



ETHICS

Without conscience.

Wiesel E.

N Engl J Med. 2005 Apr 14;352:1511-3.

On the 60th anniversary of his liberation from Buchenwald concentration camp, Nobel Peace Prize laureate Elie Weisel describes the wartime atrocities of German psychiatrists and other doctors.

Highly cited paper: Ann Intern Med. 1998 Dec 1;129:891-8.

Textbook entry: Human Molecular Genetics 2. Chapter 13.4.

SUBSTANCE ABUSE

Activation of orbital and medial prefrontal cortex by methylphenidate in cocaine addicted subjects but not in controls: relevance to addiction.

Volkow ND, Wang GJ, Ma Y, Fowler JS, Wong C, Ding YS, Hitzemann R, Swanson JM, Kalivas P. *J Neurosci.* 2005 Apr 13;25:3932-9.

Cocaine-addicted subjects showed increased metabolism in right medial orbitofrontal cortex when given methylphenidate versus placebo, whereas control subjects showed decreased metabolism, in this PET study. See Figure 3.

Highly cited paper: Nature. 1997 Apr 24; 386:827-30.

Textbook entry: Basic Neurochemistry: Molecular, Cellular and Medical Aspects, 6 ed. Part 7: 53.

EATING DISORDERS

Effects of the cannabinoid-1 receptor blocker rimonabant on weight reduction and cardiovascular risk factors in overweight patients: 1-year experience from the RIO-Europe study.

Van Gaal LF, Rissanen AM, Scheen AJ, Ziegler O, Rossner S; RIO-Europe Study Group.

Lancet. 2005 Apr;365:1389-97.

The cannabinoid-1 receptor blocker rimonabant, at 20mg per day, led to a mean 7-kg weight loss after one year in 599 overweight subjects on a hypocaloric diet, compared to a 2-kg weight loss in 305 overweight subjects receiving placebo and on a hypocaloric diet,

when analyzed by intention to treat with last observation carried forward. See Figure 2.

Highly cited paper: Am J Physiol Regul Integr Comp Physiol. 2003 Feb;284:R345-53.

Cochrane review: Cochrane Database Syst Rev. 2004;(3):CD004094.

ACP Journal Club: ACP J Club. 2005 Jan-Feb;142:19.

ECT

Electroconvulsive therapy: a selected review. Greenberg RM, Kellner CH.

Am J Geriatr Psychiatry. 2005 Apr;13:268-81.

The authors review ECT, focusing on its use in geriatric patients.

Highly cited paper: Biol Psychiatry. 2002 Aug 1;52:265-84.

Cochrane review: Cochrane Database Syst Rev. 2003;(2):CD003593.

ACP Journal Club: ACP J Club. 2005 May-Jun;142:79.

PHARMACOGENETICS

Genetic predictors of the maximum doses patients receive during clinical use of the anti-epileptic drugs carbamazepine and phenytoin.

Tate SK, Depondt C, Sisodiya SM, Cavalleri GL, Schorge S, Soranzo N, Thom M, Sen A, Shorvon SD, Sander JW, Wood NW, Goldstein DB.

Proc Natl Acad Sci U S A. 2005 Apr 12; 102(15):5507-12.

Carbamazepine's maximum clinical dose correlated with an intronic polymorphism in the SCN1A gene of the alpha-subunit of the sodium channel, in a cohort of 425 epileptic patients. See Figure 3.

Highly cited paper: N Engl J Med. 2003 Apr 10;348:1442-8.

Textbook entry: Basic Neurochemistry: Molecular, Cellular and Medical Aspects, 6 ed. Part 5: 37.

BDNF

Essential role of TRPC channels in the guidance of nerve growth cones by brain-derived neurotrophic factor.

Li Y, Jia YC, Cui K, Li N, Zheng ZY, Wang YZ, Yuan XB.

Nature. 2005 Apr 14;434:894-8.

BDNF induces neural growth cone turning by indirectly activating TRP calcium channels, in this study of cerebellar granule cells. See Fig. 1.

Highly cited paper: Nature. 1997 Jul 17; 388:275-9.

Textbook entry: Developmental Biology, 6 ed. Part 3: 13.

BRAIN INJURY

Lesions of the basal forebrain cholinergic system impair task acquisition and abolish cortical plasticity associated with motor skill learning.

Conner JM, Culbertson A, Packowski C, Chiba AA, Tuszynski MH.

Neuron. 2003 Jun 5;38:819-29.

Functional recovery from motor cortex injury was reduced when the cholinergic-targeted toxin 192-IgG-saporin was injected into the basal forebrain of rats. See Figure 2.

Highly cited paper: Proc Natl Acad Sci U S A. 1992 Apr 1;89:2639-43.

