

REFERENCES

- Altar CA, Boyar WC, Oei E, Wood PL (1988): Cholecystokinin attenuates basal and drug-induced increases of limbic and striatal dopamine release. *Brain Res* 460, 76-82.
- American Psychiatric Association (1994): "Diagnostic and Statistical Manual of Mental Disorders, 4th edition." American Psychiatric Association, Washington DC, pp. 273-315.
- Arinami T, Itokawa M, Enguchi H, Tagaya H, Yano S, Shimizu H, Hamaguchi H, Toru M (1994): Association of dopamine D2 receptor molecular variant with schizophrenia. *Lancet* 343, 703-704.
- Arinami T, Gao M, Hamaguchi H, Toru M (1997): A functional polymorphism in the promoter region of the dopamine D2 receptor gene is associated with schizophrenia. *Hum Mol Genet* 6, 577-582.
- Ashfield R, Patel AJ, Bossone SA, Brown H, Campbell RD, Marcu KB, Proudfoot NJ (1994): MAZ-dependent termination between closely spaced human complement genes. *EMBO* 23, 5656-5667.
- Asherson P, Mant R, Williams N, Cardno A, Jones L, Murphy K, Coiller DA, Nanko S, Craddock N, Morris S, Muir W, Blackwood B, McGuffin P, Owen MJ (1998): A study on chromosome 4p markers and dopamine D5 receptor gene in schizophrenia and bipolar disorder. *Mol Psychiatry* 3, 310-320.
- Blackwood DH, He L, Morris SW, Mclean A, Whitton C, Thomson M, Walker MT, Woodburn K, Sharp CM, Wright AF, Shibasaki Y, St Clair DM, Porteous DJ, Muir WJ (1996): A locus for bipolar affective disorder on chromosome 4p. *Nat Genet* 12, 427-430.
- Bowen T, Norton N, Jacobsen NJO, Guy C, Daniels JK, Sanders RD, Cardno AG, Jones LA, Murphy KC, McGuffin P, Craddock N, O'Donovan MC, Owen MJ (1998): Linked polymorphisms upstream of

- exons 1 and 2 of the human cholecystokinin gene are not associated with schizophrenia or bipolar disorder. *Mol Psychiatry* 3, 67-71.
- Bucher P (1990): Weight matrix descriptions of four eukaryotic RNA polymerase II promoter elements derived from 502 unrelated promoter sequences. *J Mol Biol* 212, 563-578.
- Carlsson A, Lindqvist J (1963): Effect of chlorpromazine and haloperidol on formation of 3-methoxytyramine and normetanephrine in mouse brain. *Acta Pharmacol Toxicol* 20, 140-144.
- Chen WJ, Lu ML, Hsu YPP, Chen CC, Yu JM, Cheng ATA (1997): Dopamine D2 receptor gene and alcoholism among four aboriginal groups and han in Taiwan. *Am J Med Genet* 74, 129-136.
- Cohen J (1977): "Statistical Power Analysis for the Behavioral Sciences." Academic Press, New York, pp. 215-271.
- Crawley JN, Corwin RL (1994): Biological actions of cholecystokinin. *Peptides* 15, 731-755.
- Crawley JN (1991): Cholecystokinin-dopamine interactions. *Trends Pharmacol Sci* 12, 232-236.
- Crocq MA, Mant R, Asherson P, Williams J, Hode Y, Mayerova A, Collier D, Lannfelt L, Sokoloff P, Schwartz JC (1992): Association between schizophrenia and homozygosity at the dopamine D3 receptor gene. *J Med Genet* 29, 858-860.
- Dasgupta S, Li XM, Jansson A, Finnman UB, Matsui T, Rinken A, Arenas E, Agnati LF, Fuxe K (1995): Regulation of dopamine D2 receptor affinity by cholecystokinin octapeptide in fibroblast cells cotransfected with human CCKB and D2L receptor cDNAs. *Mol Br Res*, 292-299.
- De Weerth A, Pisegna JR, Huppi K, and Wank SA (1993): Molecular cloning, functional expression and chromosomal localization of the

human cholecystokinin type A receptor. *Biochem Biophys Res Commun* 194, 811-818.

Ginns EI, Jean PS, Philibert RA, Galdzicka M, Damschroder P, Thiel B, Long R, Ingraham LJ, Dalwaldi H, Murray MA, Ehlert M, Pal S, Remortel BG, Patel AP, Anderson MCH, Shaio C, Lau E, Dymarskaia I, Martin BM, Stubblefield B, Falls KM, Carulli JP, Keith TP, Fann CS, Lacy LG, Allen CR, Hostetter AM, Elston RC, Schork NJ, Egeland JA, Paul SM (1998): A genome-wide search for chromosomal loci linked to mental health wellness in relatives at high risk for bipolar affective disorder among the Old Order Amish. *Proc Natl Acad Sci* 95, 15531-15536.

