

1990-94	Director, Brain and Behavior Clinic, Division of Neuropsychiatry, Department of Psychiatry, Hospital of the University of Pennsylvania, Philadelphia, PA
1991-97	Consultant in Neuropsychiatry, Bryn Mawr Rehabilitation Hospital, Malvern, PA
1993-present	Director, Cellular and Molecular Neuropathology Program, Center for Neurobiology and Behavior, Department of Psychiatry, University of Pennsylvania, Philadelphia, PA
1994-95	Clinician, Memory Disorders Clinic, Department of Neurology, The Graduate Hospital, Philadelphia, PA
1994-98	Member, Division of Geriatric Psychiatry, Ralston-Penn Medical Group, University of Pennsylvania, Philadelphia, PA
1994-present	Senior Fellow, Institute on Aging, University of Pennsylvania, Philadelphia, PA
1997-present	Clinician-Investigator, Alzheimer's Disease Center - Memory Disorders Clinic, Hospital of the University of Pennsylvania, Philadelphia, PA
2001-03	Associate Director, Mahoney Institute of Neurological Sciences, University of Pennsylvania School of Medicine, Philadelphia, PA
2001-present	Director, Clinical Neurosciences Track, University of Pennsylvania School of Medicine, Philadelphia, PA

Specialty Certification:

1988	Psychiatry - American Board of Psychiatry and Neurology
1991	Neurology - American Board of Psychiatry and Neurology

Licensure:

Pennsylvania, New York (inactive), and Iowa (inactive)

Awards, Honors and Membership in Honorary Societies:

1987	Sandoz Award for Excellence in Clinical Administration
1988	Iowa Midwest Neurology Association Residents' Day Research Award
1989	Iowa Midwest Neurology Association Residents' Day Research Award
1990	Iowa Midwest Neurology Association Residents' Day Research Award
1991	Hartford Foundation Fellow for Research on Aging
1992	National Alliance for Research on Schizophrenia and Depression Young Investigator Award
1994	Fellow, Institute on Aging, University of Pennsylvania
1996	National Alliance for Research on Schizophrenia and Depression Gerald Klerman Award (Honorable Mention)

1996	Theodore & Vada Stanley Foundation Research Award
1996	New York State Psychiatric Institute Centennial Award - Alumnus of the Decade 1980-1989
1998	<i>Philadelphia Magazine</i> , June 1998 -- "Top Doctor," Caring for the Aging, Neurology (Specialty: Neuropsychiatry)
2000	NARSAD Independent Investigator Award
2001	Essel Investigator, NARSAD Research Partners Program
2003	Alzheimer's Association T.L.L. Temple Foundation Discovery Award

Memberships in Professional and Scientific Societies:

National Societies:

1985-93	American Psychiatric Association
1988-present	American Academy of Neurology
1989-present	Society for Neuroscience
1998-99	American Neuropsychiatric Association
1999-present	American Association of Neuropathology
2000-present	American Association of Geriatric Psychiatry
2004-present	American College of Neuropsychopharmacology

Local Societies:

None

National Scientific Committees:

National Institute of Mental Health, Mental Disorders of Aging Study Section (MDA), Regular Member 1997-99
National Institutes of Health, Neurological Sciences Study Section, Subcommittee 1 (NLS-1), Ad Hoc Reviewer
National Institute of Mental Health, Neuroscience Review Branch, various Special Emphasis Panels (Chair/Reviewer 1999-2005)

Local Scientific Committees:

Swarthmore Senior Citizens Association, Health Committee

Editorial Positions:

1995-98	Editorial Board, Journal of Gerontology
2000-04	Editorial Board, American Journal of Geriatric Psychiatry
2004-present	Editorial Board, Schizophrenia Bulletin

Academic Committees at the University of Pennsylvania and Affiliated Hospitals:

1998-2001	University of Pennsylvania Faculty Grievance Commission Hearings Panel
1999-present	Faculty Advisory Committee for Institute on Aging
2003, 2005	COAP Ad Hoc Promotion Subcommittees

Major Teaching and Clinical Responsibilities at the University of Pennsylvania:

