

8 LITERATURVERZEICHNIS

- Aggarwal BB, Kumar A, Bharti AC. Anticancer potential of curcumin: preclinical and clinical studies. *Anticancer Res* 2003; 23: 363-398.
- Ahlemeyer B and Krieglstein J. Pharmacological studies supporting the therapeutic use of Ginkgo biloba extract for Alzheimer's disease. *Pharmacopsychiatry* 2003; 36: 8-14.
- Ajiro K, Shibata K, Nishikawa Y. Subtype-specific cyclic AMP-dependent histone H1 phosphorylation at the differentiation of mouse neuroblastoma cells. *J Biol Chem* 1990; 265: 6494-6500.
- Akiyama H, Barger S, Barnum S, Bradt B, Bauer J, Cole GM, Cooper NR, Eikelenboom P, Emmerling M, Fiebich BL, Finch CE, Frautschy S, Griffin WS, Hampel H, Hull M, Landreth G, Lue L, Mrak R, Mackenzie IR, McGeer PL, O'Banion MK, Pachter J, Pasinetti G, Plata-Salaman C, Rogers J, Rydel R, Shen Y, Streit W, Strohmeyer R, Tooyoma I, Van Muiswinkel FL, Veerhuis R, Walker D, Webster S, Wegrzyniak B, Wenk G, Wyss-Coray T. Inflammation and Alzheimer's disease. *Neurobiol Aging* 2000; 21: 383-421.
- Akiyama H, Kondo H, Ikeda K, Kato M, McGeer PL. Immunohistochemical localization of neprilysin in the human cerebral cortex: inverse association with vulnerability to amyloid beta-protein deposition. *Brain Res* 2001; 902: 277-281.
- Albrecht, D, Broser M, Kruger H. Excitatory action of angiotensins II and IV on hippocampal neuronal activity in urethane anesthetized rats. *Reg Pep* 1997; 70: 105-109.
- Ammon HP and Wahl MA. Pharmacology of Curcuma longa. *Planta Med* 1991; 57: 1-7.
- Andreasen N and Blennow K. Beta-Amyloid (Abeta) protein in cerebrospinal fluid as a biomarker for Alzheimer's disease. *Peptides* 2002; 23: 1205-1214.
- Andrieu S, Gillette S, Amouyal K, Nourhashemi F, Reynish E, Ousset PJ, Albarede JL, Vellas B, Grandjean H; EPIDOS study. Association of Alzheimer's disease onset with Ginkgo biloba and other symptomatic cognitive treatments in a population of women aged 75 years and older from the EPIDOS study. *J Gerontol Med Sci* 2003; 58A: 372-377.
- Angelisova P, Drbal K, Horejsi V, Cerny J. Association of CD10/neutral endopeptidase 24.11 with membrane microdomains rich in glycosylphosphatidylinositol-anchored proteins and Lyn kinase. *Blood* 1999; 93: 1437-9.
- Arregui A, Perry EK, Rossor M, Tomlinson BE. Angiotensin converting enzyme in Alzheimer's disease increased activity in caudate nucleus and cortical areas. *J Neurochem* 1982; 38: 1490-1492.

- Asanuma M, Nishibayashi S, Iwata E, Kondo Y, Nakanishi T, Vargas MG, Ogawan MG. Alterations of cAMP response element-binding activity in the aged rat brain in response to administration of rolipram, a cAMP-specific phosphodiesterase inhibitor. *Brain Res Mol Brain Res* 1996; 41: 210-215.
- Axelrod J and Reisenthal J. The fate of caffeine in man and a method for its estimation in biological material. *J Pharmacol* 1953; 107: 519-523.
- Ayoub S, Melzig MF. Induction of neutral endopeptidase (NEP) activity of SK-N-SH cells by natural compounds from green tea. *J P P* 2006a; 58: 495-501.
- Ayoub S, Melzig MF. Induction effects of apigenin, luteolin and vinpocetin on neutral endopeptidase (NEP) and angiotensin-converting enzyme activity (ACE) of SK-N-SH cells. *N P C* 2006b (in Press).
- Ayoub S, Melzig MF. Influence of selected natural products on NEP activity and beta-Amyloid production in SK-N-SH cells. *Pharm Biol* 2006c (submitted).
- Barad M, Bourtchouladze R, Winder DG, Golan H, Kandel E. Rolipram, a type IV-specific phosphodiesterase inhibitor, facilitates the establishment of long-lasting long-term potentiation and improves memory. *Proc Natl Acad Sci USA* 1998; 95: 15020–15025.
- Barker PE, Shipp MA, D'Adamio L, Masteller EL, Reinherz EL. The common acute lymphoblastic leukemia antigen gene maps to chromosomal region 3 (q21-q27). *J Immunol* 1989; 142: 283-287.
- Barnes NM, Cheng CH, Costall B, Naylor RJ, Williams TJ, Wischik CM. Angiotensin converting enzyme density is increased in temporal cortex from patients with Alzheimer's disease. *Eur J Pharmacol* 1991; 200: 289-292.
- Barrett AJ, Rawlings ND, Woessner JF. *Handbook of Proteolytic Enzymes*. London and San Diego: Academic Press 1998.
- Baum L and Ng A. Curcumin interaction with copper and iron suggests one possible mechanism of action in Alzheimer's disease animal models. *J Alzheimers Dis* 2004; 6: 367-377.
- Beaumont A, Fournie-Zaluski M-C, Roque BP. Neutral endopeptidase-24.11: structure, and design and clinical use of inhibitors. Hrsg.: Hooper, N.M.: Zinc metalloproteases in health and disease. Taylor and Francis, London (1996), S. 105-129.
- Beavo JA. Cyclic nucleotide phosphodiesterases: functional implications of multiple isoforms. *Physiol Rev* 1995; 75: 725-748.
- Belandia B, Latasa MJ, Villa A, Pascual A. Thyroid hormone negatively regulates the transcriptional activity of the β -amyloid precursor protein gene. *J Biol Chem* 1998; 273: 30366–30371.

- Belibi FA, Wallace DP, Yamaguchi T, Christensen M, Reif G, Grantham JJ. The effect of caffeine on renal epithelial cells from patients with autosomal dominant polycystic kidney disease. *J Am Soc Nephrol* 2002; 13: 2723-2729.
- Belluardo N, Mudo G, Blum M, Itoh N, Agnati L, Fuxe K. Nicotine induced FGF-2mRNA in rat brain is preserved during aging. *Neurobiol. Aging* 2004; 25: 1333-1342.
- Berezcki D and Fekete I. A systematic review of vinpocetine therapy in acute ischaemic stroke. *Euro J Clin Pharmacol* 1999; 55: 349-352.
- Bharti AC, Donato N, Singh S, Aggarwal BB. Curcumin (diferuloylmethane) down-regulates the constitutive activation of nuclear factor-kappa B and IkappaBalpha kinase in human multiple myeloma cells, leading to suppression of proliferation and induction of apoptosis. *Blood* 2003; 101: 1053-1062.
- Bick K, Amaducci L, Pepeu G. *The Early Story of Alzheimer's disease*. New York (1987): Raven: 1-3.
- Bickel H. Demenzsyndrom und Alzheimer Krankheit: Eine Schätzung des Krankenbestandes und der jährlichen Neuerkrankungen in Deutschland. *Gesundheitswesen* 2000; 62: 211-218.
- Bormann H and Melzig MF. Inhibition of metallopeptidase by flavonoids and related compounds. *Pharmazie* 2000; 55: 129-132.
- Bourtchouladze R, Lidge R, Catapano R, Stanley J, Gossweiler S, Romashko D, Scott R, Tully T. A mouse model of Rubinstein-Taybi syndrome: Defective long-term memory is ameliorated by inhibitors of hosphodiesterase 4. *Proc Natl Acad Sci USA* 2003; 100: 10518–10522.
- Breitner JC, Folstein MF. Familial Alzheimer Dementia: A prevalent disorder with specific clinical features. *Psychol Med* 1984; 14: 63-80.
- Brice CF and Smith AP. Effects of caffeine on mood and performance: a study of realistic consumption. *Psychopharmacology* 2002; 164: 188-192.
- Brunk CF, Jones KC, James TW. Assay for nanogram quantities of DNA in cellular homogenates. *Anal Biochem* 1979; 92: 497-500.
- Burian E. An ergot alkaloid preparation (hydergine) in the treatment of presenile brain atrophy (Alzheimer's disease): case report. *J Am Geriatr Soc* 1974; 22: 126-128.
- Caughey B, Lansbury PT. Protofibrils, pores, fibrils, and neurodegenerative aggregation: Separating the responsible protein aggregates from the innocent bystanders. *Annu Rev Neurosci* 2003; 26: 267-298.
- Cerutti PA. Oxidant stress and carcinogenesis. *Eur J Clin Invest* 1991; 21: 1-5.