Gottesman II (1994): Schizophrenia epigenesis: Past, present, and future. *Acta Psychiatr Scand [Suppl]* 90, 26-33.

Harada S, Okubo T, Tsutsumi M, Takase S, Muramatsu T (1998): A new genetic variant in the Sp1 binding cis-element of cholecystokinin gene promoter region and relationship to alcoholism. *Alcohol Clin Exp Res* 22, 93-96.

Harada S, Okubo T, Tachikawa H, Kawanishi Y (1997): Genetic variations of CCKBR, HT1AR and Mitochondrial-DNA ATPase deletion. In ISFH hakone symposium program committee (eds): "Advances in research on DNA polymorphisms." Toyoshoten, Tokyo, pp. 153-157.

Harty RF, Pearson PH, Solomon TE, McGuigan JE (1991): Cholecystokinin, vasoactive intestinal peptide and peptide histidine methionine responses to feeding in anorexia nervosa. *Regul Pept* 36, 141-150.

Heun R, Maier W (1995): Relation of schizophrenia and panic disorder: Evidence from a controlled family study. *Am J Med Genet* 60, 127-132.

- Hill DR, Shaw TM, Graham W, Woodruff GN (1990): Autoradiographical detection of cholecystinin-A receptors in primate brain using ¹²⁵I-Bolton Hunter CCK-8 and ³H-MK-329. *J Neurosci* 10, 1070-1081.
- Huppi K, Siwarski D, Pisegna JR, Wank S (1995): Chromosomal localization of the gastric and brain receptors for cholecystinin (CCKAR and CCKBR) in human and mouse. *Genomics* 25, 727-729.
- Innis RB, Synder SH (1980): Cholecystinin receptor binding in brain and pancreas: regulation of pancreatic binding by cyclic and acyclic guanine nucleotides. *Eur J Pharmacol* 65, 123-124.
- Inoue H, Iannotti CA, Welling CM, Veile R, Donis-Keller H, Permutt MA (1997): Human cholecystinin type A receptor gene: cytogenetic localization, physical mapping, and identification of two missense variants in patients with obesity and non-insulin-dependent diabetes mellitus (NIDDM). *Genomics* 42, 331-335.
- Kato T, Wang ZW, Zoega T, Crowe RR (1996): Missense mutation of the cholecystinin B receptor gene: Lack of association with panic disorder. *Am J Med Genet* 67, 401-405.
- Kennedy JL, Bradwejn J, Koszycki D, King N, Crowe R, Vincent J, Fourie O (1999): Investigation of cholecystinin system genes in panic disorder. *Mol Psychiatry* 4, 284-285.
- Lee YM, Beinborn M, McBride W, Lu M, Kolakowski LF, Kopin AS (1993): The human brain cholecystinin-B/Gastrin receptor: Cloning and characterization. *J Biol Chem* 268, 8164-8169.
- Marshall FH, Barnes S, Hughes J, Woodruff GN, Hunter JC (1991): Cholecystinin modulates the release of dopamine from the anterior and posterior nucleus accumbens by two different mechanisms. *J Neurochem* 56, 917-922.

- Merika M, Orkin SH (1993): DNA-binding specificity of GATA family transcription factors. *Mol Cell Biol* 13, 3999-4010.
- Miller JR, Holicky EL, Ulrich CD, Wieben ED (1995): Abnormal processing of the human cholecystokinin receptor gene in association with gallstone and obesity. *Gastroenterology* 109, 1375-1380.
- Mois HW, Yang L, Kristbjarnarson H, Wiese C, Byerley W, Macciardi F, Arolt V, Blackwood D, Liu X, Sjogren B, Aschauer HN, Hwu HG, Jang K, Livesley WJ, Kennedy JL, Zoega T, Ivarsson O, Bui MT, Yu MH, Havsteen B, Commenges D, Weissenbach J, Schwinger E, Gottesman II, Pakstis AJ, Wetterberg L, Kidd KK, Helgason T. (1995): An international two-stage genome-wide search for schizophrenia susceptibility genes. *Nature Genet* 11, 321-324.
- Moran TH, Robinson P, Goldrich MS, McHugh PR (1986): Two brain cholecystokinin receptors: Implications for behavioral actions. *Brain Res* 362, 175-179.
- Nielsen FC, Pedersen K, Hansen TVO, Rourk IJ, Rehfeld JF (1996): Transcriptional regulation of the human cholecystokinin gene: composite actions of the CREB/ATF-AP-1 family of transcriptional factors. *DNA and Cell Biol* 15, 53-56.
- Pisegna JR, Weerth A, Huppi K, Wank SA (1992): Molecular cloning of the human brain and gastric cholecystokinin receptor: structure, functional expression, and chromosomal localization. *Biochem Biophys Res Com* 189, 296-303.
- Randrup A, Munkvad L (1970): Biochemical, anatomical and psychological investigations of stereotyped behavior induced by amphetamines. In E Costa, S Garattini (eds): "Amphetamine and Related Compounds." Raven Press, New York, pp. 695-713.

