

CURRICULUM VITAE**Honglei Chen****EDUCATION**

- 1993 M.D. TianJin Medical University, Tianjin, China
1996 M.Sc. Chinese Academy of Preventive Medicine, Beijing, China
2001 Ph.D. Tufts University, Boston, Massachusetts, US

ACADEMIC APPOINTMENTS

- 2001-05 Research Associate (2001-03) & Instructor (2003-05) in Nutritional Epidemiology, Harvard School of Public Health, Boston, Massachusetts
2005-16 Tenure-Track Investigator (2005-13) & Senior Investigator with Tenure (2013-16), Epidemiology Branch, Secondary appointment in the Laboratory of Neurobiology (2013-16), National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina
2011-16 Adjunct Associate Professor (2011-14) & Adjunct Professor (2014-16), School of Public Health, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina
2016- Professor with Tenure (2016-) & MSU Foundation Professor (2021-), Department of Epidemiology and Biostatistics, College of Human Medicine, Michigan State University, East Lansing, Michigan

OTHER PROFESSIONAL/TRAINING POSITIONS

- 1992 Intern in Medicine, HuanHu Hospital, TianJin, P.R. China
1999-00 Visiting Fellow in Cancer Epidemiology, National Cancer Institute, Rockville, Maryland
2016-19 Special Volunteer, Epidemiology Branch, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina

TEACHING EXPERIENCE***Guest / invited lectures***

- 2001-03 "Nutritional Epidemiology", Tufts University
2002 "Design of Epidemiologic Studies for Nutrition Research", Tufts University
2003-05 "Nutritional Epidemiology", Harvard School of Public Health
2007-08 "Environmental Epidemiology", University of North Carolina at Chapel Hill
2017 "Chronic Disease Epidemiology", Indiana University
2017 "Neuropsychiatric Epidemiology", Michigan State University
2019 Three guest lectures at Tianjin Medical University

Lead / core instructor

- 2019-21 "Epidemiology Intersession" (8 2-hour sessions), Michigan State University
2019- "Neuroepidemiology" (EPI835, lead instructor in 2019 & co-instructor in 2021, 3-credit, biennially), Michigan State University

2020- “Introductory Epidemiology” (EPI810, lead instructor, 3-credit), Michigan State University

AWARDS AND HONORS

1988-93 Scholarship Award for Outstanding Students (TianJin Medical University)
 1990 Wang Ke-Chang Metropolitan Scholarship Award (Advanced Education Committee of TianJin)
 1996 Excellent Thesis Award (Chinese Academy of Preventive Medicine)
 1996-00 Scholarship Award (Tufts University)
 1999-00 Visiting Fellowship Award (National Cancer Institute)
 2002-03 National Research Service Award (National Institutes of Health)
 2019 NIH Director’s Award –the Agricultural Health Study Research Team
 2020 MSU AgeAlive 2020 Inaugural Research Award
 2021 MSU Foundation Professor
 2023 Elected Fellow of the American Academy of Neurology (FAAN)
 2023-2024 Selected for the Academic Leadership Fellows Program with Dr. Douglas Gage, Senior Vice President for Research and Innovation, Michigan State University

PROFESSIONAL SOCIETIES

Society for Epidemiologic Research
 American Academy of Neurology
 Movement Disorders Society
 The Gerontological Society of America
 Association for Chemoreception Sciences
 International Society for Environmental Epidemiology

RESEARCH FUNDING

After joining MSU in 2016

W81XWH-17-1-0536 **Chen (mPI)** \$1,500,000 (Chen)
Title: Airborne pollutants as triggers of Parkinson's disease via the olfactory system
 Source: DOD Parkinson’s Research Program
 Dates: 09/01/2017 – 08/31/2021
 Role: Multi-PI, Principal Investigator for the epidemiology arm
 Goal: To define the role of ambient air pollutants in olfactory impairment among older adults in order to understand early stages of PD development, using data from the Sister Study.

PF-IMP-1825 **Chen (PI)** \$151,399
Title: Prodromal symptoms in the Sister Study
 Source: Parkinson’s Foundation
 Dates: 06/01/2018–05/31/2019
 Role: Principal Investigator
 Goal: As part of the inaugural Parkinson’s Foundation Impact Award program, the grant supports additional data collection for the afore-mentioned DoD project.

No Number **Chen (mPI)** \$299,975
Title: Determinants of depression in Parkinson’s disease
 Source: Gibby & Friends vs. Parky for Parkinson’s Disease Research

Dates: 06/01/18-05/31/21

Role: Multi-PI

Goal: To investigate the role of depression in Parkinson's disease using data from the Swedish patient registry.

R01ES029227

Chen (PI)

\$4,999,267

Title: Pesticides, Olfaction, and Neurodegeneration Among US Farmers

Source: NIH/NIEHS

Dates: 02/01/2019 – 01/31/2024

Role: Principal Investigator

Goal: To investigate roles of pesticides in olfactory impairment among farmers and their relevance to prodromal development of major neurodegenerative diseases.

R01AG071517

Chen (PI)

\$2,674,117

Title: Poor sense of smell and the health of older adults

Source: NIH/NIEHS

Dates: 06/15/2022 – 02/28/2027

Role: Principal Investigator

Goal: To investigate poor olfaction as a facile, early, and noninvasive marker of deteriorating health of older adults and age acceleration.