- Cesarone CF, Bolognesi C, Santi L. Improved microfluorometric DNA determination in biological material using 33258 Hoechst. *Anal Biochem* 1979; 100: 188-197.
- Chandrasekaran K, Mehrabian Z, Spinnewyn B, Drieu K, Fiskum G. Neuroprotective effects of bilobalide, a component of the Ginkgobiloba extract (Egc 761®), in gebril global brain ischemia. *Brain Res* 2001; 922: 282-292.
- Chapman PF, White GL, Jones MW, Cooper-Blacketer D, Marshall VJ, Irizarry M, Younkin L, Good MA, Bliss TV, Hyman BT, Younkin SG, Hsiao KK. Impaired synaptic plasticity and learning in aged amyloid precursor protein transgenic mice. *Nat Neurosci* 1999; 2: 271-276.
- Chen H, Noble F, Coric P, Fournie-Zaluski M-C, Roques BP. Aminophosphonic inhibitors as transition state analogs of enkephalin-degrading enzymes: a class of central analgesics. *Proc Natl Acad Sci USA* 1998; 95: 12028-12033.
- Chen Y, Zheng R, Jia Z, Ju Y. Flavonoids as superoxide scavengers and antioxidants. *Free Radical Biology and Medicine* 1990; 9: 19-21.
- Cherny RA, Atwood CS, Xilinas ME, Gray DN, Jones WD, Mclean CA, Barnham KJ, Volitakis I, Fraser FW, Kim Y, Huang X, Goldstein LE, Moir RD, Lim JT, Beyreuther K, Zheng H, Tanzi RE, Masters CL, Bush AI. Treatment with a copper-zinc chelator markedly and rapidly inhibits beta-amyloid accumulation in Alzheimer's disease transgenic mice. *Neuron* 2001; 30: 665-676.
- Chipkin RE, Latranyi MB, Iorio LC, Barnett A, Berger JG. Pharmacological effects of SCH 30497-a novel analgesic substance. *Arch Int Pharmacodyn Ther* 1985; 278: 23-44.
- Chiu PJ, Tetzloff G, Ahn HS, Sybertz EJ. Comparative effects of vinpocetine and 8-Br-cyclic GMP on the contraction and ⁴⁵Ca-fluxes in the rabbit aorta. *Am J Hypertension* 1988; 11: 262-268.
- Chong YH and Suh YH. Aggregation of amyloid precursor proteins by aluminium in vitro. *Brain Res* 1995; 670: 137-141.
- Chong YH, Shin SA, Lee HJ, Kang JH, Suh YH. Molecular mechanisms underlying cyclic AMP inhibition of macrophage dependent TNF-alpha production and neurotoxicity in response to amyloidogenic C-terminal fragment of Alzheimer's amyloid precursor protein. *J Neuroimmunol* 2002; 133: 160-174.
- Chong YH, Shin YA, Suh YH. Cyclic AMP inhibition of tumor necrosis factor alpha production induced by amyloidogenic C-terminal peptide of Alzheimer's amyloid precursor protein in macrophages: involvement of multiple intracellular pathways and cyclic AMP response element binding protein. *Mol Pharmacol* 2003; 63: 690-698.

- Clarimon J, Bertranpetit J, Calafell F, Boada M, Tarraga L, Comas D. Association study between Alzheimer's disease and genes involved in Abeta biosynthesis, aggregation and degradation: suggestive results with BACE1. *J Neurol* 2003; 250: 956-961.
- Clegg A, Bryant J, Nicholson T, McIntyre L, De Broe S, Gerard K, Waugh N. Clinical and cost-effectiveness of donepezil, rivastigmine, and galantamine for Alzheimer's disease: a rapid and systematic review. *Health Technol Assess* 2001; 5: 1-137.
- Colciaghi F, Borroni B, Zimmermann M, Bellone C, Longhi A, Padovani A, Cattabeni F, Christen Y, Di Luca M. Amyloid precursor protein metabolism is regulated toward alpha-secretase pathway by Ginkgo biloba extracts. *Neurobiol Dis* 2004; 16: 454-460.
- Corder EH, Saunders AM, Strittmatter WJ, Schmechel DE, Gaskell PC, Small GW, Roses AD, Haines JL, Perica k-Vance MA. Gene dose of apolipoprotein E type 4 allele and the risk of Alzheimer's disease in late onset families. *Science* 1993; 261: 921-923.
- Cordy JM, Hussain I, Dingwall C, Hooper NM, Turner AJ. Exclusively targeting beta-secretase to lipid rafts by GPI-anchor addition up-regulates beta-site processing of the amyloid precursor protein. *Proc Natl Acad Sci USA* 2003; 100: 11735-11740.
- Cupic B, Breljak D, Gabrilovac J. Receptor-mediated down-regulation of neutral endopeptidase (NEP; EC 3.4.24.11; CD10) on immature B-lymphocytes by dexamethasone. *Int J Mol Med* 2005; 15: 1023-1031.
- D'Adamio L, Shipp MA, Masteller EL, Reinherz EL. Organisation of the gene encoding common acute lymphoblastic leukemia antigen (neutral endopeptidase 24.11): multiple miniexons and separate 5' untranslated regions. *Proc Natl Acad Sci USA* 1989; 86: 7103-7107.
- D'Uscio LV, Quaschnig T, Burnett JC Jr, Luscher TF. Vasopeptidase Inhibition Prevents Endothelial Dysfunction of Resistance Arteries in Salt-Sensitive Hypertension in Comparison With Single ACE Inhibition. *Hypertension* 2001; 37: 28-33.
- Dall'Igna OP, Porciuncula LO, Souza DO, Cunha RA, Lara DR. Neuroprotection by caffeine and adenosine A_{2A} receptor blockade of β -amyloid neurotoxicity. *Br J Pharmacol* 2003; 23: 5361-5369.
- Daly JW, Bruns RF, Snyder SH. Adenosine receptors in the central nervous system: relationship to the central actions of methylxanthines. *Life Sci* 1981; 28: 2083-2097.
- Davies P and Maloney AJ. Selective loss of central cholinergic neurons in Alzheimer's disease. *Lancet* 1976; 2: 1403.
- Dawson TM and Ginty DD. CREB family transcription factors inhibit neuronal suicide. *Nat Med* 2002; 8: 450-451.

- DeFeudis V. Francis. Ginkgo biloba extract (Egb 761): From chemistry to the clinic / Francis V. DeFeudis. – Wiesbaden: Ullstein Medical 1998, S. 11-15.
- DeMattos RB, Bales KR, Cummins DJ, Dodart JC, Paul SM, Holtzman DM. Peripheral anti-A beta antibody alters CAN and plasma A beta clearance and decrease brain A beta burden in a mouse model of Alzheimer's disease. *Proc Natl Acad Sci USA* 2001; 98: 8850-55.
- Devault A, Lazure C, Nault C, Le Moual H, Seidah NG, Chreiten M, Kahn P, Powell J, Mallet J, Beaumont A, Roques BP, Crine P, Boileau G. Amino acid sequence of rabbit kidney neutral endopeptidase 24.11 (enkephalinase) deduces from a complementary DNA. *E M B O J* 1987; 6: 1317-1322.
- Dufresne CJ and Farnworth ER.: A review of latest research findings on health promotion properties of tea. *J Nutr Biochem* 2001; 12: 404-421.
- Dulloo AG, Seydoux J, Girardier L, Chantre P, Vandermander J. Green tea and thermogenesis: interactions between catechin-polyphenols, caffeine and sympathetic activity. *Int J Obes Relat Metab Disord* 2000; 24: 252-258.
- Eckman EA, Watson M, Marlow L, Sambamutri K, Eckman CB. Alzheimer's Amyloid beta Peptide (A β) is increased in Mice Deficient in Endothelin-Converting Enzyme. *J Biol Chem* 2003; 278: 2081-2084.
- Edenhardder R, Von Petersdorff I, Rauscher R. Antimutagenic effects of flavonoids, chalcones and structurally related compounds on the activity of 2-amino-3-methylimidazo [4,5] quinoline (IQ) and heterocyclic amine mutagenes from cooked food. *Mutation Res* 1993; 287: 261-274.
- Elkins JS, Douglas VC, Johnston SC. Alzheimer disease risk and genetic variation in ACE. *Neurology* 2004; 62: 363-368.
- Elsisi NS, Darling-Reed S, Lee EY, Oriaku ET, Soliman KF. Ibuprofen and apigenin induce apoptosis and cell cycle arrest in activated microglia. *Neurosci Lett* 2005; 375: 91-96.
- Engelhart MJ, Geerlings MI, Ruitenberg A, Van Swieten JC, Hofman A, Witteman JC, Breteler MM. Dietary Intake of Antioxidants and Risk of Alzheimer's disease. *JAMA* 2002; 287: 3223-3229.
- Exley C and Korchazhkina OV. Plasmin cleaves Abeta42 in vitro and prevents its aggregation into beta-plated sheet structures. *Neuroreport* 2001; 12: 2967-2970.
- Farrer LA, Sherbatich T, Keryanov SA, Korovaitseva GI, Rogaeva EA, Petruk S, Premkumar S, Moliaka Y, Song YQ, Pei Y, Sato C, Selezneva ND, Voskresenskaya S, Golimbet V, Sorbi S, Duara R, Gavrilova S, George-Hyslop PH, Rogaev EI. Association between angiotensin-converting enzyme and Alzheimer disease. *Arch Neurol* 2000; 57: 210-214.

