF in the paraventricular nucleus mediates gastric and colonic motor response to restraint stress. *Am J Physiol* 1992b; 262:G137-G143.
110. Mönnikes H, Tebbe J, Bauer C, Grote C, Arnold R. Neuropeptide Y in the paraventricular nucleus of the hypothalamus stimulates colonic transit by peripheral cholinergic and central CRF pathways. *Neurogastroenterol Motil* 2000; 12:343-352.
111. Nakazato M, Murakami N, Date Y, et al. A role for ghrelin in the central regulation of feeding. *Nature* 2001; 409:194-198.
112. O'Brien TD, Westermark P, Johnson KH. Islet amyloid polypeptide and insulin secretion from isolated perfused pancreas of fed, fasted, glucose-treated, and dexamethasone-treated rats. *Diabetes* 1991; 40:1701-1706.
113. Ohki-Hamazaki H, Iwakura H, Maekawa F. Development and function of bombesin-like peptides and their receptors. *Int J Dev Biol* 2005; 49:293-300.
114. Ohki-Hamazaki H, Wada E, Matsui K, Wada K. Cloning and expression of the neuromedin B receptor and the third subtype of bombesin receptor genes in the mouse. *Brain Res* 1997; 762:165-172.
115. Olsen L, Knigge U, Warberg J. Gastrin-releasing peptide stimulation of corticotropin secretion in male rats. *Endocrinology* 1992; 130:2710-2716.
116. Panula P, Yang HY, Costa E. Neuronal location of the bombesin-like immunoreactivity in the central nervous system of the rat. *Regul Pept* 1982; 4:275-283.

- 
117. Paxinos G, Watson C. The rat brain in stereotaxic coordinates. 3rd ed. San Diego Academic Press 1997.
  118. Plamondon H, Merali Z. Regulation of ingestion by CRF and bombesin-like peptides: distinct meal-related peptide level changes. Am J Physiol 1997; 272:R268-R274.
  119. Primus RJ, Yevich E, Baltazar C, Gallager DW. Autoradiographic localization of CRF1 and CRF2 binding sites in adult rat brain. Neuropsychopharmacology 1997; 17:308-316.
  120. Reidelberger RD, Arnelo U, Granqvist L, Permert J. Comparative effects of amylin and cholecystokinin on food intake and gastric emptying in rats. Am J Physiol Regul Integr Comp Physiol 2001; 280:R605-R611.
  121. Reidelberger RD, Kalogeris TJ, Solomon TE. Plasma CCK levels after food intake and infusion of CCK analogues that inhibit feeding in dogs. Am J Physiol 1989; 256:R1148-R1154.
  122. Reyes TM, Lewis K, Perrin MH, et al. Urocortin II: a member of the corticotropin-releasing factor (CRF) neuropeptide family that is selectively bound by type 2 CRF receptors. Proc Natl Acad Sci U S A 2001; 98:2843-2848.
  123. Riediger T, Zuend D, Becskei C, Lutz TA. The anorectic hormone amylin contributes to feeding-related changes of neuronal activity in key structures of the gut-brain axis. Am J Physiol Regul Integr Comp Physiol 2004; 286:R114-R122.
  124. Rowland NE, Crews EC, Gentry RM. Comparison of Fos induced in rat brain by GLP-1 and amylin. Regul Pept 1997; 71:171-174.
  125. Rushing PA, Hagan MM, Seeley RJ, et al. Inhibition of central amylin signaling increases food intake and body adiposity in rats. Endocrinology 2001; 142:5035.