Before joining MSU

Extramural

2002-04	Michael J. Fox Foundation	Co-Investigator	Prospective study of non-steroidal anti-inflammatory drugs and risk of Parkinson's disease	\$557,837
2003-04	NIH RO1	Co-Investigator	Prospective epidemiological study of ALS	\$615,600
2004-05	NIH KO8*	Principal Investigator	Diet, gene-diet interactions and risk of Parkinson's	\$122,647
2005-10	NIH RO1	Co-Investigator	NSAIDs, inflammation and Parkinson's disease	\$2,091,766
2006-11	NIH RO1	Consultant	Prospective study of ALS: Pooling project	\$1,497,423
2009-10	Parkinson Study Group	Co-Principal Investigator	Plasma cholesterol and the progression of Parkinson's disease	\$12,000

* Terminated when I took the NIH intramural position in Jan. 2005, cost for the year of 2004 only.

NIH Intramural #

2006-16	ZIAES101986	Principal Investigator	Prospective Studies on Parkinson's Disease	\$9,607,506
2014-16	ZIAES049030	Principal Investigator	Health Effects of Exposures in Agriculture	\$530,619

Terminated when I left NIH intramural program, only data collection and analytic costs.

INVITED PRESENTATIONS

Michigan State University Institute of Integrative Toxicology, September 19, 2023: "The study of olfaction: environment, prodromal neurodegeneration, and Beyond"

Beijing Union Medical University, May 10, 2023: "Olfaction, cardio-respiratory health, and aging"

Monell Institute, February 28, 2023 "Poor olfaction, neurodegeneration, and beyond: an epidemiologic perspective"

University of Michigan Udall Center, February 22nd, 2023 "Environmental Health Studies of Prodromal Parkinson's Development"

The University of Florida, UF Health Smell Disorders Program, January 10th, 2023 "Poor olfaction and the health of older adults"

Indiana University, School of Public Health, November 4th, 2022, Indianapolis, IN "The Sense of Smell, Neurodegeneration, and Beyond"

Michael J. Fox Foundation – Environmental contributors to Parkinson's disease risk meeting "Parkinson's disease epidemiological research: Findings, Gaps, and Challenges" Sept 28, 2022, New York City in person

Chinese CDC Institute of Nutrition and Food Hygiene, July 12, 2022 "Olfaction and the health of older adults"

Chinese Academy of Medical Sciences, June 14, 2022 (virtual): "Olfaction, Neurodegeneration, and Beyond"

PPMI Data Committee Meeting, April 14, 2022 (virtual): "Prospective studies of prodromal neurodegeneration"

7th MSU Annual Medicine, Health and Society (MHS) Seminar, Department of Sociology and Family and Population Health Laboratory, February 23rd, 2022 (virtual): "Your nose knows about your health"

The 7th HaiHe Forum on Environment, Nutrition, and Health, Tianjin, China, Oct. 27, 2021 (virtual): "Environment, Olfaction, and the Health of Older Adults"

ARIC Sensory Health Working Group Meeting, November 1, 2021: "Poor olfaction in older adults, neurodegeneration, and beyond"

MSU Board of Trustee Meeting, September 10, 2021: "My Sense of Smell, Who Cares?", MSU Department of Epidemiology Seminar Series, March 25, 2021 (virtual): "Poor olfaction and the health of older adults: neurodegeneration and beyond?"

Symposium on Grand Challenges in Parkinson's Disease - When and how does Parkinson's start? Van Andel Institute, Sept 23-24, 2020, Grand Rapids, MI: "Environmental triggers of Parkinson's disease" (Virtual meeting due to COVID-19)

2020 International Symposium on Olfaction and Taste, Jun 2020, Portland OR, "Olfactory impairment, Neurodegeneration, and Beyond – Community-based Evidence" (Virtual meeting due to COVID-19)

Beijing Union Medical University, Oct 31, 2019, Beijing, China: "My Sense of Smell? Why Do I Care?"

2019 Conference on Environment and Health, Oct 28-31, 2019, Tianjin: "Multi-Cohort Approach to Study Parkinson's Disease"

Tianjin Medical University, Oct 12, 2018, Tianjin, China: "My Sense of Smell, Who Cares"

Symposium on Grand Challenges in Parkinson's Disease, Van Andel Institute, Sept 26-27, 2018, Grand Rapids, MI: "Olfaction and Parkinson's Disease"

FuDan University, Dec. 19, 2017, Shanghai, China: "The Changing Landscape of Parkinson Epidemiology"

Michigan State University, Department of Medicine Grand Rounds, December 12, 2017, East Lansing, MI: "My Sense of Smell? Why Do I Care?"

Michigan State University, Department of Neurology and Ophthalmology, Nov 17, 2017, East Lansing, MI: "Prodromal Approach to Dissecting Parkinson's Disease Etiology"

Beijing Union Medical University, Oct 12, 2017, Beijing, China: "Getting to the Roots of Parkinson's Disease"

Tianjin Medical University, Oct 9, 2017, Tianjin, China: "Getting to the Roots of Parkinson's Disease"

Alzheimer's Association and the Alzheimer's Drug Discovery Foundation: Nexus of Alzheimer's, Related Dementias & Cancer: Exploring Relationships, Mechanisms and Therapeutic Implications, Washington DC, May 25, 2016: "Cancer and Parkinson's Disease".