- Farris W, Mansourian S, Chang Y, Lindsley L, Eckman EA, Frosch MP, Eckman CB, Tanzi RE, Selkoe DJ, Guenette S. Insulin-degrading enzyme regulates the levels of insulin, amyloid beta-protein, and the beta-amyloid precursor protein intracellular domain in vivo. *Proc Natl Acad Sci USA* 2003; 100: 4162-4167.
- Ferrandiz ML and Alcaraz MJ. Anti-inflammatory activity and inhibition of arachidonic acid metabolism by flavonoids. *Agents and Action* 1991; 32: 283-288.
- Ferriola PC, Cody Y, Middleton JrE. Protein kinase C inhibition by plant flavonoids. Kinetic mechanisms and structure-activity relationships. *Biochem Pharmacol* 1989; 38: 1617-1624.
- Fioravanti M and Flicker L. Efficacy of nicergoline in dementia and other age associated forms of cognitive impairment. *Cochrane Database Syst. Rev.* 2001; 4: CD003159.
- Flicker L and Grimley Evans J. Piracetam for dementia or cognitive impairment. *Cochrane Database Syst Rev* 2000; 2: CD001011.
- Fram RJ and Kufe DW. Inhibition of DNA excision repair and the repair of x-ray induced DNA damage by cytosine arabinoside and hydroxyurea. *Pharmacol Ther* 1985; 31: 165-176.
- Frautschy SA, Hu W, Kim P, Miller SA, Chu T, Harris-White ME, Cole GM. Phenolic anti-inflammatory antioxidant reversal of Abeta-induced cognitive deficits and neuropathology. *Neurobiol Aging* 2001; 22: 993-1005.
- Freir DB and Herron CE. Nicotine enhances the depressive actions of A-beta 1-40 on long-term potentiation in the rat hippocampal CA1 region in vivo. *J Neurophysiol* 2003; 89: 2917-2922.
- Fujiki H. Two stages of cancer prevention with green Tea. *J Cancer Res. Clin. Oncol.* 1999; 125: 589-597.
- Fukami S, Watanabe K, Iwata N, Haraoka J, Lu B, Gerard NP, Gerard C, Fraser P, Westaway D, St George-Hyslop P, Saido TC. Abeta-degrading endopeptidase, neprilysin, in mouse brain: synaptic and axonal localization inversely correlating with Abeta pathology. *Neurosci Res* 2002; 43: 39-56.
- Fulcher IS and Kenny AJ. Proteins of the kidney microvillar membrane. The amphipathic forms of endopeptidase purified from pig kidneys. *J Biochem* 1983; 211: 743-753.
- Ganguli M, Burmeister LA, Seaberg EC, Belle S, DeKosky ST. Association between dementia and elevated TSH: a community-based study. *Biol Psychiatry* 1996; 40: 714-725.
- Ganguli M, Chandra V, Kamboh MI, Johnston JM, Dodge HH, Thelma BK, Juyal RC, Pandav R, Belle SH, DeKosky ST. Apolipoprotein E polymorphism and Alzheimer's disease: the Indo-US Cross-National Dementia Study. *Arch Neurol* 2000; 57: 824-830.

GeneCards(2004):<http://www.ncbi.nlm.nih.gov/LocusLink/LocRpt.cgi?|=4311#map>.

Gerhard Krauss. Die Regulation der Transkription. In: Biochemie der Regulation und Signaltransduktion: das moderne Lehrbuch für Chemiker, Biologen und Mediziner. Weinheim 1997 S. 60-61.

Gieza A, Maier P, Poppel E. The effect of ginkgo biloba on healthy elderly subjects. Fortschr Med Orig 2003; 121: 5-10.

Giri RK, Rajagopal V, Kalra VK. Curcumin, the active constituent of turmeric, inhibits amyloid peptide-induced cytochemokine gene expression and CCR5-mediated chemotaxis of THP-1 monocytes by modulating early growth response-1 transcription factor. J Neurochem 2004; 91: 1199-1210.

Glabe C. Does Alzheimer disease tilt the scales of amyloid degradation versus accumulation?. Nat Med 2000; 6: 133-134.

Glenner GG and Wong CW. Alzheimer's disease and Down's Syndrome: sharing of a unique cerebrovascular amyloid fibril protein. Biochem Biophys Res Commun 1984; 122: 1131-1135.

Gouras GK, Xu H, Gross RS, Greenfield JP, Hai B, Wang R, Greengard P. Testosterone reduces neuronal secretion of Alzheimer's B-amyloid peptides. Proc Natl Acad Sci USA 2000; 97: 1202-1205.

Graf K, Kunkel K, Zhang M, Grafe M, Schultz K, Schudt C, Biroc S, Fleck E, Kunkel G. Activation of adenylate cyclase and phosphodiesterase inhibition enhance neutral endopeptidase activity in human endothelial cells. Peptides 1995; 16: 1273-1278.

Graham TE and Spriet LL. (Metabolic, catecholamine, and exercise performance responses to various doses of caffeine. J Appl Physiol 1995; 78: 867-874.

Green PS, Gridley KE, Simpkins JW. Estradiol protects against beta-amyloid (25-35)-induced toxicity in SK-N-SH human neuroblastoma cells. Neurosci Lett 1996; 218: 165-168.

Gulyas B, Halldin C, Farde L. PET studies on the uptake and regional distribution of [¹¹C] vinpocetine in human subjects. Acta Neurological Scandinavica 2002; 106: 325-332.

Gulyas B, Halldin M, Karlsson P, Chou YH, Swahn CG, Bonock P, Paraczei M, Farde L. Brain uptake and plasma metabolism of [¹¹C] vinpocetine: a preliminary PET study in a cynomolgus monkey. J Neuroimag 1999; 9: 217-222.

Haass C and Selkoe DJ. Cellular processing of beta-amyloid precursor protein and the genesis of amyloid beta-peptide. Cell 1993; 75: 1039-1042.

Hama E, Shiratoni K, Iwata N, Saido TC. Effects of neprilysin chimeric proteins targeted to subcellular compartments on amyloid β peptide clearance in primary neurons. J Biol Chem 2004; 279: 30259-30264.

- Hama E, Shirovani K, Masumoto H, Sekine-Aizawa Y, Aizawa H, Saido TC. Clearance of extracellular and cell-associated amyloid beta peptide through viral expression of neprilysin in primary neurons. *J Biochem (Tokyo)* 2001; 130: 721-726.
- Hans Cottier. *Pathogenese: Ein Handbuch für die ärztliche Fortbildung 2*. Springer-Verlag Berlin Heidelberg New York (1980): 2127-2149.
- Haqqi TM, Anthony DD, Gupta S, Ahmad N, Lee MS, Kumar GK, Mukhtar H. Prevention of collagen induced arthritis in mice by a polyphenolic fraction from green tea. *Proc Natl Acad Sci USA* 1999; 96: 4524-4529.
- Hara Y, Matsuzaki T, Suzuki T. Green tea controls high blood pressure. *Nippon Nogeikagaku Kaishi* 1987; 61: 803.
- Haugabook SJ, Yager DM, Eckman EA, Golde TE, Younkin SG, Eckman CB. High throughput screens for the identification of compounds that alter the accumulation of Alzheimer's amyloid beta peptide. *J Neurosci Methods* 2001; 108: 171-179.
- Hayashi T, Sawa K, Kawasaki M, Arisawa M, Shimizu M, Morita N. Inhibition of cow's milk xanthine oxidase by flavonoids. *J Nat Prod* 1988; 51: 345-348.
- Hebert LE, Scherr PA, Bienias JL, Bennett DA, Evans DA. Alzheimer's disease in the U.S. Population: Prevalence Estimates Using the 2000 Census. *Archives of Neurology* 2003; 60: 1119-1122.
- Helisalmi S, Hiltunen M, Vepsäläinen S, Livonen S, Mannermaa A, Lehtovirta M, Koivisto AM, Alafuzoff I, Soininen H. Polymorphisms in Neprilysin gene affect the risk of Alzheimer's disease in Finnish patients. *J Neurol Neurosurg Psychiatry* 2004; 75: 1746-1748.
- Hellstrom-Lindahl E, Mausavi M, Ravid R, Nordberg A. Reduced levels of Aβ₄₀ and Aβ₄₂ in brains of smoking controls and Alzheimer's patients. *Neurobiol Dis* 2004; 15: 351-360.
- Hemming ML and Selkoe DJ. Amyloid beta-protein is degraded by cellular angiotensin-converting enzyme (ACE) and elevated by an ACE inhibitor. *J Biol Chem* 2005; 280: 37644-37650.
- Hertog MG, Kromhout D, Aravanis C, Blackburn H, Buzina R, Fidanza F, Giampaoli S, Jansen A, Menotti A, Nedeljkovic S, et al. Flavonoid intake and long-term risk of coronary heart disease and cancer in seven countries study. *Arch Intern Med* 1995; 155: 381-386.
- Heyman A, Wilkinson WE, Hurwith BJ, Schmechel D, Sigmon AH, Weinberg T, Helms MJ, Swift M. Alzheimer's disease: genetic aspects and associated clinical disorders. *Ann Neurol* 1983; 14: 507-515.
- Hogervorst E, Bandelow S, Combrinck M, Smith AD. Low free testosterone is an independent risk factor for Alzheimer's disease. *Exp Gerontol* 2004; 39: 1633-1639.

- Hooper N. M.: Families of zinc metalloproteases. *FEBS Lett* 1994; 356: 1-6.
- Hooper NM. The biological roles of zinc and families of zinc metalloproeases. Hrsg.: Hooper NM: Zinc metalloproteases in health and disease. Taylor and Francis, London (1996), S.1-17.
- Hsiao K, Chapman P, Nilsen S, Eckman C, Harigaya Y, Younkin S, Yang F, Cole G. Correlative memory deficits, Abeta elevation, and amyloid plaques in transgenic mice. *Science* 1996; 274: 99–102.
- Hu J, Igarashi A, Kamata M, Nakagawa H. Angiotensin convertine enzyme degrades Alzheimer Amyloid- β - peptide A β ; Retards A β Aggregation, depositino, Fibril Formation and inhibit cytotoxicity. *J Biol Chem* 2001; 276: 47863-47868.
- Hu J, Miyatake F, Aizu Y, Nakagawa H, Nakamura S, Tamaoka A, Takahashi R, Urakami K, Shoji M. *Neurosci Lett* 1999; 277: 65-67.
- Hudson S and Tabet N. Acetyl-l-carnitine for dementia. *Cochrane Database Syst Rev* 2003; 2: CD003158.
- Imamoto T, Tanabe M, Shimamoto N, Kawazone K, Hirata M. Cerebral circulatory and cardiac effects of vinpocetine and its metabolite, apovincaminic acid, in anesthetized dogs. *Arzneimettelforschung* 1984; 34: 161-169.
- In t' Veld BA, Ruitenberg A, Hofman A, Launer LJ, van Duijn CM, Stijnen T, Breteler MM, Stricker BH. Nonsteroidal anti-inflammatory drugs and risk of Alzheimer's disease. *N Engl J Med* 2001; 345: 1515-1521.
- Ino K, Suzuki T, Uehara C, Nagasaka T, Okamoto T, Kikkawa F, Mizutani S. The expression and localisation of neutral endopeptidase 24.11/CD10 in human gestational trophoblastic diseases. *Lab Invest* 2000; 80: 1729-1738.
- Itzhaki RF, Lin W-R, Shang D, Wilcock GK, Faragher B, Jamieson GA: Herpes simplex Virus type 1 in brain and risk of Alzheimer's disease. *Lancet* 1997; 349: 241-244.
- Iwata N, Higuchi K, Saido TC. Metabolism of amyloid-beta peptide and Alzheimer's disease. *Pharmacolog and Therapeutics* 2005; 108: 129-148.
- Iwata N, Takaki Y, Fukami S, Tsubuki S, Saido TC. Region-specific reduction of A beta-degrading endopeptidase, neprilysin, in mouse hippocampus upon aging. *J Neurosi Res* 2002; 70: 493-500.
- Iwata N, Tsubuki S, Takaki Y, Shirotani K, Lu B, Gerard NP, Gerard C, Hama E, Lee HJ, Saido TC. Metabolic regulation of Abeta by neprilysin. *Science* 2001; 292: 1550-1552.
- Iwata N, Tsubuki S, Takaki Y, Watanabe K, Sekiguchi M, Hosoki E, Kawashima-Morishima M, Lee HJ, Hama E, Sekine-Aizawa Y, Saido TC. Identification of the major Abeta 1-42-degrading catabolic

pathway in brain parenchyma: suppression leads to biochemical and pathological deposition. *Nat Med* 2000; 6: 143-150.