- Rasmussen K, Stockton ME, Czachura JF, Houbert JJ (1991): Cholecystokinin (CCK) and schizophrenia: the selective CCKB antagonist LY262691 decreases midbrain dopamine unit activity. *Eur J Pharmacol* 209, 135-138.
- Seeman P, Ulpian C, Chouinard G, Van Tol HH, Dwosh H, Lieberman JA, Siminovitch K, Liu IS, Wayne J, Voruganti P (1994): Dopamine D4 receptor variant, D4GLYCINE194, in Africans, but not in Caucasians: no association with schizophrenia. *Am J Med Genet* 54, 384-390.
- Seeman P, Lee T, Chau-Wong M, Wong K (1976): Antipsychotic drug doses and neuroleptic/dopamine receptors. *Nature* 261, 717-719.
- Shaikh S, Ciller DA, Sham P, Ball D, Aitchison K, Vallada H, Smith I, Gill M, Kerwin RW (1996): Allelic association between a Ser-9-Gly polymorphism in the dopamine D3 receptor gene and schizophrenia. *Hum Genet* 97, 714-719.
- Shalling M, Friberg K, Seroogy K, Riederer P, Bird E, Schiffmann SN, Mailleux P, Vanderhaeghen JJ, Kuga S, Goldstein M, Kitahama K, Luppi PH, Jouvret M, Hokfelt T (1990): Analysis of expression of cholecystokinin in dopamine cells in the ventral mesencephalon of several species and in humans with schizophrenia. *Proc Natl Sci USA* 87, 8427-8431.
- Shapiro MB, Senepathy P (1987): RNA splice junctions of different classes of eukaryocytes: sequence statistics and functional implications in gene expression. *Nucl Acids Res* 15, 7155-7174.
- Sherrington R, Brynjolfsson J, Petursson H, Potter M, Dudleston K, Barraclough B, Wasmuth J, Dobbs M, Gurling H (1988): Localization of a susceptibility locus for schizophrenia on chromosome 5. *Nature* 336, 164-167.

- Schwab SG, Eckstein GN, Hallmayer J, Lerer B, Albus M, Borrmann M, Lichtermann D, Ertl MA, Maier W, Wildenauer DB (1997): Evidence suggestive of a locus on chromosome 5q31 contributing to susceptibility for schizophrenia in German and Israeli families by multi point affected sib-pair linkage analysis. *Mol Psychiatry* 2, 156-160.
- Snyder SH, Tayler KM, Coyle JT, Meyerhoff JL (1970): The role of brain dopamine in behavioral regulation and the actions of psychotropic drugs. *Am J Psychiatry* 127, 199-207.
- Song I, Brown DR, Wiltshire RN, Gantz I, Trent JM, Yamada T (1993): The human gastrin/cholecystokinin type B receptor gene: Alternative splice donor site in exon 4 generates two variant mRNAs. *Proc Natl Sci USA* 90, 9085-9089.
- Terwillinger JD, Otto J (1994): "Handbook of Human Genetic Linkage." John Hopkins University Press, Baltimore, MD.
- Ulrich CD, Ferber I, Holicky E, Hadac E, Buell G, Miller LJ (1993): Molecular cloning and functional expression of the human gall bladder cholecystokinin A receptor. *Biochem Biophys Res Commun* 193, 204-211.
- Vallada HP, Gill M, Sham P, Lim LC, Nanko S, Asherson P, Murray RM, McGuffin P, Owen M, Collier D (1995): Linkage studies on chromosome 22 in familial schizophrenia. *Am J Med Genet* 60, 139-146.
- Verbanck PMP, Lostra F, Gill C Linkowski P, Mendelwicz J, Vanderhaegen JJ (1984): Reduced cholecystokinin immunoreactivity in the cerebrospinal fluid of patients with psychiatric disorders. *Life Sci* 34: 67-72.

- Virroy TW, Bianchi BR (1989): Pharmacological and mechanistic studies of cholecystinin-facilitated [³H]-dopamine efflux from rat nucleus accumbens. *Neuropeptides* 13, 43-50.
- Virgo L, Humphries C, Mortimer A, Barnes T, Hirsch S, Belleruche J (1995): Cholecystinin messenger RNA deficit in frontal and temporal cerebral cortex in schizophrenia. *Biol Psychiatry* 37, 694-701.
- Wang Z, Valdes J, Noyes R, Zoega T, Crowe RR (1998): Possible association of a cholecystinin promoter polymorphism (CCK_{-36CT}) with panic disorder. *Am J Med Genet* 81, 228-234.