North Carolina State University, March 21, 2016, Raleigh NC: "Environmental Clues to Parkinson's Disease"

University of North Carolina at Chapel Hill, March 11, 2016, Chapel Hill, NC: "Parkinson's Prodromal Symptoms: A Unique Opportunity to Understand Environment and Parkinson's Disease"

Van Andel Institute, December 15, 2015, Grand Rapids, MI: "Understand the Prodromal Symptoms of Parkinson's Disease"

Peking Union Medical University, Aug 20, 2015, Beijing, China: "Prodromal Research Moves Parkinson's Epidemiology Forward"

Nanjing Medical University, Aug 5, 2015, Nanjing, China: "Prodromal Research Moves Parkinson's Epidemiology Forward"

NIEHS/NINDS Joint Conference on Parkinson's Disease: Understanding the Environment and Gene Connection Nov 3-4, 2014, RTP, NC: "Prodromal symptoms of PD"

Karolinska Institute, Neuroepidemiology Retreat, July 2014, Stockholm, Sweden: "Research on Non-motor symptoms of Parkinson's Disease"

NC Department of Health and Human Services, February 24, 2014. Raleigh, NC. "Farming and Health: The Agricultural Health Study"

National Institute of Environmental Health Sciences, National Advisors on Environmental Health Sciences (NAEHS) conference, February 19, 2014, RTP NC: "Clinical and Etiological Implications of Parkinson's Pre-motor Symptoms:"

Environmental Toxin and Neurodegeneration Mini-symposium, October 18, 2013, Pennsylvania State University-Milton S. Hershey Medical Center (scheduled but canceled due to government shutdown)

Michigan State University, East Lansing, Michigan, September 26, 2013 "Clinical and Etiological Implications of Parkinson's Premotor Symptoms"

National Institute of Environmental Health Sciences, Laboratory of Neurobiology Seminar Series, September 4, 2013 "Research on Parkinson's Premotor Symptoms: Medical and Etiological Implications"

Conference on Functional Genomics of Parkinson's Disease and Beyond, Tübingen, April 18-20, 2013 "Environmental Risk Factors for Parkinson's Disease"

Karolinska Institute, November 12, 2012, Stockholm, Sweden: "Parkinson's Disease, Risk Factors, and Premotor Symptoms"

International Congress on Neurology and Epidemiology, November 8-10, 2012, Nice, France: "Updates of Parkinson's Epidemiology"

NIH Research Festival, Translational Research of Aging, October 10, 2012, Bethesda, MD: "Prospective Research of Parkinson's Premotor Symptoms"

The University of Mississippi Medical Center, September 17, 2012, Jackson, Mississippi: "Parkinson's Premotor Symptoms – Clinical and Etiological Implications"

The Young Onset Parkinson Support Group, May 8, 2012, Cary, NC, USA: "Current Research on Parkinson's Disease"

Pennington Biomedical Research Center, April 27, 2012, Baton Rouge, Louisiana, USA: "Environmental Epidemiology of Parkinson's Disease"

Tulane University, April 24, 2012, New Orleans, Louisiana, USA: "Etiologic Research of Parkinson's Disease"

Centers for Neurodegeneration Sciences Program Directors Meeting, The National Institute of Environmental Health Sciences, May 3, 2012, Research Triangle Park, NC, USA: "Findings from the Parkinson's Genes and Environment Study"

Laboratory of Toxicology and Pharmacology Seminar Series, The National Institute of Environmental Health Sciences, March 15, 2012: "Parkinson's Disease Etiological Research and Prevention"

Chinese Academy of Medical Sciences and Peking Union Hospital, December 29, 2011, Beijing, China: "Risk Factors for Parkinson's Disease: Beyond *SNCA* / *MAPT* and Smoking/Caffeine"

Chinese University of Hong Kong, School of Public Health and Primary Care, December 21, 2011, Hong Kong, China: "The Epidemiology of Parkinson's Disease"

XIX World Congress on Parkinson's Disease and Related Disorders, December 14, 2011, Shanghai, China: "Inflammation, NSAIDs use and Parkinson's disease"

XIX World Congress on Parkinson's Disease and Related Disorders, December 12, 2011, Shanghai, China: "What about Braak"

National Cancer Institute, November 30, 2011, Rockville, MD: "Parkinson Research in the NIH-AARP Diet and Health Cohort"

Grand Round Seminar, Department of Neurology, Pennsylvania State University-Milton S. Hershey Medical Center, September 16, 2011, Hershey, PA, USA: "The Changing Landscape of Parkinson's Epidemiology"

International Forum of Neurodegenerative Disease, Fu-Dan University Affiliated Hua-Shan Hospital, June 20, 2010, Shanghai, China: "Risk Factors for Parkinson's disease: What Did We Learn in the Past Decade"

NIEHS Centers for Neurodegeneration Science Annual Meeting, October 8-9, 2009, RTP, NC, USA: "The Parkinson's Genes and Environment (PAGE) Study."