Jaffe AB, Toran-Allerand CD, Green-grad Gudy SE. Estrogen regulates metabolism of Alzheimer amyloid-B-precursor protein. *J Biol Chem* 1994; 269: 13065-13068.

Jorm AF, Korten AE, Henderson AS. The prevalence of dementia: a quantitative integration of the literature. *Arch Psychiatr Scand* 1987; 76: 465-479.

Juan D, Zhou DH, Li J, Wang JY, Gao C, Chen M. A-2-year follow-up study of cigarette smoking and risk of demantia. *Eur J Neurology* 2004; 11: 277-282.

Kakinuma Y, Hama H, Sugiyama F, Yagami K, Goto K, Murakami K, Fukamizu A. Anti-apoptotic action of angiotensin fragments to neuronal cells from angiotensinogen knockout mice. *Nat Med* 1998; 4: 1078-1080.

Kalmijn S, Launer LJ, Ott A, Witteman JC, Hofman A, Breteler MM. Dietary fat intake and the risk of incident dementia in the Rotterdam Study. *Ann Neurol* 1997; 42: 776-782.

Kalmijn S, Mehta KM, Pols HA, Hofman A, Drexhage HA, Breteler MM. Subclinical hyperthyroidism and the risk of dementia. The Rotterdam study. *Clin Endocrinol* 2000; 53: 733-737.

Kammer GM. The adenylate cyclase-cAMP-protein kinase A pathway and regulation of the immune response. *Immunol Today* 1988; 9: 222-229.

Kaneda T, Shimizu K, Urakawa N, Kajyo S. Effects of various selective phosphodiesterase inhibitors on carbachol-induced contraction and cyclic nucleotide contents in guinea pig taenia coli. *J Veter Med Sci* 2004; 66: 1047-1052.

Kanemitsu H, Tomiyama T, Mori H. Human neprilysin is capable of degrading amyloid beta peptide not only in the monomeric form but also the pathological oligomeric form. *Neurosci Lett* 2003; 350:113-116.

Kang SS, Lee JY, Choi YK, Song SS, Kim JS, Jeon SJ, Han YN, Son KH, Han BH. Neuroprotective effects of naturally occurring biflavonoids. *Bioorg Med Chem Lett* 2005; 15: 3588-3591.

Kehoe PG, Russ C, Mellroy S, Williams H, Holmans P, Holmes C, Liolitsa D, Vahidassr D, Powell J, McGleenon B, Liddell M, Plomin R, Dynan K, Williams N, Neal J, Cairns NJ, Wilcock G, Passmore P, Lovestone S, Williams J, Owen MJ. Variation in DCP1, encoding ACE, is associated with susceptibility to Alzheimer disease. *Nat Genet* 1999; 21: 71-72.

Kenny AJ and Stephenson SL. Role of enopeptidase-24.11 in the inactivation of atrial natriuretic peptide. *FEBS Lett* 1988; 232: 1-8.

- Kenny AJ, Flucher IS, Ridgwell K, Ingram J. Microvillar membrane neutral endopeptidases. *Acta Biol Med Ger* 1981; 40: 1465-1471.
- Kerr MA and Kenny AJ. The purification and specificity of a neutral endopeptidase from rabbit kidney brush border. *J Biochem* 1974; 137: 477-488.
- Kikkawa F, Shibata K, Suzuki T, Kajiyama H, Ino K, Nomura S, Mizutani S. Signal Pathway Involved in Increased Expression of neutral Endopeptidase 24.11 by Gonadotropin releasing Hormone in Choriocarcinoma Cells. *Placenta* 2004; 25: 176-183.
- Kim DS, Park SY, Kim JK. Curcuminoids from *Curcuma longa* L. (Zingiberaceae) that protect PC12 rat pheochromocytoma and normal human umbilical vein endothelial cells from beta-A (1-42) insult. *Neurosci Lett* 2001; 303: 57-61.
- Klaus S, Pultz S, Thone-Reineke C, Wolfram S. Epigallocatechin gallate attenuates diet-induced obesity in mice by decreasing energy absorption and increasing fat oxidation. *Int J Obesity* 2005; 29: 615-623.
- Kletsas D, Caselgrandi E, Barbieri D, Stathakos D, Franceschi C, Ottavini E. Neutral endopeptidase-24.11 (NEP) activity in human fibroblasts during development and aging. *Mech Ageing Dev* 1998; 102: 15-23.
- Knekt P, Kumpulainen J, Jarvinen R, Rissanen H, Heliövaara M, Reunanen A, Hakulinen T, Aromaa A. Flavonoid intake and risk of chronic diseases. *Amer J Clin Nutr* 2002; 76: 560-568.
- Ko WC, Shih CM, Lai YH, Chen JH, Huang HL. Inhibitory effects of flavonoids on phosphodiesterase isoenzymes from guinea pig and their structure activity relationships. *Biochem Pharmacol* 2004; 68: 2087-2094.
- Kolsch H, Jessen F, Freymann N, Kreis M, Hentschel F, Maier W, Heun R. ACE I/D polymorphism is a risk factor of Alzheimer's disease but not of vascular dementia. *Neurosci Lett* 2005; 377: 37-39.
- Konkoy CS and Davis TP. Ectoenzymes as sites of peptide regulation. *Trends Pharmacol Sci* 1996; 17: 288-294.
- Kramar EA, Harding JW, Wright JW. Angiotensin II- and IV-induced changes in cerebral blood flow. Roles of AT1, AT2, and AT4 receptor subtypes. *Reg Pep* 1997; 68: 131-138.
- Kruman I, Kumaravel TS, Lohani A, Pedersen W, Cutler RG, Kruman Y, Haughey N, Lee J, Evans M, Mattson MP. Folic Acid Deficiency and Homocysteine Impair DNA Repair in Hippocampal Neurons and Sensitize them to Amyloid Toxicity in Experimental Models of Alzheimer's disease. *J Neurosci* 2002; 22: 1752-1762.

- Kufe DW and Major PP. Studies on the mechanism of action of cytosine arabinoside. *Med Pediatr Oncol* 1982; 1: 49-67.
- Kuppusamy UR and Das NP. Effects of flavonoids on cyclic AMP phosphodiesterase and lipid mobilization in rat adipocytes. *Biochem Pharmacol* 1992; 44: 1307-1315.
- Kushwaha Rs, Foster DM, Barrett RHR, Carey KD, Bemard MG. Metabolic regulation of plasma apolipoprotein E by estrogen and progesterone in the baboon. *Metabolism* 1991; 40: 93-100.
- Labarca C and Paigen K. A simple, rapid and sensitive DNA assays procedure. *Analyt Biochem* 1980; 102: 344-352.
- Latasá MJ, Belandía B, Pascual A. Thyroid hormones regulate β -amyloid gene splicing and protein secretion in neuroblastoma cells. *Endocrinology* 1998; 139: 2692–2698.
- Latchman DS: Herpes Simplex virus and risk of Alzheimer's disease. *Lancet* 1997; 349: 1101.
- Le Bars P, Kats MM, Nancy B, Itil TM, Freedman AM, Schatzberg AF. A placebo-controlled, double-blind, randomized trial of an extract of Ginkgo biloba for dementia. *J Am Med Associ* 1997; 278: 1327-1332.
- Ledesma MD, Da Silva JS, Crassaerts K, Delacourte A, De Strooper B, Dotti CG. Brain plasmin enhances APP- α cleavage and A β degradation and is reduced in Alzheimer's disease brains. *EMBO* 2000; 1: 530-535.
- Lee MJ, Maliakal P, Chen L, Meng X, Bondoc FY, Prabhu S, Lambert G, Mohr S, Yang CS. Pharmacokinetics of tea catechins after ingestion of green tea and (-)-epigallocatechin-3-gallate by humans. *Cancer Epidemiol Biomarkers Prev* 2002; 11: 1025-1032.
- Lehmann DJ, Cortina-Borja M, Warden DR, Smith AD, Sleegers K, Prince JA, Van Duijn CM, Kehoe PG. Large Meta-Analysis Establishes the ACE Insertion-Deletion Polymorphism as a Marker of Alzheimer's Disease. *Am J Epidemiol* 2005; 162: 305-317.
- Leissring MA, Farris W, Chang AY, Walsh DM, Wu X, Sun X, Frosch MP, Selkoe DJ. Enhanced proteolysis of beta-amyloid in APP transgenic mice prevents plaque formation, secondary pathology, and premature death. *Neuron* 2003; 40: 1087-1093.
- Lendon CL, Thaker U, Harris JM, McDonagh AM, Lambert JC, Chartier-Harlin MC, Iwatsubo T, Pickering-Brown SM, Mann DM. The angiotensin 1-converting enzyme insertion (I)/deletion (D) polymorphism does not influence the extent of amyloid or tau pathology in patients with sporadic Alzheimer's disease. *Neurosci Lett* 2002; 328: 314–318.