- 1990-present Attending physician, Psychiatry inpatient units, Hospital of the University of Pennsylvania
- 1990-present Supervision of fellows, residents, medical students and graduate students
- 1992-2000 Lecturer in Integrative Neuroscience course (ID110), School of Medicine
- 1994-95 Lecturer in Biological Basis of Behavior course (BBB109), School of Arts and Sciences
- 1994-present Staff physician for geriatric neuropsychiatry and neurology, Foederer Clinic, Ralston-Penn Center, Hospital of the University of Pennsylvania
- 1997-present Section coordinator in Neuropsychopharmacology course (Pharm 550), Biomedical Graduate Studies
- 1998-present Independent study undergraduate advisor, Biological Basis of Behavior (BBB 399/499), School of Arts and Sciences
- 2000-present Lecturer in Biological/Behavioral Correlates in Mental Health and Illness (NURS 622), School of Nursing
- 2001-present Director, Clinical Neuroscience Track, School of Medicine
- 2003-present Lecturer in Mental Health and Aging (NURS 628), School of Nursing

Lectures by Invitation:

- April 5, 1991 "Borderland of Psychiatry and Neurology" – American Academy of Neurology Annual Meeting, Boston, MA
- January 2, 1992 "Towards a Neuroanatomy of Psychosis" - Grand Rounds, Department of Psychiatry, University of Pennsylvania, Philadelphia, PA
- March 3, 1993 "Alzheimer's Disease: Phenomenology and Pathobiology" - DuPont/Merck, Wilmington, DE
- May 12, 1993 "Treatment of Brain Injury in the State Hospital Setting" - Allentown State Hospital, Allentown, PA
- May 27, 1993 "Hippocampal Formation in Schizophrenia" - American Psychiatric Association Annual Meeting, San Francisco, CA
- January 21, 1994 "Neuropathology of Schizophrenia" - Department of Neurology, Pennsylvania Hospital, Philadelphia, PA
- June 29, 1994 "Investigations of Neuronal Morphology and the Neuronal Cytoskeleton in the Hippocampal Region in Schizophrenia" - XIXth Congress of the Collegium Internationale Neuropsychopharmacologicum, Washington, DC

- November 6, 1995 "Clinicopathologic Studies of Neuropsychiatric Illness in Late Life" - Philadelphia Geriatric Center, Philadelphia, PA
- November 12, 1995 Chair of Session for "Mental Illness I" - 25th Annual Meeting of the Society for Neuroscience, San Diego, CA
- December 15, 1995 "Molecular Markers of Neurodegeneration and Neural Injury in Elderly Patients with Schizophrenia" - Thirty-fourth Annual Meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico
- January 12, 1996 "Development or Degeneration? Insights from Neuropathological Investigations of Schizophrenia" - Grand Rounds, Department of Psychiatry, College of Physicians and Surgeons of Columbia University, New York, NY
- April 30, 1996 "Cellular and Molecular Neuropathology of Schizophrenia" - Eleventh Annual Research Retreat, Department of Psychiatry, University of Pennsylvania Medical Center, Philadelphia, PA
- May 2, 1996 "The Dementia of Schizophrenia: Antemortem and Postmortem Studies" - Society for Biological Psychiatry Annual Meeting - 1996, New York, NY
- April 2, 1997 "Neuropathology and Cognition in Schizophrenia" -- Dr. Paul Janssen Medical Institute - Symposium 1997: Schizophrenia: Clinical Signs and Cognitive Dysfunction, Copenhagen, DENMARK
- April 12, 1997 "Schizophrenia and Frontotemporal Degenerative Dementias: Neuropathological Similarities and Differences" -- 1997 Mt. Sinai Conference on Schizophrenia and Cognition, New York, NY
- July 8, 1997 "Cellular and Molecular Neuropathology of the Olfactory Epithelium and Central Olfactory Pathways in Neuropsychiatric Disorders in Late Life" -- International Symposium on Olfaction and Taste XII, San Diego, CA
- August 16, 1997 Eighth Congress of the International Psychogeriatric Association, Jerusalem, ISRAEL (declined)
- November 24, 1997 "A Neuropathological Perspective on Neurodevelopment and Neurodegeneration in Schizophrenia" -- Grand Rounds, Department of Psychiatry, University of Chicago, Chicago, IL