The First International Congress on Clinical Neurology and Epidemiology, August 27-30, 2009, Munich, Germany: "Epidemiology of Parkinson's Disease: New Data and New Methods"

National Institute of Environmental Health Sciences, April 7, 2009, RTP, NC, USA: "Parkinson's Disease: Etiology, Clinical and Disability Management"

Institute for Nutritional Sciences, Chinese Academy of Sciences, June 3, 2008, Shanghai China: "Role of Diet in Parkinson's Disease Development"

Shanghai Huashan Hospital, May 29, 2008, Shanghai, China: "Parkinson's Disease: Gene and Environment"

Vanderbilt University, November 9, 2007, Nashville TN, USA: "Parkinson Epidemiology: Recent Progress and Research Opportunities"

- The Fourth Annual Parkinson's Progress in 2007 Conference: September 28, 2007, Omaha, NE, USA: "Environmental Epidemiology of Parkinson's Disease"
- The Fourth Annual Parkinson's Progress in 2007 Conference: September 28, 2007, Omaha, NE, USA: "Potential Environmental Contributors to Parkinson's Disease"
- Consensus Meeting on Environment and Parkinson's Disease: June 26-28, 2007, Sunnyvale, CA, USA: "Diet and Parkinson's disease"
- Routable Meeting on Exercise and Parkinson's Disease: University of Pittsburgh, June 18, 2007, Pittsburgh, PA, USA: "Exercise and Parkinson's Disease – Epidemiological Findings"
- North Carolina State University, March 20, 2007, Raleigh, NC: "Parkinson's Disease: Is Environment Still Relevant".
- Annual Conference on Rodent Genetics (Session Mediator): National Institute of Environmental Health Sciences, September 26, 2006, RTP, NC, USA: "Gene-Environment Interactions in Parkinson's Disease"
- Harvard School of Public Health, July 10, 2006. Boston, MA, USA: "Epidemiology of Parkinson's Disease: Contributions from Prospective Studies"
- Harvard School of Public Health, October 31, 2005. Boston, MA, USA: "Dairy Consumption and Risk of Parkinson's Disease"
- Harvard School of Public Health, March 15, 2004, Boston, MA, USA: "Diet and Parkinson's Disease"
- International Forum on the New Approaches to Understand Neuropsychological Diseases, September 3, 2004, Shanghai, China: "Environmental and Genetic Risk Factors for Parkinson's Disease"
- International Symposium on Parkinson's Disease, September 4-7, 2004, Beijing, China: "Obesity and the Risk of Parkinson's Disease"
- 45th Annual Meeting of the American College of Nutrition, September 30–October 3, 2004, Long Beach, CA, USA: "Diet, Lifestyle, and Risk of Parkinson's Disease"
- Parkinson Institute, November 15, 2004, Sunnyvale, CA, USA: "Risk Factors for Parkinson's Disease: Findings from the Health Professionals Follow-up Study and the Nurses' Health Study"

REVIEWER FOR JOURNALS

General medical/science journals: New England Journal of Medicine • JAMA • Lancet • British Medical Journal • BMJ Open • Annals of Internal Medicine • PLOS One • Scientific Reports

Journals of neurology/neurosciences: Lancet Neurology • Annals of Neurology • Neurology • JAMA (Achieves of) Neurology • Movement Disorders • Journal of Parkinson's Disease • Journal of Neurology, Neurosurgery & Psychiatry • Parkinsonisms and Related Disorders • Parkinson's disease • Journal of Alzheimer's Disease • Brain Behavior and Immunity • Journal of Neural Transmission • European Journal of Neurology • Neurotoxicology • Neuroscience letters • Expert Review of Neurotherapeutics • Brain Research • Frontiers in Neurology

Journals of environmental health: Environmental Health Perspectives • Environmental Research • Environmental Pollution • Environment International • Atmospheric Environment

Journals of epidemiology: International Journal of Epidemiology • American Journal of Epidemiology • Epidemiology • Annals of Epidemiology • Journal of Exposure Science and Environmental Epidemiology • Neuroepidemiology

Other specialty journals: American Journal of Clinical Nutrition • The Journal of Nutrition • British Journal of Nutrition • Aging • Health and Aging • Journal of American College of Nutrition • Journal of American Geriatric Society • Cancer Research • Cancer Causes and Control • Drugs & Aging • American Journal of Physical Medicine & Rehabilitation • Diabetes Care • Sleep • Frontiers in Pharmacology • Nutrition, Metabolism and Cardiovascular Diseases.