- Letarte M, Vera S, Tran R, Addis JB, Onizuka RJ, Quackenbush EJ, Jongeneel CV, McInnes RR. Common acute lymphocytic leukaemia antigen is identical to neutral endopeptidase. *J Exp Med* 1988; 168: 1247-1253.
- Letenneur L, Launer LJ, Andersen K, Dewey ME, Ott A, Copeland JR, Dartigues JF, Kragh-Sorensen P, Baldereschi M, Brayne C, Lobo A, Martinez-Lage JM, Stijnen T, Hofman A. Education and the risk for Alzheimer's disease: sex makes a difference. EURODEM pooled analyses. EURODEM Incidence Research Group. *J Epidemiol* 2000; 151: 1064-1071.
- Li C, Booze RM, Hersh LB. Tissue-specific expression of rat neutral endopeptidase (neprilysin) mRNAs. *J Biol Chem* 1995; 270: 5723-5728.
- Lim GP, Chu T, Yang F, Beech W, Frautschy SA, Cole GM. The curry spice curcumin reduces oxidative damage and amyloid pathology in an Alzheimer's transgenic mouse. *J Neurosci* 2001; 21: 8370-8377.
- Linert W, Bridge MH, Huber M, Bjugstad KB, Grossman S, Arendash GW. In vitro and in vivo studies investigating possible antioxidant actions of nicotine: relevance to Parkinson's and Alzheimer's diseases. *Biochim Biophys Acta* 1999; 1454: 143-152.
- Lohmann A, Dingler E, Sommer W, Schaffer K, Wober W, Schmidt W. Bioavailability of vinpocetine and interference of the time of application with food intake. *Arzneimittelforschung* 1992; 42: 914-917.
- Malfroy B, Kuang WJ, Seeburg PH, Mason AJ, Schofield PR. Molecular cloning and amino acid sequence of human enkephalinase (neutral endopeptidase). *FEBS Lett* 1988; 229: 206-210.
- Malfroy B, Schonfield PR, Kuang WJ, Seeburg PH, Mason AJ, Henzel WJ. Molecular cloning and amino acid sequence of rat enkephalinase. *Biochem Biophys Res Commun* 1987; 144: 59-66.
- Manach C, Regerat F, Texier O, Agullo G, Demigne C, Remesy C. Bioavailability, metabolism and physiological impact of 4-oxo-flavonoids. *Nutri Res* 1996; 16: 517-544.
- Mari B, Guerin S, Maulon L, Belhacene N, Farahi Far D, Imbert V, Rossi B, Peyron JF, Auburger P. Endopeptidase 24.11 (CD10/NEP) is required for phorbol ester-induced growth arrest in Jurkat T cells. *FASEB J* 1997; 11: 869-879.
- Mark F. Bera, Barry W. Connors, Michael A. Paradiso. *Neuroscience: Exploring the Brain*. 2nd edition, 2001: 150-153.
- Marr RA, Guan H, Rockenstein E, Kindy M, Gage FH, Verma I, Masliah E, Hersh LB. Neprilysin regulates amyloid Beta peptide levels. *J Mol Neurosci* 2004; 22: 5-11.

- Marr RA, Rockenstein E, Mukherjee A, Kindy MS, Hersh LB, Gage FH, Verma IM, Masliah E. Neprilysin gene transfer reduces human amyloid pathology in transgenic mice. *J Neurosci* 2003; 23: 1992-1996.
- McDonald JK. *Exopeptidases, Mammalian Proteases*. Academic Press, London 1986.
- McKenna DJ, Jones K, Hughes K. Efficacy, safety, and use of ginkgo biloba in clinical and preclinical applications. *Altern Ther Health Med* 2001; 7: 70-86, 88-90.
- Melzig MF and Escher F. Induction of neutral endopeptidase and angiotensin-converting enzyme activity of SK-N-SH cells in vitro by quercetin and resveratrol. *Pharmazie* 2002; 57: 556-558.
- Melzig MF and Janka M. Enhancement of neutral endopeptidase activity in SK-N-SH cells by green tea extract. *Phytomedicine* 2003; 10: 494-498.
- Menon LG, Kuttan R, Kuttan G. Inhibition of lung metastasis in mice induced by B16F10 melanoma cells by polyphenolic compounds. *Cancer Lett* 1995; 95: 221-225.
- Mera SL. Aluminium, amyloid, and Alzheimer's disease. *Med Lab Sci* 1991;48:283-295.
- Metz G. Wein und Olivenöl sind ein potentes Duo. *Pharm Ztg* 2000; 145: 2779-2784.
- Meyer-Franke A, Kaplan MR, Pfrieger FW, Barres BA. Characterization of the signaling interactions that promote the survival and growth of developing retinal ganglion cells in culture. *Neuron* 1995; 15: 805-819.
- Mishra GD, Malik NS, Paul AA, Wadsworth ME, Bolton-Smith C. Childhood and adult dietary Vitamin E intake and cardiovascular risk factors in mid-life in the 1946 British Cohort. *Eur J Clin Nutr* 2003; 57: 1418-1425.
- Miskolczi P, Korma K, Polgar M, Vereczkey L. Pharmacokinetics of vinpocetine and its main metabolite apovincaminic acid before and after the chronic oral administration of vinpocetine to humans. *Europ J Drug Meta Pharmacok* 1990; 15: 1-5.
- Mitchell T, Sariban E, Kufe D. Effects of 1- β -n-arabinofuranosylcytosine on proto-oncogene expression in human U-937 cells. *Mol Pharmacol* 1986; 30: 398-402.
- Miyamoto M, Murphy TH, Schnaar RL, Coyle JT. Antioxidants protect against glutamate-induced cytotoxicity in a neuronal cell line. *J Pharmacol Experim Therap* 1989; 250: 1132-1140.
- Mizutani S, Safwat MA, Goto K, Tsujimoto M, Nakazato H, Itakura A, Mizuno M, Kurauchi O, Kikkawa F, Tomoda Y. Initiating and responsible enzyme of arginine vasopressin degradation in human placenta and pregnancy serum. *Regul Pept* 1995; 59: 371-378.

- Mohajeri MH, Kuehnle K, Li H, Poirier R, Tracy J, Nitsch RM. Anti-amyloid activity of neprilysin in plaque-bearing mouse models of Alzheimer's disease. *FEBS Lett* 2004; 562: 16-21.
- Molsa PK, Marttila RJ, Rinne UK. Epidemiology of Dementia in a Finnish population. *Acta Neurol Scand* 1982; 65: 541-552.
- Monti B, Berteotti C, Contestabile A. Subchronic rolipram delivery activates hippocampal CREB and arc, enhances retention and slows down extinction of conditioned fear. *Neuropsychopharmacology* 2006; 31: 278-286.
- Morris MC, Evans DA, Bienias JL, Tangney CC, Bennett DA, Aggarwal N, Wilson RS, Scherr PA. Dietary intake of antioxidant nutrients and the risk of incident Alzheimer disease in a biracial community study. *JAMA* 2002; 287: 3230-3237.
- Mortimer JA. Genetic and environmental risk factors for Alzheimer's disease: key questions and new approaches. In: Mortimer JA, Altman HJ, Altomari BN (eds) *Alzheimer's and Parkinson Diseases*. Plenum Press, New York, 1989, S. 85-100.
- Munch G, Apelt J, Rosemarie-Kientsch, Stahl P, Luth HJ, Schliebs R. Advanced glycation endproducts and pro-inflammatory cytokines in transgenic Tg2576 mice with amyloid plaques pathology. *J Neurochem* 2003; 86: 283-289.
- Munch G, Thome J, Toley P, Schinzel R, Riederer P. Advanced glycation endproducts in aging and Alzheimer's disease. *Brain Res* 1997; 23: 134-143.
- Nakagawa K, Okuda S, Miyazawa T. Dose-dependent incorporation of tea catechins, (-)-epigallocatechin-3-gallate and (-)-epigallocatechin, into human plasma. *Biosci Biotechnol Biochem* 1997; 61: 1981-1985.
- Nijjar MS and Nijjar SS. Domoic acid-induced neurodegeneration resulting in memory loss is mediated by Ca²⁺ overload and inhibition of Ca²⁺ calmodulin-stimulated adenylate cyclase in rat brain. *Int J Mol Med* 2000; 6: 377-389.
- O'Neill C, Wiehager B, Fowler CJ, Ravid R, Winblad B, Cowburn RF. Regionally selective alterations in G protein subunit levels in the Alzheimer's disease brain. *Brain Res* 1994; 636: 193-201.
- Oda M, Morino H, Maruyama H, Terasawa H, Izumi Y, Torii T, Sasaki K, Nakamura S, Kawakami H. Dinucleotide repeat polymorphisms in the neprilysin gene are not associated with sporadic Alzheimer's disease. *Neurosci Lett* 2002; 320: 105-107.
- Okello EJ, Savelev SU, Perry EK. In vitro anti-beta secretase and dual anti-cholinesterase activities of *Camellia sinensis* L. (tea) relevant to treatment of dementia. *Phytother Res* 2004; 18: 624-627.