- December 8, 1997 "Is There a Distinct 'Vascular Depression' in Late-Life" -- Annual Meeting Study Group Panelist, 36th Annual Meeting of the American College of Neuropsychopharmacology, Kamuela, HA
- March 10, 1998 "Neuropathological Investigations of Schizophrenia in Late Life" -- AAGP Symposium on Elderly Schizophrenics, 11th Annual Meeting of the American Association for Geriatric Psychiatry, San Diego, CA
- March 23, 1998 "Towards a Neuropathology of Schizophrenia" -- Grand Rounds, Department of Pathology and Laboratory Medicine, University of Pennsylvania, Philadelphia, PA
- May 21, 1998 Visiting Professorship -- "Development of a Program for Clinico-Pathological Studies of Psychiatric Disorders in Late Life" -- The New York Hospital - Cornell Medical Center, White Plains, NY
- June 18, 1998 "Dementia in Schizophrenia: Neurodegeneration or Neurodevelopment?" -- Presidential Symposium, 1998 American Association of Neuropathologists Annual Meeting, Minneapolis, MN
- August 6, 1998 "Clinicopathological Investigations of Dementia in Schizophrenia" -- Grand Rounds, Department of Neurological Sciences, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL
- March 1, 1999 "Cellular and Molecular Neuropathology in the Olfactory System - A Model for Studying Neurodevelopmental Processes in Schizophrenia" -- Neuroscience Seminar, Department of Psychiatry, College of Physicians and Surgeons of Columbia University, New York, NY
- April 12-13, 1999 "Neuropathology of Schizophrenia" -- Grand Rounds and Research Seminar, Department of Psychiatry, University of Iowa, Iowa City, IA
- May 6, 1999 "Quantitative Neurohistological Features of 'Dementia Lacking Distinctive Histopathology'" -- Alzheimer's Association Multidisciplinary Conference on Pick's Disease and Frontotemporal Dementias, Philadelphia, PA
- May 14, 1999 "Neuropathology of the Olfactory System in Schizophrenia" -- Symposium: "Temporolimbic Function in Schizophrenia: An Integrative Approach from Behavior to the Molecule," Society

- of Biological Psychiatry 53rd Annual Meeting, Washington, DC
- June 14, 1999 "Neuropathology of Schizophrenia in Late Life" -- Harvard Medical School Symposium: "Late Life Schizophrenia: State of the Science," Beverly Hills, CA
- August 7, 1999 "Neurodegeneration in Schizophrenia" -- Molecular Approaches to Psychiatric Research Symposium, XIth World Congress for Psychiatry, Hamburg, GERMANY
- September 24, 1999 "Cellular and Molecular Neuropathology of the Entorhinal Cortex in Schizophrenia" -- New York Academy of Sciences Conference on "The Parahippocampal Region: Basic Science and Clinical Implications," Baltimore, MD
- February 17, 2000 "A Neuropathological Perspective of Development and Degeneration in Schizophrenia" – Grand Rounds, Department of Psychiatry, University of Washington, Seattle, WA
- March 7, 2000 "Towards a Developmental Neuropathology of Schizophrenia" – Grand Rounds, Neuropsychiatric Institute, University of California at Los Angeles, Los Angeles, CA
- September 1, 2000 "Aspects of Synaptic Connectivity/Maturation that are Altered in Schizophrenia" – International Congress of Neuropathology / Schizophrenia Satellite Meeting, Oxford, UNITED KINGDOM
- March 27, 2001 "Neuropathology of Schizophrenia" – National Association of Veterans Administration Psychiatrists in Administration and Leadership: "Schizophrenia: Scientific, Clinical, and Economic Challenges to the VA," Ellicott City, MD
- September 21, 2001 "Single Cell Gene Expression Profiling in Alzheimer's Disease and Other Neuropsychiatric Illnesses" – IRCCS S. Giovanni di Dio Symposium: "The Shadow Line from Normal Aging to Dementia: Clinical, Genetic and Ethical Aspects," Brescia, ITALY
- February 21, 2002 "The Grail in the Graveyard: Neuropathology's Insights into Schizophrenia" – Grand Rounds, Department of Psychiatry, University of Pennsylvania, Philadelphia, PA
- September 23, 2002 "Under the Microscope: Postmortem Research into the Causes of Mental Illness" – NAMI FACE of Burlington County, Moorestown, NJ