Journal Editorial Boards

2010-2021	American Journal of Epidemiology
2009-	International Journal of Molecular Epidemiology and Genetics
2012-	American Journal of Neurodegenerative Disease
2020-	Frontiers in Neurology (Associate Editor for the Neuroepidemiology Section)
2020-	Neurotoxicology

Guest editor:

2020 Frontiers in Neurology 'Uncovering the Broad Spectrum of Prediagnostic Parkinson's Disease'

GRANT REVIEWS

Panel member:

Health and Biomedical Sciences review panel for the Strategic Partnership Grant (SPG) program, Michigan State University, 2019-
American Brain Foundation Scientific Review Panel, 2017-2020

Ad-hoc reviewer:

NIEHS Career Development (K Applications), July 2019, Oct, 2019, Feb 2020, Oct, 2020.
CDC Peer Review Panel TS 18-004: Amyotrophic Lateral Sclerosis research, June 2018
USAMRMC Department of Defense Parkinson's Research Program, Oct 2017 (TUA-GEI panel)
National Institutes of Health Study Section: Neurological, Aging and Musculoskeletal Epidemiology (multiple times)
Medical Research Council, United Kingdom
Parkinson's Disease Society, United Kingdom (multiple times)
PSI Foundation, Canada
Austrian Science Fund, Austria
Parkinson Study Group (PSG), United States and Canada
The Wellcome Trust
Center for Environmental Health and Susceptibility, School of Public Health, University of North Carolina at Chapel Hill
The Prinses Beatrix Fonds, Netherlands
Neurological Foundation of New Zealand (multiple times, latest in 2022.10)
Netherlands Organisation for Health Research and Development (2022.08)
Association of British Neurologists
French National Research Agency
Hertie Foundation, Germany

PROFESSIONAL SERVICES***Michigan State University***

MSU Chinese Faculty Club (CFC) Executive Committee: Member 2019-; President Elect 2021-2022

College Advisory Committee, MSU College of Human Medicine, 2017-2021

Department level

Leadership Advisory Committee in Epidemiology and Biostatistics, 2020-
Epidemiology & Biostatistics Reappointment, Promotion and Tenure Review Committee 2018- , Chair 2021-

Graduate Program Committee, 2021-

Award Committee (Chair), 2017-2020

Ad hoc Committee on PhD Comprehensive Exams, 2017-2019

Search Committee for Neuroepidemiology Faculty, 2016-2018

National Institute of Environmental Health Sciences

DIR Committee of Promotions-I (NIEHS Tenure Committee) 2016

Biostatistics Branch Staff Scientist Search Committee (Chair), 2015

Institutional Review Board, NIEHS/NIH 2015-2016

DIR Retreat Committee 2016

Presenter and member of the clinical research group, NIEHS-NINDS co-sponsored
Symposium on Parkinson's Disease: Understanding the Environment and Gene
Connection, November 3-4, Research Triangle Park, North Carolina

Member, NIEHS Epidemiology Branch Tenure-Track Investigator Search Committees (2015
& 2016)

Organizer, Symposium on Parkinson's premotor symptoms – clinical and etiological
implications, June 7-8th, 2012, Research Triangle Park, North Carolina

NIEHS/NTP Scientific Review Group

DIR Committee for Distinguished Lecturers and Scientific Conferences

Sister Study Steering Committee

Executive Committee, Agricultural Health Study, 2013-2016

Other Organizations

The Netherlands Organisation for Health Research and Development – Dementia Research
Programme, August 2022

Planning Committee & Session Chair, "*Environmental Contributions to PD risk*" Michael J
Fox Foundation on Parkinson's Research

Abstract reviewer of The Gerontological Society of America (GSA) 2022 Annual Scientific
Meeting, 2022

Member of the Scientific Program Committee, 2020 Grand Challenges in Parkinson's
disease: When and how does it start? Grand Rapids, 2020.

Aligning Science Across Parkinson's (ASAP) Scientific Workshop (invitation only), Newport
Beach, California, May 23-25, 2018

Co-Chair, American Academy of Neurology annual meeting 2017, session "Parkinson's
disease: Observational Studies". Boston, Massachusetts, April 25, 2017

Abstract reviewer of Neuroepidemiology, American Academy of Neurology annual meeting
2017, 2021

Scientific Review Panel, American Brain Foundation, 2017

Scientific Committee, The Parkinson Study Group (2012-2015)

General Neurology Topic Work Group, American Academy of Neurology 2015

Expert Panel on Global Burden of Diseases, Gates Foundation / World Health Organization

Scientific Committee, International Congress on Neurology and Epidemiology, November 8-10, 2012, Nice, France
 Co-Chair, "Epilepsy & Neurodegenerative disorders", November 9, 2012, Nice, France
 Scientific Committee, The First International Congress on Clinical Neurology and Epidemiology, August 27-30, 2009, Munich, Germany
 Co-Chair, "Parkinson's disease and other movement disorders - Epidemiology and Management Part 1 and Part 2", The First International Congress on Clinical Neurology and Epidemiology, August 27-30, 2009, Munich, Germany
 Scientific Committee, Wuhan International Conference on the Environment & the 2009 Annual Meeting of Chinese Society for Environmental Sciences, June 2009
 Award Committee, Society for Epidemiologic Research
 Judge, Fellow Awards for Research Excellence, National Institutes of Health
 Meeting abstract reviewer for Society for Epidemiologic Research annual meeting
 Meeting abstract reviewer for International Congress on Clinical Neurology and Epidemiology