- Okuda T, Kimura Y, Yoshida T, Hatano T, Okuda H, Arichi S. Studies on the activities of tannins and related compounds from medicinal plants and drugs. I. Inhibitory effects on lipid peroxidation in mitochondria and microsomes of liver. *Chem Pharm Bull* 1983; 31: 1625-1631.
- Ono K, Hasegawa K, Naiki H, Yamada M. Curcumin has potent anti-amyloidogenic effects for Alzheimer's beta-amyloid fibrils in vitro. *J Neurosci Res* 2004; 75: 742-750.
- Osada K, Takahashi M, Hoshina S, Nakamura M, Nakamura S, Sugano M. Tea catechins inhibit cholesterol oxidation accompanying oxidation of low density lipoprotein in vitro. *Comp Biochem Physiol C Toxicol Pharmacol* 2001; 128: 153-164.
- Oyama Y, Chikashia L, Ueha T, Kanamaru K, Noda K. Ginkgo biloba extract protects brain neurons against oxidative stress induced by hydrogenperoxide. *Brain Res* 1996; 712: 349-352.
- Papandreou CN, Usmani B, Geng Y, Bogenrieder T, Freeman R, Wilk S, Finstad CL, Reuter VE, Powell CT, Scheinberg D, Magill C, Scher HI, Albino AP, Nanus DM. Neutral endopeptidase 24.11 loss in metastatic human prostate cancer contributes to androgen-independent progression. *Nat Med* 1998; 4: 50-57.
- Paradossi-Piquard, Petit A, Kawarai T, Sunyach C, Alves da Costa C, Vincent B, Ring S, D'Adamio L, Shen J, Muller U, St George Hyslop P, Checler F. Presenilin-dependent transcriptional control of the Abeta-degrading enzyme neprilysin by intracellular domains of betaAPP and APLP. *Neuron* 2005; 46: 541-554.
- Parajua-Pozo JL and Casis-Arguea S. Dow's Syndrome and Dementia. *Rev Neurol*. 2000; 31: 126-128.
- Park SY and Kim DS. Discovery of natural products from *Curcuma longa* that protect cells from beta-amyloid insult: a drug discovery effort against Alzheimer's disease. *J Nat Prod* 2002; 65: 1227-1231.
- Parnetti L, Senin U, Mecocci P. Cognitive enhancement Therapy for Alzheimer's disease. The way forward. *Drugs* 1997; 53: 752-768.
- Parvathenani LK, Calandra V, Roberts SB, Posmantur R. cAMP delays beta-amyloid (25-35) induced cell death in rat cortical neurons. *Neuroreport* 2000; 11: 2293-2297.
- Passer B, Pellegrini L, Russo C, Siegel RM, Lenardio MJ, Schettini G, Bachmann M, Tabaton M, D'Adamio L. Generation of an apoptotic intracellular peptide by gamma-secretase cleavage of Alzheimer's amyloid beta protein precursor. *J Alzheimers Dis* 2000; 2: 289-301.
- Patil CS, Singh VP, Satyanarayan PS, Jain NK, Singh A, Kulkarni SK. Protective effect of flavonoids against aging- and lipopolysaccharide-induced cognitive impairment in mice. *Pharmacology* 2003; 69: 59-67.

- Pearse DD, Pereira FC, Marcillo AE, Bates ML, Berrocal YA, Filbin MT, Bunge MB. cAMP and Schwann cells promote axonal growth and functional recovery after spinal cord injury. *Nat Med* 2004; 10: 610-616.
- Pendurthi UR and Rao LV. Suppression of transcription factor Egr-1 by curcumin. *Thromb Res* 2000; 97: 179-189.
- Pendurthi UR, Williams JT, Rao LV. Inhibition of tissue factor gene activation in cultured endothelial cells by curcumin. Suppression of activation of transcription factors Egr-1, AP-1, and NF-kappa B. *Arterioscler Thromb Vasc Biol* 1997; 17: 3406-3413.
- Phinney AL, Drisaldi B, Schmidt SD, Lugowski S, Coronado V, Liang Y, Horne P, Yang J, Sekoulidis J, Coomaraswamy J, Chishti MA, Cox DW, Mathews PM, Nixon RA, Carlson GA, St George-Hyslop P, Westaway D. In vivo reduction of amyloid-beta is promoted by amutant copper transporter. *Proc Natl Acad Sci USA* 2003; 100: 14193-14198.
- Pietta P, Gardana C, Mauri PL. Identification of Gingko biloba flavonol metabolites after oral administration to humans. *J Chrom* 1997; 693: 249-255.
- Plagemann PG, Martz R, Wohlueter RM. Transport and metabolism of deoxycytidine and 1-beta-D-arabinofuranosylcytosine into cultured Novikoff rat hepatoma cells, relationship to phosphorylation, and regulation of triphosphate synthesis. *Cancer Res* 1978; 38: 978-989.
- Polgar M, Vereczkey I, Nyary I. Pharmacokinetics of vinpocetine and its metabolite, apovincaminic acid, in plasma and cerebrospinal fluid after intravenous infusion. *J Pharm Biomed Analy* 1985; 3: 131-139.
- Price JM, Hellermann A, Hellermann G, Sutton ET. Aging enhances vascular dysfunction induced by the Alzheimer's peptide beta-Amyloid. *Neurol Res* 2004; 26: 305-311.
- Qiu WQ, Borth W, Ye Z, Haass C, Teplow DB, Selkoe DJ. Degradation of Amyloid- β -Protein by a serine protease- α -Macroglobulin Complex. *J Biol Chem* 1996; 271: 8443-8451.
- Quadri P, Fragiaco C, Pezzati R, Zanda E, Forloni G, Tettamanti M, Lucca U. Homocysteine, folate and vitamin B-12 in mild cognitive impairment, Alzheimer's disease, and vascular dementia. *J Clin Nutr* Jul 2004; 80: 114-122.
- Rago R, Mitchen J, Wilding G. DNA Fluorometric assay in 96-well tissue culture plates using Hoechst 33258 after cell lysis by freezing in distilled water. *Analyt Biochem* 1990; 191: 31-34.
- Rall TW. Central nervous system stimulants. The xanthines. In: A. Goodman-Gilman, L.S. Goodman and A. Gilman. (6th Eds.), *The Pharmacological Basis of Therapeutics*, MacMillan, New York 1980 S. 592-607.

- Rang HP, Dale MM, Ritter JM, Moore PK. Neurodegenerative disorders. In: Rang HP. Pharmacology. 5th edition. Edinburgh: Churchill. Livingstone 2003: 490-502.
- Rawlings ND and Barrett AJ. Evolutionary families of peptidases. *J Biochem* 1993; 290: 205-218.
- Rebeck GW. Cholesterol efflux as a critical component of Alzheimer's disease pathogenesis. *J Mol Neurosci* 2004; 23: 219-224.
- Reilly CE. Neprilysin content is reduced in Alzheimer brain areas. *J Neurol* 2001; 248: 159-160.
- Reisberg B, Doody R, Stoffler A, Schmitt F, Ferris S, Mobius HJ. Memantine in moderate to severe Alzheimer's disease. *N Engl J Med* 2003; 348: 1333-1341.
- Reisberg B. In: Alzheimer's Disease, Hrsg. B. Reisberg, New York (1983): 3.
- Reitz C, Tang MX, Luchsinger J, Mayeux R. Relation of plasma lipids to Alzheimer's disease and vascular dementia. *Arch Neurol* 2004; 6: 705-714.
- Riemersma RA, Rice-Evans CA, Tyrell RM, Clifford MN, Lean ME: Tea flavonoids and cardiovascular health. *QJM* 2001; 94: 277-282.
- Roberts GW, Gentelman SM, Lynch A, Graham DI. Beta A4-Amyloid precursor protein deposition in brain after head trauma. *Lancet* 1991; 338: 1422-1423.
- Roberts GW, Gentelman SM, Lynch A, Landon M, Graham DI. Beta amyloid protein deposition in the brain after severe head injury: Implications for the pathogenesis of Alzheimer's disease. *J Neurol Neurosurg Psychiatry* 1994; 57: 419-425.
- Robl JA, Sun CQ, Stevenson J, Ryono DE, Simpkins LM, Cimarusti MP, Dejneka T, Slusarchyk WA, Chao S, Stratton L, Misra RN, Bednarz MS, Asaad MM, Cheung HS, Abboa-Offei BE, Smith PL, Mathers PD, Fox M, Schaeffer TR, Seymour AA, Trippodo NC. Dual metallopeptidase inhibitors: mercaptoacetyl-based heterocyclic dipeptide mimetics as inhibitors of angiotensin-converting enzyme and neutral endopeptidase. *J Med Chem* 1997; 40: 1570-1577.
- Roques BP and Beaumont A. natural endopeptidase-24.11 inhibitors : from analgesics to antihypertensives? *Trends Pharmacol Sci* 1990; 11: 245-249.
- Roques BP, Fournie-Zaluski MC, Soroca E, Lacomte JM, Malfroy B, Liorens C, Schwartz JC. The enkephalinase inhibitor thiorphan shows antioiceptive activity in mice. *Nature* 1980; 288: 286-288.
- Rondeau V, Iron A, Letenneur L, Commenges D, Duchene F, Arveiler B, Dartiques JF. Analysis of the effect of aluminum in drinking water and transferrin C2 allele on Alzheimer's disease. *Eur J Neurol* 2006; 13: 1022-1025.