- September 28, 2002 “The Entorhinal Cortex in Aging and Dementia – Clinical Neurobiology, Cellular and Molecular Neuropathology” – First International Dementia Congress, Chicago, IL
- October 7, 2002 “The Grail in the Graveyard: Postmortem Research into the Neurobiology of Schizophrenia” – Grand Rounds, Norristown State Hospital, Norristown, PA
- October 10, 2002 “Cellular and Molecular Approaches to Schizophrenia as a Neurdevelopmental Disorder” – Grand Rounds, Department of Neurology, University of Pennsylvania, Philadelphia, PA
- December 11, 2002 “DNA Strand Breaks in Hippocampal and Olfactory Tissues in Schizophrenia and Bipolar Disorder” – in “Apoptotic Mechanisms in the Pathophysiology and Treatment of Schizophrenia and Bipolar Disorder” – 41st Annual Meeting, American College of Neuropsychopharmacology, San Juan, PR
- December 19, 2002 “The Grail in the Graveyard: Insights from Postmortem Research into the Neurobiology of Schizophrenia” – Grand Rounds, Hall Mercer Mental Health Center, Pennsylvania Hospital, Philadelphia, PA
- February 25, 2003 "Neuropathology Research in Psychiatric Illness and Cognition in the Aged" – National Institute of Mental Health Special Conference "The Neuroscience of Aging in Psychiatric Disease," Rockville, MD
- April 10, 2003 "Human Olfactory Neurogenesis and Synaptogenesis: A Model System for Investigating Neurodevelopmental Pathology in Psychiatric Disorders" – Mahoney Institute of Neurological Sciences Annual Research Retreat, Bryn Mawr, PA
- July 17, 2003 “Postmortem Research into the Neuropathology of Schizophrenia” – Grand Rounds, Department of Neurology, Crozer-Chester Medical Center, Upland, PA
- August 28, 2003 “Schizophrenia as a Neural Network Disease” – Netherlands Institute for Brain Research, International Neuroscience Summer School, Amsterdam, The NETHERLANDS
- September 13, 2002 “Debate – Should Physicians Diagnose and Treat Alzheimer’s Disease Presymptomatically” – Second Annual Dementia Congress, Washington, DC

- September 14, 2003 “What Clinical Lessons Have We Learned from the Neuropathology of Alzheimer’s Disease” – Second Annual Dementia Congress, Washington, DC
- October 24, 2003 “Neuropathology of Schizophrenia” – Symposium “Schizophrenia Across the Lifespan,” Harrisburg State Hospital, Harrisburg, PA
- October 31, 2003 “Under the Microscope: Brain Tissue Research into the Causes of Mental Illness” – NAMI Pennsylvania Annual Conference 2003 “Bringing Science to the Grassroots,” Harrisburg, PA
- November 21, 2003 “Neuropathology Associated with Schizophrenia” – 20th Annual University of Pittsburgh Schizophrenia Conference, Pittsburgh, PA
- February 23, 2004 “Follow Your Nose: The Olfactory System as a Window into the Neurobiology of Schizophrenia” – American Association for Geriatric Psychiatry 17th Annual Meeting, Baltimore, MD
- May 13, 2004 “Brain Tissue Research in Severe Psychiatric Illnesses” – Commonwealth of Pennsylvania State Hospital Grand Rounds Teleconference: Hershey Medical Center, Harrisburg State Hospital, Norristown State Hospital, Allentown State Hospital, Danville State Hospital, Chambersburg Hospital, Mayview State Hospital, PA
- June 18, 2004 “Dementia Neuropathology and How it Relates to Clinical Manifestations” – Hartford Hospital 26th Annual Neurology Symposium, Farmington, CT
- December 16, 2004 “Postmortem Functional Genomics of Dysbindin” – In “Schizophrenia Genes Implicate Convergent Signaling Pathways” Panel Session, 43rd Annual Meeting of the American College of Neuropsychopharmacology, San Juan, PR
- February 23, 2005 “Molecular Traction: Schizophrenia Research in the Era of Functional Genomics” – Special Seminar, Department of Psychiatry, Mount Sinai School of Medicine, New York, NY
- April 11, 2005 “Molecular Traction: Schizophrenia Research in the Era of Functional Genomics” – Research Seminar, Department of Human Genetics, David Geffen School of Medicine, University of California at Los Angeles, Los Angeles, CA
- June 8, 2005 “Schizophrenia, Genes, and Brain Tissue Research: A New Era” – Spring In-Service and Family Council, South Mountain