MENTORING

	<i>Position</i>	<i>Years</i>	<i>Current Position</i>
<i>Graduate Students</i>			
Shuang Tang	MPH Student	2015.08-2018.04	PI, Shanghai Cancer Center at Fudan University
Bojing Liu	PhD Student	2016.09-2018.9	Postdoc, Karolinska Institute, Sweden
Frank Purdy	MS Student	2018.08-2019.12	Epidemiologist, MI Department of Health and Human Services
Zichun Cao	PhD Student	2018.08-2023.7	Michigan State University
Keran Wang	PhD Student	2019.08-	
Eleanor Song	PhD Student	2020.08-	
Kathy Xia	PhD Student	2023.08-	
<i>Current Postdoc</i>			
Yaqun Yuan	Visiting Fellow	2019.08-	Michigan State University
<i>Previous Postdoc</i>			
Dr. Qun Xu	Visiting Fellow	2007.10-2009.12	Professor, Chinese Academy of Medical Sciences
Dr. Jianjun Gao	Visiting Fellow	2008.02-2012.09	Data Analyst, University of Chicago
Dr. Rui Liu	Research Fellow	2010.08-2016.08	Assistant Professor, Sacred Heart University
Dr. Wen Zhang	Visiting Fellow	2012.09-2014.04	Assistant Professor, Fukushima Medical University, Japan
Dr. Jing Dong	Visiting Fellow	2012.10-2016.08	Assistant Professor, Medical College of Wisconsin
Dr. Srishti Shrestha	Visiting Fellow	2015.03-2016.08	Assistant Professor, Medical University of Mississippi

Other Trainees

Jessica Rinsky	Summer Student, 2010.09-2012.05 Special Volunteer	EIS Officer, North Carolina Division of Public Health
Edward Zhao	High school special volunteer	2011.09-2013.06 PhD, University of Washington

Thesis defense committees

Frank Purdy,	MS in Biostatistics	MSU 2018
Chun Yao,	PhD	McGill University, 2018
Kyle Bennett,	MS in Epidemiology	MSU 2019
Eleanor Song	MS in Epidemiology	MSU, 2020
Di Wu	PhD. in Biostatistics	MSU, 2022
Zichun Cao	PhD. in Biostatistics	MSU, 2023

BIBLIOGRAPHY

22X publications listed (**196** original contributions)

H-index **84**, *not counting papers from the global burden of diseases consortium*

Google scholar: <https://scholar.google.com/citations?hl=en&user=qz4O89oAAAAJ>

A. Peer-Reviewed Original Publications

- 1 **Chen H**, Ge KY, Wang EL, Jia FM, Jiao RH, Wang YY: The validation of conjunctival impression cytology to detect vitamin A deficiency. *Hygiene Res* 25(Suppl): 126-132, 1996.
- 2 Tucker KL, Hannan MT, **Chen H**, Cupples LA, Wilson PWF, Kiel D: Potassium, magnesium, and fruit and vegetable intakes are associated with greater bone mineral density in elderly men and women. *Am J Clin Nutr* 69(4): 727-36, 1999. PMID: 10197575
- 3 Tucker KL, **Chen H**, Vogel S, Wilson PW, Schaefer EJ, and Lammi-Keefe CJ: Carotenoid intakes, assessed by dietary questionnaire, are associated with plasma carotenoid concentrations in an elderly population. *J Nutr* 129(2): 438-45, 1999. PMID: 10024624
- 4 Booth SL, Tucker KL, **Chen H**, Hannan MT, Gagnon DR, Cupples LA, Wilson PW, Ordovas J, Schaefer EJ, Dawson-Hughes B, Kiel DP: Dietary vitamin K intakes are associated with hip fracture but not with bone mineral density in elderly men and women. *Am J Clin Nutr* 71(5): 1201-8, 2000 (with editorial). PMID: 10799384
- 5 **Chen H**, Bermudez OI, Tucker KL: Waist circumference and weight change are associated with disability among elderly Hispanics. *J Gerontol A Biol Sci Med Sci* 57 (1): M19-25, 2002. PMID: 11773208
- 6 **Chen H**, Ward MH, Graubard BI, Heineman EF, Markin RM, Potischman NA, Russell RM, Weisenburger DD, Tucker KL: Dietary patterns and adenocarcinoma of the esophagus and distal stomach. *Am J Clin Nutr* 75(1): 137-44, 2002 (with editorial and press release). PMID: 11756071
- 7 Tucker KL, **Chen H**, Hannan MT, Cupples LA, Wilson PW, Felson D, Kiel DP: Bone mineral density and dietary patterns in older adults: the Framingham Osteoporosis Study. *Am J Clin Nutr* 76(1): 245-52, 2002. PMID: 12081842