- Saito T, Iwata N, Tsubuki S, Takaki Y, Takano J, Huang SM, Suemoto T, Higuchi M, Saido TC. Somatostatin regulates brain amyloid beta peptide Abeta42 through modulation of proteolytic degradation. *Nat Med* 2005; 11: 434-439.
- Sampaolo S, Campos-Bros A, Mazziotti G, Carlomagno S, Sannino V, Amato G, Carella C, Di Iorio G. Increased cerebrospinal fluid levels of 3,3',5'-triiodo-L-tyrosine in patients with Alzheimer's disease. *J Clin Endocrinol Metab* 2005; 90: 198-202.
- Sano M, Ernesto C, Thomas RG, Schafer K, Grundman M, Woodbury P, Growdon J, Cotman CW, Pfeiffer E, Schneider LS, Thal LJ. A controlled trial of selegiline, alpha-tocopherol, or both as treatment for Alzheimer's disease. The Alzheimer's Disease Cooperative Study. *N Engl J Med* 1997; 336: 1216-1222.
- Saria A, Hauser KF, Traurig HH, Turbek CS, Hersh L, Gerard C. Opioid-related changes in nociceptive threshold and in tissue levels of enkephalins after target disruption of the gene for neutral endopeptidase (EC 3.4.24.11) in mice. *Neurosci Lett* 1997; 234: 27-30.
- Savaskan E, Hock C, Olivieri G, Bruttel S, Rosenberg C, Hulette C, Muller-Spahn F. Cortical alterations of angiotensin converting enzyme, angiotensin II and AT1 receptor in Alzheimer's dementia. *Neurobiol. Aging* 2001; 22: 541-546.
- Schellenberger A. (Hrsg) : *Enzymkatalyse*. 1. Auf., Fischer, Jena (1989) S. 219,242-252.
- Schenk D, Barbour R, Dunn W, Gordon G, Grajeda H, Guido T, Hu K, Huang J, Johnson-Wood K, Khan K, Kholodenko D, Lee M, Liao Z, Lieberburg I, Motter R, Mutter L, Soriano F, Shopp G, Vasquez N, Vandeventer C, Walker S, Wogulis M, Yendock T, Games D, Seubert P. Immunization with amyloid-beta attenuates Alzheimer's disease-like pathology in the PDAPP mouse. *Nature* 1999; 400: 173-177.
- Scheuermann S, Hamsch B, Hesse L, Stumm J, Schmidt C, Behr D, Bayer TA, Beyreuther K, Multhaup G. Homodimerization of amyloid precursor protein and its implication in the amyloidogenic pathway of Alzheimer's disease. *J Biol Chem* 2001; 276: 33923-33929.
- Schindowski K, Lentner S, Kressmann S, Eckert A, Müller WE. Age related increase of oxidative stress-induced apoptosis in mice. Prevention by Ginkgo biloba extracts (EGb761®). *J Neural Transm* 2001; 108: 969-978.
- Schmitt-Schillig S, Schaffer S, Weber CC, Eckert GP, Müller WE. Flavonoids and the aging brain. *J Physiol Pharmacol* 2005; 56: 23-36.
- Schulte PA and Burnett CA. EMFs and Alzheimer's disease. *Neurology* 1997; 49: 312-313.

- Scott LJ, Goa KL. Galantamine: A review of its use in Alzheimer's disease. *Drugs* 2000; 60: 1095-1122.
- Selkoe DJ. Alzheimer's disease: genes, proteins and therapy. *Physiol Rev* 2001a; 81: 741-766.
- Selkoe DJ. Amyloid-beta-protein and the genetics of Alzheimer's disease. *J Biol Chem* 1996; 271: 18295-18298.
- Selkoe DJ. Clearing the brain's amyloid cobwebs. *Neuron* 2001b; 32: 177-180.
- Seshadri S, Beiser A, Selhub J, Jacques PF, Rosenberg IH, D'Agostino RB, Wilson PW, Wolf PA. Plasma Homocysteine as a risk factor for Dementia and Alzheimer's disease. *N Eng J Med* 2002; 346: 476-483.
- Shimizu M, Wada S, Hayashi T, Arisawa M, Ikegaya K, Ogaku S, Yano S, Morita N. Green tea lowers the blood sugar level. *Yakugaku Zasshi* 1988; 108: 964-970.
- Shipp MA, Stefano GB, Switzer SN, Griffin JD, Reinherz EL. CD10 (CALLA)/neutral endopeptidase-24.11 modulates inflammatory peptide-induced changes in neutrophil morphology, migration and adhesion proteins and is itself regulated by neutrophil activation. *Blood* 1991a; 78: 1834-1841.
- Shipp MA, Tarr GE, Chen CY, Switzer SN, Hersh LB, Stein H, Sunday ME, Reinherz EL. CD10/neutral endopeptidase-24.11 hydrolyzes bombesin-like peptides and regulates the growth of small-cell carcinomas of the lung. *Proc Natl Acad Sci USA* 1991b; 88: 10662-10666.
- Shiratori K, Tsubuki S, Iwata N, Takaki Y, Harigaya W, Maruyama K, Kiryu-Seo S, Kiyama H, Iwata H, Tomita T, Iwatsubo T, Saido TC. Neprilysin degrades both amyloid β peptides 1-40 and 1-42 most rapidly and efficiently among thiorphan and phosphoramidon sensitive endopeptidases. *J Biol Chem*. 2001; 276: 21895-21901.
- Sigle JP, Zander J, Ehret A, Honegger J, Jackisch R, Feuerstein TJ. High potassium- induced activation of cholin- acetyltransferase in human neocortex: implications and species differences. *Brain Res Bull* 2003; 60: 255-262.
- Silva AJ, Kogan JH, Frankland PW, Kida S. CREB and memory. *Annu Rev Neurosci* 1998; 21: 127-148.
- Simons A, Ruppert T, Schmidt C, Schlicksupp A, Pipkorn R, Reed J, Masters CL, White AR, Cappai R, Beyreuther K, Bayer TA, Multhaup G. Evidence for a copper binding superfamily of the amyloid precursor protein. *Biochemistry* 2002; 41: 9310-9320.
- Sinha S and Lieberburg I. Cellular mechanisms of beta-Amyloid production and secretion. *Proc Natl Acad Sci USA* 1999; 96: 11049-11053.
- Sitges M and Nekrassov V. Vinpocetine selectively inhibits neurotransmitter release triggered by sodium channel activation. *Neurochem Res* 1999; 24: 1585-1591.

- Skoog I, Wallin A, Fredman P. A population study on blood-brain barrier function in 85-year-olds: relation to Alzheimer's disease and vascular dementia. *Neurology* 1998; 50: 966-971.
- Sleegers K, Den Heijer T, van Dijk EJ, Hofman A, Bertoli-Avella AM, Koudstaal PJ, Breteler MM, Van Duijn CM. ACE gene is associated with Alzheimer's disease and atrophy of hippocampus and amygdala. *Neurobiol Aging* 2005; 26: 1153-1159.
- Snaedal J, Johannesson T, Jonsson JE, Gylfadottir G. The effect of nicotine in dermal plaster on cognitive functions in patients with Alzheimer's disease. *Dementia* 1996; 7: 47-52.
- Sodeyama N, Mizusawa H, Yamada M, Itoh Y, Otomo E, Matsushita M. Lack of association of neprilysin polymorphism with Alzheimer's disease and Alzheimer's disease-type neuropathological changes. *J Neurol Neurosurg Psychiatry* 2001; 71: 817-818.
- Soleilhac JM, Lafuma C, Porcher JM, Auburtin G, Roques BP. Characterization of soluble form of neutral endopeptidase-24.11 (EC 3.4.24.11) in human serum: enhancement of its activity in serum of underground miners exposed to coal dust particles. *Eur J Clin Invest* 1996; 26: 1011-1017.
- Souness JE, Aldous D, Sargent C. Immunosuppressive and anti-inflammatory effects of cyclic AMP phosphodiesterase (PDE) type 4 inhibitors. *Immunopharmacology* 2000; 47: 127-162.
- Sparks DL, Friedland R, Petanceska S, Scheurs BG, Shi J, Perry G, Smith MA, Sharma A, Derosa S, Ziolkowski C, Stankovic G. Trace Copper Levels in the Drinking Water, but not Zinc or Aluminum Influence CNS Alzheimer-Like Pathology. *J Nutr Health Aging* 2006; 10: 247-254.
- Starke K. Grundlagen der Pharmakologie des Nervensystems. In: Forth W, Henschler D, Rummel W, Förstermann U et al. (Hrsg) *Allgemeine Pharmakologie und Toxikologie* 2001; 8: 111-146.
- Stolc S. Indole derivatives as neuroprotectants. *Life Sci* 1999; 65: 1943-1950.
- Strausak D, Mercer JF, Dieter HH W, Multhaup G. Copper in disorders with neurological symptoms: Alzheimer's, Menkes, and Wilson diseases. *Brain Res Bull* 2001; 55: 175-185.
- Suh YH and Checler F. Amyloid precursor Protein, Presenilins, and α -synuclein: Molecular pathogenesis and pharmacological Applications in Alzheimer's disease. *Pharmacol Rev* 2002; 54: 469-525.
- Sumitomo M, Shen R, Goldberg JS, Dai J, Navarro D, Nanus DM. Neutral endopeptidase promotes phorbol ester-induced apoptosis in prostate cancer cells by inhibiting neuropeptide-induced protein kinase C delta degradation. *Cancer Res* 2000; 60: 6590-6596.
- Szatmari SZ, Whitehouse PJ. Vinpocetine for cognitive impairment and dementia. *Cochrane Database Syst Rev* 2003; 1: CD003119.