Restoration Center, South Mountain, PA

September 20, 2005 "The Grail in the Graveyard: New Findings in the Neuropathology of Schizophrenia" – Colloquium, Department of Psychology, University of Pennsylvania, Philadelphia, PA

Organizing Roles in Scientific Meetings:

January 23-25, 2003 Planning Committee, "Clinical Trials in Neuroprotection: A Multidisciplinary Symposium Designed to Foster the Development of New Drugs for Protecting the Brain and Spinal Cord," Key Biscayne, FL

June 6, 2003 Organizing Director, South Mountain Restoration Center Spring Symposium "Schizophrenia Across the Lifespan," South Mountain, PA

December 12, 2005 Chair & Discussant, Half-Day Panel "Neuregulin-1 – erbB4 Signaling in Schizophrenia, American College of Neuropsychopharmacology 44th Annual Meeting, Waikoloa, HI

Bibliography:

Research Publications, peer reviewed:

1. Arnold S.E., Kahn R.J., Faldetta L.L., Laing R.A., McNair D.M.: "Tricyclic antidepressants and peripheral anticholinergic activity," *Psychopharmacology (Berl)* 74:325-328, 1981.
2. Arnold S.E.: "Psychosis and mycoplasma pneumoniae [case report]," *Hillside J Clin Psychiatry* 9:231-235, 1987.
3. Arnold S.E., Biller J.: "Spontaneous cerebral embolism from descending thoracic aortic aneurysm--a case report," *Angiology* 42:69-72, 1991.
4. Arnold S.E., Hyman B.T., Flory J., Damasio A.R., Van Hoesen G.W.: "The topographical and neuroanatomical distribution of neurofibrillary tangles and neuritic plaques in the cerebral cortex of patients with Alzheimer's disease," *Cereb Cortex* 1:103-116, 1991.
5. Arnold S.E., Hyman B.T., Van Hoesen G.W., Damasio A.R.: "Some cytoarchitectural abnormalities of the entorhinal cortex in schizophrenia," *Arch Gen Psychiatry* 48:625-632, 1991.
6. Arnold S.E., Lee V.M., Gur R.E., Trojanowski J.Q.: "Abnormal expression of two microtubule-associated proteins (MAP2 and MAP5) in specific subfields of the hippocampal formation in schizophrenia," *Proc Natl Acad Sci U S A* 88:10850-10854, 1991.
7. Hyman B.T., Flory J.E., Arnold S.E., Van Hoesen G.W., Schelper R.L., Ghanbari H., Haigler H.: "Quantitative assessment of ALZ-50 immunoreactivity in Alzheimer's disease," *J Geriatr Psychiatry Neurol* 4:231-235, 1991.
8. Arnold S.E.: "Estrogen for refractory aggression after traumatic brain injury," *Am J Psychiatry* 150:1564-1565, 1993.