- 8 **Chen H**, Tucker KL, Graubard BI, Heineman EF, Markin RS, Potischman NA, Russell RM, Weisenburger DD, Ward MH: Nutrient intakes and adenocarcinoma of the esophagus and distal stomach. *Nutr Cancer* 42(1): 33-40, 2002. PMID: 12235648
- 9 **Chen H**, Ward MH, Tucker KL, Graubard BI, McComb RD, Potischman NA, Weisenburger DD, Heineman EF: Diet and risk of adult glioma in eastern Nebraska, United States. *Cancer Causes Control* 13(7): 647-55, 2002. PMID: 12296512
- 10 Zhang SM, Hernán MA, **Chen H**, Spiegelman D, Willett WC, Ascherio A: Intakes of vitamins E and C, carotenoids, vitamin supplements, and PD risk. *Neurology* 59(8): 1161-9, 2002 (with editorial). PMID: 12391343
- 11 **Chen H**, Zhang SM, Hernán MA, Willett WC, Ascherio A: Diet and Parkinson's disease: a potential role of dairy products in men. *Ann Neurol* 52(6): 793-801, 2002. PMID: 12447934
- 12 **Chen H**, Zhang SM, Hernán MA, Willett WC, Ascherio A: Weight loss in Parkinson's disease. *Ann Neurol* 53(5): 676-9, 2003. PMID: 12731005
- 13 **Chen H**, Miller BA, Giovannucci E, Hayes RB: Height and the survival of prostate cancer patients. *Cancer Epidemiol Biomarkers Prev* 12(3): 215-8, 2003. PMID: 12646510
- 14 Ascherio A, **Chen H**, Schwarzschild MA, Zhang SM, Colditz GA, Speizer FE: Caffeine, postmenopausal estrogen, and risk of Parkinson's disease. *Neurology* 60(5): 790-5, 2003. PMID: 12629235
- 15 **Chen H**, Zhang SM, Hernán MA, Willett WC, Ascherio A: Dietary intakes of fat and risk of Parkinson's disease. *Am J Epidemiol* 157(11):1007-14, 2003. PMID: 12777364
- 16 Weisskopf MG, **Chen H**, Schwarzschild MA, Kawachi I, Ascherio A: Prospective study of phobic anxiety and risk of Parkinson's disease. *Mov Disord* 18(6):646-51, 2003. PMID: 12784267
- 17 **Chen H**, Zhang SM, Hernán MA, Schwarzschild MA, Willett WC, Colditz GA, Speizer FE, Ascherio A: Nonsteroidal anti-inflammatory drugs and the risk of Parkinson disease. *Arch Neurol* 60: 1059-64, 2003 (with editorial and press release). PMID: 12925360
- 18 Hernán MA, **Chen H**, Schwarzschild MA, Ascherio A: Alcohol consumption and the incidence of Parkinson's disease *Ann Neurol* 54 (2): 170-5, 2003. PMID: 12891669
- 19 **Chen H**, Zhang SM, Schwarzschild MA, Hernán MA, Willett WC, Ascherio A: Obesity and the risk of Parkinson's disease. *Am J Epidemiol* 159(6): 547-55, 2004. PMID: 15003958
- 20 **Chen H**, Zhang SM, Schwarzschild MA, Hernán MA, Logroscino G, Willett WC, Ascherio A: Folate intake and risk of Parkinson's disease. *Am J Epidemiol* 160(4): 368-75, 2004. PMID:15286022
- 21 Zhang J, Song YQ, **Chen H**, Fan D: The tau gene haplotype h1 confers a susceptibility to Parkinson's disease. *Euro Neurol* 53(1):15-21, 2005. PMID: 15627775
- 22 **Chen H**, Zhang SM, Schwarzschild MA, Hernán MA, Ascherio A: Physical activity and the risk of Parkinson's disease. *Neurology* 64 (4): 664-9, 2005 (with journal highlight). PMID: 15728289
- 23 **Chen H**, Jacobs E, Schwarzschild MA, McCullough ML, Calle EE, Thun MJ, Ascherio A: Nonsteroidal antiinflammatory drug use and the risk for Parkinson's disease. *Ann Neurol* 58 (6) 963-7, 2005. PMID: 16240369
- 24 Jiang B, Wang WZ, **Chen H**, Hong Z, Yang QD, Wu SP, Du XL, Bao QJ: Incidence and trends of stroke and its subtypes in China: results from three large cities. *Stroke* 37(1):63-8, 2006. PMID: 16306469
- 25 **Chen H**, Schernhammer E, Schwarzschild MA, Ascherio A: A prospective study of night shift work, sleep duration, and risk of Parkinson's disease. *Am J Epidemiol* 163(8):726-30, 2006. PMID: 16495472