- Szekely CA, Thorne JE, Zandi PP, EK M, Messias E, Breitner JC, Goodman SN. Nonsteroidal anti-inflammatory drugs for the prevention of alzheimer's disease: asystemic review. *Neuroepidemiology* 2004; 23: 159-169.
- Takeda K, Minowada J, Block A. Kinetics of appearance of differentiation-associated characteristics in ML-1, a line of human myeloblastic leukemia cells, after treatment with 12-O-tetradecanoylphorbol-13-acetate, dimethyl sulfoxide, or 1-beta-n-arabinofuranosylcytosine. *Cancer Res* 1982; 42: 5152-5158.
- Tam LT, Engelbrecht S, Talent JM, Gracy RW, Erdos EG. The importance of disulfide bridges in human endopeptidase (enkephalinase) after proteolytic cleavage, *Biochem Biophys Res Commun* 1985; 133: 1187-1192.
- Tang MX, Jacobs D, Stern Y, Marder K, Schofield P, Gurland B, Andrews H, Mayeux R. Effect of oestrogen during menopause on risk and age at onset of Alzheimer's disease. *Lancet* 1996; 34:429-432.
- Tarasiuk VK, Timko NA, Guba GP. The use of deoxypeganin hydrochloride in the combined treatment of patients with diseases of the peripheral nervous system. *Vrach Delo* 1989; 3: 92-93.
- Teuscher E. *Biogene Arzneimittel*. 5. überarb. Und erw. aufl., Wiss. Verl.-Ges., Stuttgart (1997) S. 391.
- Thienhaus OJ, Wheeler BG, Simon S, Zemlan FP, Hartford JT. A controlled double-blind study of high-dose dihydroergotoxine mesylate (Hydergine) in mild dementia. *J Am Geriatr Soc* 1987; 35: 219-223.
- Thong FS, Derave W, Kiens B, Graham TE, Urso B, Wojtaszewski JF, Hansen BF, Richter EA. Caffeine-induced impairment of insulin action but not insulin signaling in human skeletal muscle is reduced by exercise. *Diabetes* 2002; 51: 83-590.
- Trippodo NC, Robl JA, Asaad MM, Fox M, Panchal BC, Schaeffer TRD. Effects of omapatrilat in low, normal, and high renin experimental hypertension. *Am J Hypertens* 1998; 11: 363-372.
- Troade JD, Marien M, Mourlevat S, Debeir T, Ruberg M, Colpaert F, Michel PP. Activation of the mitogen-activated protein kinase (ERK(1/2)) signaling pathway by cyclic AMP potentiates the neuroprotective effect of the neurotransmitter noradrenaline on dopaminergic neurons. *Mol Pharmacol* 2002; 62: 1043–1052.
- Tucker HM, Kihiko-Ehmann M, and Estus S. Urokinase-type Plasminogen inhibits amyloid beta neurotoxicity and fibrillogenesis via plasminogen. *J Neurosci Res* 2002; 70: 249-255.
- Turner AJ, Isaac RE, Coates D. The neprilysin (NEP) family of zinc metalloendopeptidases: genomics and function. *Bio Essays* 2001; 23: 261-269.

- Turner AJ. Exploring the structure and function of zinc metalloendopeptidases: old enzymes and new discoveries. *Biochem Soc Trans* 2003; 31: 723-727.
- Uehara C, Ino K, Suzuki T, Kajiyama H, Kikkawa F, Nagasaka T, Mizutani S. Up regulation of neutral endopeptidase expression and enzymatic activity during the differentiation of human choriocarcinoma cells. *Placenta* 2001; 22: 540-549.
- Vitolo OV, Sant'Angelo A, Costanzo V, Battaglia F, Arancio O, Shelanski M. Amyloid beta-peptide inhibition of the PKA/CREB pathway and long-term potentiation: reversibility by drugs that enhance cAMP signaling. *Proc Natl Acad Sci USA* 2002; 99: 13217-13221.
- Vlahovic P and Stefanovic V.: Kidney ectopeptidases – structure, function and clinical significance. *Path Biol* 46 (1998), S. 779-786.
- Vovin RIA, Fakturovich AIA, Golenkov AV, Lukin VO. Correction of apathetic-abulic manifestations of schizophrenia with cholinotropic drugs. *Zh Nevropatol Psikhiatr Im S S Korsakova*. 1991; 91: 111-115.
- Wallace WC, Akar CA, Lyons WE, Kole HK, Egan JM and Wolozin B. Amyloid precursor protein requires the insulin signalling pathway for neurotrophic activity. *Mol Brain Res* 1997; 52: 213-227.
- Wan Kim S, Wan Kim J, Chul Choi K, Kwon Ma S, Oh Y, Jung JY, Kim J, Lee J. Indomethacin enhances shuttling of aquaporin-2 despite decreased abundance in rat kidney. *J Am Soc Nephrol* 2004; 15: 2998-3005.
- Wang CN, Chi CW, Lin YL, Chen CF, Shiao YJ. The neuroprotective effects of phytoestrogens on the amyloid beta protein-induced toxicity are mediated by abrogating the activation of caspase cascade in rat cortical neurons. *J Biol Chem* 2001; 276: 5287-5295.
- Wang H, Ferguson GD, Pineda VV, Cundiff PE, Storm DR. Overexpression of type-1 adenylyl cyclase in mouse forebrain enhances recognition memory and LTP. *Nat Neurosci* 2004; 7: 635–642.
- Weisburger JH. Tea and health: The underlying mechanisms. *Proc Soc Exp Biol Med* 1999; 220: 271-275.
- Wiley MD, Jones SP, Sawyer WH, Paterson ARP. Cytosine arabinoside influx and nucleoside transport sites in acute leukemia. *J Clin Invest* 1982; 69: 479-489.
- Willcox JK, Ashe SL, Catignani GL. Antioxidants and prevention of chronic diseases. *Crit Rev Food Sci Nutr* 2004; 44: 275-295.
- Wilson RS, u-a.: Proneness to Psychological distress is associated with risk of Alzheimer's disease. *Neurology* 2003; 61: 1479-1485.

- Wolozin B, Lesch P, Lebovics R, Sunderland T. Olfactory neuroblasts from Alzheimer donors: studies on APP processing and cell regulation. *Biol Psychiatry* 1993; 34: 824-838.
- Wolozin B. A fluid connection: cholesterol and Abeta. *Proc Natl Acad Sci USA* 2001; 98: 5371-5373.
- Wong-Leung YL and Kenny AJ. Some properties of a microsomal peptidase in rat kidney. *Biochem J* 1968; 110: 5P.
- Xu H, Gouras GK, Greenfield JP, Vincent B, Naslund J, Mazzarelli L, Fried G, Jovanovic JN, Seeger M, Relkin NR, Liao F, Checler F, Buxbaum JD, Chait BT, Thinakaran G, Sisodia SS, Wang R, Greengard P, Gandy S. Estrogen reduces neuronal generation of Alzheimer's B-amyloid peptides. *Natl Med* 1998; 4: 447-451.
- Yamaguchi T, Fukase M, Arao M, Sugimoto T, Chihara K. Endothelin 1 hydrolysis by rat kidney membranes. *FEBS Lett* 1992; 309: 303-306.
- Yamamoto M, Gotz ME, Ozawa H, Luckhaus C, Saito T, Rosler M, Riederer P. Hippocampal level of neural specific adenylyl cyclase type I is decreased in Alzheimer's disease. *Biochim Biophys Acta* 2000; 1535: 60-68.
- Yamamoto T. *Chemistry and Applications of Green Tea*. CRC Press, Boca Raton, 1997.
- Yamamoto-Sasaki M, Ozawa H, Saito T, Rosler M, Riederer P. Impaired phosphorylation of cyclic AMP response element binding protein in the hippocampus of dementia of the Alzheimer type. *Brain Res* 1999; 824: 300-303.
- Yamin R, Malgeri EG, Sloane JA, McGraw WT, Abraham CR. Metallopeptidase EC 3.4.24.15 is necessary for Alzheimer Amyloid- β -Peptide Degradation. *J Biol Chem* 1999; 274: 18777-18784.
- Yang F, Lim GP, Begum AN, Ubeda OJ, Simmons MR, Ambegaokar SS, Chen PP, Kaye R, Glabe CG, Frautschy SA, Cole GM. Curcumin inhibits formation of Abeta oligomers and fibrils and binds plaques and reduces amyloid in vivo. *J Biol Chem* 2004; as Manuscript M404751200.
- Yao ZX, Han Z, Drieu K, Papadopoulos V. Ginkgo biloba extract (Egb 761) inhibits beta-amyloid production by lowering free cholesterol levels. *J Nutr Biochem* 2004; 15: 749-756.
- Yasojima K, Akiyama H, McGeer EG, McGeer PL. Reduced neprilysin in high plaque areas of Alzheimer brain: a possible relationship to deficient degradation of beta-amyloid peptide. *Neurosci Lett* 2001b; 297: 97-100.

- Yasojima K, McGeer EG, McGeer PL. Relationship between beta amyloid peptide generating molecules and neprilysin in Alzheimer disease and normal brain. *Brain Res* 2001a; 919: 115-121.
- Yen SH, Liu WK, Hall FL, Yan SD, Stern D, Dickson DW. Alzheimer neurofibrillary lesions: Molecular nature and potential roles of different components. *Neurobiol Aging* 1995; 16: 381-387.
- Yesavage JA, Hollister LE, Burian E. Dihydroergotoxine: 6-mg versus 3-mg dosage in the treatment of senile dementia. Preliminary report. *J Am Geriatr Soc* 1979; 27: 80-82.
- Yoshimasu F, Kokmen E, Hay ID, Beard CM, Offord KP, Kurland LT. The association between Alzheimer's disease and thyroid disease in Rochester, Minnesota. *Neurology* 1991; 41: 1745-1747.
- Younge JD and Jarvis SM. Nucleoside transport in animal cells. *Biosci Rep* 1983; 3: 309-322.
- Zhou LJ, Song W, Zhu XZ, Chen ZL, Yin ML, Cheng XF. Protective effect of bilobalide on amyloid beta-peptide 25-35 induced PC12 cell cytotoxicity. *Acta Pharmacol Sin* 2000; 21: 75-79.
- Zhu L, Wu J, Liao H, Gao J, Zhao XN, Zhang ZX. Antagonistic effects of extract from leaves of Ginkgo biloba on glutamate neurotoxicity. *Zhongguo Yao Li Xue Bao* 1997; 18: 344-347.
- Zou J and Crews F. CREB and NF-kappaB Transcription Factors Regulate Sensitivity to Excitotoxic and Oxidative Stress Induced Neuronal Cell Death. *Cell Mol Neurobiol* 2006 [Epub ahead of print].