- 
126. Rushing PA, Hagan MM, Seeley RJ, Lutz TA, Woods SC. Amylin: a novel action in the brain to reduce body weight. *Endocrinology* 2000a; 141:850-853.
  127. Rushing PA, Lutz TA, Seeley RJ, Woods SC. Amylin and insulin interact to reduce food intake in rats. *Horm Metab Res* 2000b; 32:62-65.
  128. Rüter J, Kobelt P, Tebbe JJ, et al. Intraperitoneal injection of ghrelin induces Fos expression in the paraventricular nucleus of the hypothalamus in rats. *Brain Res* 2003; 991:26-33.
  129. Sagar SM, Sharp FR, Curran T. Expression of c-fos protein in brain: metabolic mapping at the cellular level. *Science* 1988; 240:1328-1331.
  130. Sakanaka M, Shibasaki T, Lederis K. Distribution and efferent projections of corticotropin-releasing factor-like immunoreactivity in the rat amygdaloid complex. *Brain Res* 1986; 382:213-238.
  131. Sakurai T. Orexins and orexin receptors: implication in feeding behavior. *Regul Pept* 1999; 85:25-30.
  132. Sakurai T, Amemiya A, Ishii M, et al. Orexins and orexin receptors: a family of hypothalamic neuropeptides and G protein-coupled receptors that regulate feeding behavior. *Cell* 1998; 92:1.
  133. Sanchez J, Oliver P, Pico C, Palou A. Diurnal rhythms of leptin and ghrelin in the systemic circulation and in the gastric mucosa are related to food intake in rats. *Pflugers Arch* 2004; 448:500-506.
  134. Sawchenko PE, Swanson LW, Grzanna R, Howe PR, Bloom SR, Polak JM. Colocalization of neuropeptide Y immunoreactivity in brainstem catecholaminergic neurons that project to the paraventricular nucleus of the hypothalamus. *J Comp Neurol* 1985; 241:138-153.

- 
135. Schulz DW, Kalivas PW, Nemeroff CB, Prange AJ Jr. Bombesin-induced locomotor hyperactivity: evaluation of the involvement of the mesolimbic dopamine system. *Brain Res* 1984; 304:377-382.
136. Schusdziarra V, Bender H, Pfeiffer A, Pfeiffer EF. Modulation of acetylcholine-induced secretion of gastric bombesin-like immunoreactivity by cholinergic and histamine H<sub>2</sub>-receptors, somatostatin and intragastric pH. *Regul Pept* 1984; 8:189-198.
137. Schusdziarra V, Bender H, Pfeiffer EF. Release of bombesin-like immunoreactivity from the isolated perfused rat stomach. *Regul Pept* 1983; 7:21-29.
138. Schusdziarra V, Schmid R, Classen M. Modulatory glucose effect on bombesin-like immunoreactivity and gastrin secretion from isolated perfused rat stomach. *Diabetes* 1986; 35:791-796.
139. Schwartz GJ, Moran TH, White WO, Ladenheim EE. Relationships between gastric motility and gastric vagal afferent responses to CCK and GRP in rats differ. *Am J Physiol* 1997; 272:R1726-R1733.
140. Sexton PM, Paxinos G, Kenney MA, Wookey PJ, Beaumont K. In vitro autoradiographic localization of amylin binding sites in rat brain. *Neuroscience* 1994; 62:553-567.
141. Shibasaki T, Yamauchi N, Kato Y, et al. Involvement of corticotropin-releasing factor in restraint stress-induced anorexia and reversion of the anorexia by somatostatin in the rat. *Life Sci* 1988; 43:1103-1110.
142. Smith GP, Jerome C, Cushin BJ, Eterno R, Simansky KJ. Abdominal vagotomy blocks the satiety effect of cholecystokinin in the rat. *Science* 1981; 213:1036-1037.
143. Sofroniew MV, Schrell U. Long-term storage and regular repeated use of diluted antisera in glass staining jars for increased sensitivity, reproducibility, and convenience of single-

- 
- and two-color light microscopic immunocytochemistry. *J Histochem Cytochem* 1982; 30:504-511.
144. Spina M, Merlo-Pich E, Chan RK, et al. Appetite-suppressing effects of urocortin, a CRF-related neuropeptide. *Science* 1996; 273:1561-1564.
145. Spindel ER, Gibson BW, Reeve JR Jr, Kelly M. Cloning of cDNAs encoding amphibian bombesin: evidence for the relationship between bombesin and gastrin-releasing peptide. *Proc Natl Acad Sci U S A* 1990a; 87:9813-9817.
146. Spindel ER, Giladi E, Brehm P, Goodman RH, Segerson TP. Cloning and functional characterization of a complementary DNA encoding the murine fibroblast bombesin/gastrin-releasing peptide receptor. *Mol Endocrinol* 1990b; 4:1956-1963.
147. Stanley BG, Leibowitz SF. Neuropeptide Y injected in the paraventricular hypothalamus: a powerful stimulant of feeding behavior. *Proc Natl Acad Sci U S A* 1985; 82:3940-3943.
148. Stein LJ, Woods SC. Cholecystokinin and bombesin act independently to decrease food intake in the rat. *Peptides* 1981; 2:431-436.
149. Stein LJ, Woods SC. Gastrin releasing peptide reduces meal size in rats. *Peptides* 1982; 3:833-835.
150. Stridsberg M, Sandler S, Wilander E. Cosecretion of islet amyloid polypeptide (IAPP) and insulin from isolated rat pancreatic islets following stimulation or inhibition of beta-cell function. *Regul Pept* 1993; 45:363-370.
151. Stuckey JA, Gibbs J, Smith GP. Neural disconnection of gut from brain blocks bombesin-induced satiety. *Peptides* 1985; 6:1249-1252.
152. Tateishi K, Klee GG, Cunningham JM, Lennon VA. Stability of bombesin in serum, plasma, urine, and culture media. *Clin Chem* 1985; 31:276-278.