Textbook entry: Basic Neurochemistry: Molecular, Cellular and Medical Aspects, 6 ed. Part 7: 50.

PRIONS

In Vitro Generation of Infectious Scrapie Prions

Castilla J, Saá P, Hetz C, Soto C

Cell. 2005 Apr 22;121:195-206.

Protease-resistant prion protein made by in vitro protein misfolding cyclic amplification was biochemically and structurally similar to prions from scrapie brains and caused scrapie after inoculation in hamster brain. See Table 1 and Figure 6.

Highly cited paper: Nature. 1996 Mar 28;380:345-7.

Textbook entry: Basic Neurochemistry: Molecular, Cellular and Medical Aspects, 6 ed. Part 6: 46.

PSYCHOLOGY

Representation of visual gravitational motion in the human vestibular cortex.

Indovina I, Maffei V, Bosco G, Zago M, Macaluso E, Lacquaniti F.

Science. 2005 Apr 15;308:416-9.

The vestibular cortex encodes visualized gravitational acceleration, according to this fMRI study in humans. See Figure 2.

Highly cited paper: Exp Brain Res. 1999 Aug;127:355-70.

Textbook entry: Neuroscience, 2 ed. II: 14.



DUKE RESEARCH

SUBSTANCE ABUSE

College students lack knowledge of standard drink volumes: implications for definitions of risky drinking based on survey data.

White AM, Kraus CL, Flom JD, Kestenbaum LA, Mitchell JR, Shah K, Swartzwelder HS. *Alcohol Clin Exp Res.* 2005 Apr;29:631-8.

Mecamylamine moderates cue-induced emotional responses in smokers.

McClellon FJ, Rose JE. *Addict Behav.* 2005 May;30:741-53.

GERIATRICS

An autosomal genomic screen for dementia in an extended Amish family.

Ashley-Koch AE, Shao Y, Rimmler JB, Gaskell PC, Welsh-Bohmer KA, Jackson CE, Scott WK, Haines JL, Pericak-Vance MA. *Neurosci Lett.* 2005 May 13;379:199-204.

Screening for Early Alzheimer's Disease: Is There Still a Role for the Mini-Mental State Examination?

Benson AD, Slavin MJ, Tran TT, Petrella JR, Doraiswamy PM. *Prim Care Companion J Clin Psychiatry.* 2005;7:62-69.

Thought suppression and treatment outcome in late-life depression.

Rosenthal MZ, Cheavens JS, Compton JS, Thorp SR, Lynch TR. *Aging Ment Health.* 2005 Jan;9:35-9.

CHILD

Sequential Pharmacotherapy for Children With Comorbid Attention-Deficit/Hyperactivity and Anxiety Disorders.

Abikoff H, McGough J, Vitiello B, McCracken J, Davies M, Walkup J, Riddle M, Oatis M, Greenhill L, Skrobala A, March J, Gammon P, Robinson J, Lazell R, McMahon DJ, Ritz L; and The RUPP ADHD/ANXIETY STUDY GROUP. *J Am Acad Child Adolesc Psychiatry.* 2005 May;44:418-427.

COMMUNITY

The assertive community treatment team as a complex dynamic system of care.

Allred CA,Burns BJ,Phillips SD.

Adm Policy Ment Health. 2005 Jan;32:211-20.

BIOLOGY

Neural substrates of coping behavior in the rat: possible importance of mesocorticolimbic dopamine system.

Coco ML,Weiss JM.

Behav Neurosci. 2005 Apr;119:429-45.

Disruption of Rat Forebrain Development by Glucocorticoids: Critical Perinatal Periods for Effects on Neural Cell Acquisition and on Cell Signaling Cascades Mediating Noradrenergic and Cholinergic Neurotransmitter/Neurotrophic Responses.

Kreider ML,Aldridge JE,Cousins MM,Oliver CA,Seidler FJ,Slotkin TA.

Neuropsychopharmacology. 2005 Apr 20

Translation of an integral membrane protein in distal dendrites of hippocampal neurons.

Grigston JC,Vandongen HM,McNamara JI,JO,Vandongen AM.

Eur J Neurosci. 2005 Mar;21:1457-68.

Interaction between tissue oxygen tension and NADH imaging during synaptic stimulation and hypoxia in rat hippocampal slices.

Foster KA,Beaver CJ,Turner DA.

Neuroscience. 2005;132:645-57.

PSYCHOLOGY

Variations in unconditioned stimulus processing in unblocking.

Holland PC,Kenmuir C.

J Exp Psychol Anim Behav Process. 2005 Apr;31:155-71.

Timing in choice experiments.

Jozefowicz J,Cerutti DT,Staddon JE.

J Exp Psychol Anim Behav Process. 2005 Apr;31:213-25.