9. Arnold S.E., Franz B.R., Trojanowski J.Q.: "Elderly patients with schizophrenia exhibit infrequent neurodegenerative lesions," *Neurobiol Aging* 15:299-303, 1994.
10. Arnold S.E., Hyman B.T., Van Hoesen G.W.: "Neuropathologic changes of the temporal pole in Alzheimer's disease and Pick's disease," *Arch Neurol* 51:145-150, 1994.
11. Holdnack J.A., Moberg P.J., Arnold S.E., Gur R.E., Gur R.C.: "MMPI characteristics in adults diagnosed with ADD: a preliminary report," *Int J Neurosci* 79:47-58, 1994.
12. Houlihan D.J., Flaum M., Arnold S.E., Keshavan M., Alliger R.: "Further evidence for olfactory identification deficits in schizophrenia," *Schizophr Res* 12:179-182, 1994.
13. Arnold S.E., Franz B.R., Gur R.C., Gur R.E., Shapiro R.M., Moberg P.J., Trojanowski J.Q.: "Smaller neuron size in schizophrenia in hippocampal subfields that mediate cortical-hippocampal interactions," *Am J Psychiatry* 152:738-748, 1995.
14. Arnold S.E., Gur R.E., Shapiro R.M., Fisher K.R., Moberg P.J., Gibney M.R., Gur R.C., Blackwell P., Trojanowski J.Q.: "Prospective clinicopathologic studies of schizophrenia: accrual and assessment of patients," *Am J Psychiatry* 152:731-737, 1995.
15. Gur R.C., Mozley L.H., Mozley P.D., Resnick S.M., Karp J.S., Alavi A., Arnold S.E., Gur R.E.: "Sex differences in regional cerebral glucose metabolism during a resting state," *Science* 267:528-531, 1995.
16. Gur R.E., Mozley P.D., Resnick S.M., Mozley L.H., Shtasel D.L., Gallacher F., Arnold S.E., Karp J.S., Alavi A., Reivich M., et al.: "Resting cerebral glucose metabolism in first-episode and previously treated patients with schizophrenia relates to clinical features," *Arch Gen Psychiatry* 52:657-667, 1995.
17. Martinoli M.G., Trojanowski J.Q., Schmidt M.L., Arnold S.E., Fujiwara T.M., Lee V.M., Hurtig H., Julien J.P., Clark C.: "Association of apolipoprotein epsilon 4 allele and neuropathologic findings in patients with dementia," *Acta Neuropathol (Berl)* 90:239-243, 1995.
18. Arnold S.E., Trojanowski J.Q.: "Human fetal hippocampal development: II. The neuronal cytoskeleton," *J Comp Neurol* 367:293-307, 1996.
19. Arnold S.E., Trojanowski J.Q.: "Human fetal hippocampal development: I. Cytoarchitecture, myeloarchitecture, and neuronal morphologic features," *J Comp Neurol* 367:274-292, 1996.
20. Arnold S.E., Joo E., Martinoli M.G., Roy N., Trojanowski J.Q., Gur R.E., Cannon T., Price R.A.: "Apolipoprotein E genotype in schizophrenia: frequency, age of onset, and neuropathologic features," *Neuroreport* 8:1523-1526, 1997.
21. Arnold S.E., Ruscheinsky D.D., Han L.Y.: "Further evidence of abnormal cytoarchitecture of the entorhinal cortex in schizophrenia using spatial point pattern analyses," *Biol Psychiatry* 42:639-647, 1997.
22. Gurevich E.V., Bordelon Y., Shapiro R.M., Arnold S.E., Gur R.E., Joyce J.N.: "Mesolimbic dopamine D3 receptors and use of antipsychotics in patients