- 
153. Tempel DL, Kim T, Leibowitz SF. The paraventricular nucleus is uniquely responsive to the feeding stimulatory effects of steroid hormones. *Brain Res* 1993; 614:197-204.
  154. Toshinai K, Date Y, Murakami N, et al. Ghrelin-induced food intake is mediated via the orexin pathway. *Endocrinology* 2003; 144:1506-1512.
  155. Tschöp M, Smiley DL, Heiman ML. Ghrelin induces adiposity in rodents. *Nature* 2000; 407:908-913.
  156. Vaughan J, Donaldson C, Bittencourt J, et al. Urocortin, a mammalian neuropeptide related to fish urotensin I and to corticotropin-releasing factor. *Nature* 1995; 378:287-292.
  157. Wada E, Way J, Shapira H, et al. cDNA cloning, characterization, and brain region-specific expression of a neuromedin-B-preferring bombesin receptor. *Neuron* 1991; 6:421-430.
  158. Wang L, Saint-Pierre DH, Taché Y. Peripheral ghrelin selectively increases Fos expression in neuropeptide Y - synthesizing neurons in mouse hypothalamic arcuate nucleus. *Neurosci Lett* 2002; 325:47-51.
  159. Westermark P, Wernstedt C, O'Brien TD, Hayden DW, Johnson KH. Islet amyloid in type 2 human diabetes mellitus and adult diabetic cats contains a novel putative polypeptide hormone. *Am J Pathol* 1987; 127:414-417.
  160. Woods SC. Gastrointestinal satiety signals I. An overview of gastrointestinal signals that influence food intake. *Am J Physiol Gastrointest Liver Physiol* 2004; 286:G7-13.
  161. Woods SC, Rushing PA, Seeley RJ. Neuropeptides and the control of energy homeostasis. *Nestle Nutr Workshop Ser Clin Perform Programme* 2001; 5:93-112.

- 
162. Woods SC, Seeley RJ. Adiposity signals and the control of energy homeostasis. *Nutrition* 2000; 16:894-902.
  163. Wren AM, Seal LJ, Cohen MA, et al Ghrelin enhances appetite and increases food intake in humans. *J Clin Endocrinol Metab* 2001a; 86:5992.
  164. Wren AM, Small CJ, Abbott CR, et al. Ghrelin causes hyperphagia and obesity in rats. *Diabetes* 2001b; 50:2540-2547.
  165. Wren AM, Small CJ, Fribbens CV, et al. The hypothalamic mechanisms of the hypophysiotropic action of ghrelin. *Neuroendocrinology* 2002; 76:316-324.
  166. Wren AM, Small CJ, Ward HL, et al. The novel hypothalamic peptide ghrelin stimulates food intake and growth hormone secretion. *Endocrinology* 2000; 141:4325-4328.
  167. Yoshida-Yoneda E, Lee TJ, Wei JY, Vigna SR, Taché Y. Peripheral bombesin induces gastric vagal afferent activation in rats. *Am J Physiol* 1996; 271:R1584-R1593.

**6.2 Eigene Publikationen**

Kobelt P, Goebel M, Stengel A, et al. Bombesin but not Amylin blocks the orexigenic effect of peripheral ghrelin. Am J Physiol Regul Integr Comp Physiol 2006; 291:R903-R913.

Kobelt P, Paulitsch S, Goebel M, et al. Peripheral injection of CCK-8S induces Fos expression in the dorsomedial hypothalamic nucleus in rats. Brain Res 2006; 1117:109-117.