- with schizophrenia. A postmortem study," *Arch Gen Psychiatry* 54:225-232, 1997.
23. Moberg P.J., Doty R.L., Mahr R.N., Mesholam R.I., Arnold S.E., Turetsky B.I., Gur R.E.: "Olfactory identification in elderly schizophrenia and Alzheimer's disease," *Neurobiol Aging* 18:163-167, 1997.
 24. Moberg P.J., Doty R.L., Turetsky B.I., Arnold S.E., Mahr R.N., Gur R.C., Bilker W., Gur R.E.: "Olfactory identification deficits in schizophrenia: correlation with duration of illness," *Am J Psychiatry* 154:1016-1018, 1997.
 25. Prohovnik I., Arnold S.E., Smith G., Lucas L.R.: "Physostigmine reversal of scopolamine-induced hypofrontality," *J Cereb Blood Flow Metab* 17:220-228, 1997.
 26. Smutzer G., Zimmerman J.E., Hahn C.G., Ruscheinsky D.D., Rodriguez A., Han L.Y., Arnold S.E.: "Inositol 1,4,5-trisphosphate receptor expression in mammalian olfactory tissue," *Brain Res Mol Brain Res* 44:347-354, 1997.
 27. Smutzer G., Zimmerman J.E., Han L.Y., Ruscheinsky D.D., Arnold S.E., Yu X., Kratskin I.: "Inositol 1,4,5-trisphosphate receptor expression in odontoblast cells," *Biochim Biophys Acta* 1358:221-228, 1997.
 28. Arnold S.E., Trojanowski J.Q., Gur R.E., Blackwell P., Han L.Y., Choi C.: "Absence of neurodegeneration and neural injury in the cerebral cortex in a sample of elderly patients with schizophrenia," *Arch Gen Psychiatry* 55:225-232, 1998.
 29. Smutzer G., Lee V.M., Trojanowski J.Q., Arnold S.E.: "Human olfactory mucosa in schizophrenia," *Ann Otol Rhinol Laryngol* 107:349-355, 1998.
 30. Tran K.D., Smutzer G.S., Doty R.L., Arnold S.E.: "Reduced Purkinje cell size in the cerebellar vermis of elderly patients with schizophrenia," *Am J Psychiatry* 155:1288-1290, 1998.
 31. Arnold S.E., Trojanowski J.Q., Parchi P.: "Protease resistant prion proteins are not present in sporadic "poor outcome" schizophrenia," *J Neurol Neurosurg Psychiatry* 66:90-92, 1999.
 32. Duda J.E., Shah U., Arnold S.E., Lee V.M., Trojanowski J.Q.: "The expression of alpha-, beta-, and gamma-synucleins in olfactory mucosa from patients with and without neurodegenerative diseases," *Exp Neurol* 160:515-522, 1999.
 33. McBride T., Arnold S.E., Gur R.C.: "A comparative volumetric analysis of the prefrontal cortex in human and baboon MRI," *Brain Behav Evol* 54:159-166, 1999.
 34. Arnold S.E., Han L.Y., Clark C.M., Grossman M., Trojanowski J.Q.: "Quantitative neurohistological features of frontotemporal degeneration," *Neurobiol Aging* 21:913-919, 2000.
 35. Falke E., Han L.Y., Arnold S.E.: "Absence of neurodegeneration in the thalamus and caudate of elderly patients with schizophrenia," *Psychiatry Res* 93:103-110, 2000.
 36. Gur R.E., Cowell P.E., Latshaw A., Turetsky B.I., Grossman R.I., Arnold S.E., Bilker W.B., Gur R.C.: "Reduced dorsal and orbital prefrontal gray matter volumes in schizophrenia," *Arch Gen Psychiatry* 57:761-768, 2000.

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41. Arnold S.E., Han L.Y., Moberg P.J., Turetsky B.I., Gur R.E., Trojanowski J.Q., Hahn C.G.: "Dysregulation of olfactory receptor neuron lineage in schizophrenia," *Arch Gen Psychiatry* 58:829-835, 2001.
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47. Mitchell T.W., Mufson E.J., Schneider J.A., Cochran E.J., Nissanov J., Han L.Y., Bienias J.L., Lee V.M., Trojanowski J.Q., Bennett D.A., Arnold S.E.: "Parahippocampal tau pathology in healthy aging, mild cognitive impairment, and early Alzheimer's disease," *Ann Neurol* 51:182-189, 2002.
48. Wilson R.S., Barnes L.L., Mendes de Leon C.F., Aggarwal N.T., Schneider J.S., Bach J., Pilat J., Beckett L.A., Arnold S.E., Evans D.A., Bennett D.A.: "Depressive symptoms, cognitive decline, and risk of AD in older persons," *Neurology* 59:364-370, 2002.
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- allele, AD pathology, and the clinical expression of Alzheimer's disease," *Neurology* 60:246-252, 2003.
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 51. Falke E., Nissanov J., Mitchell T.W., Bennett D.A., Trojanowski J.Q., Arnold S.E.: "Subicular dendritic arborization in Alzheimer's disease correlates with neurofibrillary tangle density," *Am J Pathol* 163:1615-1621, 2003.
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None

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None

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Alternative Media:

None

Patents:

None