- 26 **Chen H**, Zhang SM, Schwarzschild MA, Hernán MA, Ascherio A: Survival of Parkinson's disease patients in a large prospective cohort of male health professionals. *Mov Disord* 21(7): 1002-7, 2006. PMID: 16602107
- 27 Logroscino G, **Chen H**, Wing A, Ascherio A: Blood donations, iron stores, and risk of Parkinson's disease. *Mov Disord* 21(6):835-8, 2006. PMID: 16802290
- 28 Ascherio A, **Chen H**, Weisskopf MG, O'Reilly E, McCullough ML, Calle EE, Schwarzschild MA, Thun MJ: Pesticide exposure and risk for Parkinson's disease. *Ann Neurol*. 60 (2): 197-203, 2006 PMID: 16802290 (NIEHS DERT paper of the month)
- 29 Huang X, **Chen H**, Miller WC, Mailman RB, Woodard JL, Chen PC, Xiang D, Murrow RW, Wang YZ, Poole C: Lower low-density lipoprotein cholesterol levels are associated with Parkinson's disease. *Mov Disord* 22(3):377-81, 2007. PMID: 17177184; PMCID: PMC1906875
- 30 Thacker EL, O'Reilly EJ, Weisskopf MG, **Chen H**, Schwarzschild MA, McCullough ML, Calle EE, Thun MJ, Ascherio A: Temporal relationship between cigarette smoking and risk of Parkinson disease. *Neurology* 68(10): 764-8, 2007. PMID: 17339584; PMCID: PMC2225169
- 31 **Chen H**, O'Reilly E, McCullough ML, Rodriguez C, Schwarzschild MA, Calle EE, Thun MJ, Ascherio A: Consumption of dairy products and risk of Parkinson's disease. *Am J Epidemiol* 165(9):998-1006, 2007. PMID: 17272289; PMCID: PMC2232901 (NIEHS DIR paper of the month)
- 32 Kan H, London SJ, **Chen H**, Song G, Chen G, Jiang L, Zhao N, Zhang Y, Chen B: Diurnal temperature range and daily mortality in Shanghai, China. *Environmental Research* 103(3):424-31, 2007. PMID: 17234178
- 33 **Chen H**, Richard M, Sandler DP, Umbach DM, Kamel F: Head injury and amyotrophic lateral sclerosis. *Am J Epidemiol* 166(7):810-6, 2007. PMID: 17641152; PMCID: PMC2239342
- 34 Weisskopf MG, O'Reilly E, **Chen H**, Schwarzschild MA, Ascherio A: Plasma urate and risk of Parkinson's disease. *Am J Epidemiol* 166(5):561-7, 2007. PMID:17584757; PMCID: PMC2391073 (NIEHS DERT paper of the month)
- 35 Simon KC, **Chen H**, Schwarzschild MA, Ascherio A: Hypertension, hypercholesterolemia, diabetes, and risk of Parkinson's disease. *Neurology* 69(17):1688-95, 2007. PMID: 17761552; PMCID: PMC2391077
- 36 Gao X, **Chen H**, Fung TT, Logroscino G, Schwarzschild MA, Hu FB, Ascherio A: Prospective study of dietary pattern and risk of Parkinson disease. *Am J Clin Nutr* 86(5):1486-94, 2007. PMID: 17991663; PMCID: PMC222516
- 37 Gao X, **Chen H**, Schwarzschild MA, Glasser DB, Logroscino G, Rimm EB, Ascherio A: Erectile function and risk of Parkinson's disease. *Am J Epidemiol* 166(12):1446-50, 2007. PMID: 17875583; PMCID: PMC2385785
- 38 **Chen H**, O'Reilly EJ, Schwarzschild MA, Ascherio A: Peripheral inflammatory biomarkers and risk of Parkinson's disease. *Am J Epidemiol* 167(1):90-5, 2008. PMID: 17890755.
- 39 Wang H, **Chen H**, Gao X, McGrath M, Deer D, De Vivo I, Schwarzschild MA, Ascherio A: Telomere length and risk of Parkinson's diseases. *Mov Disord* 23(2):302-5, 2008. PMID: 18044760; PMCID: PMC2387100
- 40 Thacker EL, **Chen H**, Patel AV, McCullough ML, Calle EE, Thun MJ, Schwarzschild MA, Ascherio A: Recreational physical activity and risk of Parkinson's disease. *Mov Disord* 23(1):69-74, 2008. PMID: 17960818; PMCID: PMC2387117
- 41 Gao X, **Chen H**, Schwarzschild MA, Logroscino G, Ascherio A: Perceived imbalance and risk of Parkinson's disease. *Mov Disord* 23(4):613-6, 2008. PMID: 18181208; PMCID: PMC2385782

- 42 **Chen H**, Guo X: Obesity and functional disability in elderly Americans. *J Am Geriatr Soc* 56(4):689-94, 2008. PMID: 18266843; PMCID: PMC2391089 (NIEHS DIR paper of the month)
- 43 Gao X, **Chen H**, Choi HK, Curhan G, Schwarzschild MA, Ascherio A: Diet, Urate and Parkinson's disease risk in men. *Am J Epidemiol* 167(7):831-8, 2008. PMID: 18326873; PMCID: PMC2367211
- 44 Logroscino G, Gao X, **Chen H**, Wing A, Ascherio A: Dietary iron intake and risk of Parkinson's disease. *Am J Epidemiol* 168(12):1381-8, 2008. PMID: 18945687; PMCID: PMC2727188
- 45 O'Reilly EJ, **Chen H**, Gardener H, Gao X, Schwarzschild MA, Ascherio A: Smoking and Parkinson's disease: using parental smoking as a proxy to explore causality. *Am J Epidemiol* 169(6):678-82, 2009. PMID: 19131566; PMCID: PMC2727210
- 46 Kim S, Parks CG, DeRoo LA, **Chen H**, Taylor JA, Cawthon RM, Sandler DP: Obesity and weight gain in adulthood and telomere length. *Cancer Epidemiol Biomarkers Prev* 18(3):816-20, 2009. PMID: 19273484; PMCID: PMC2805851 (NIEHS DIR paper of the month)
- 47 Xu Q, Parks CG, DeRoo LA, Cawthon RM, Sandler DP, **Chen H**: Multivitamin use and telomere length in Women. *Am J Clin Nutr* 89(6): 1857-63, 2009 (with editorial and press release). PMID: 19279081; PMCID: PMC2714373 (NIEHS DIR paper of the month)
- 48 **Chen H**, Mosley TH, Alonso A, Huang X: Plasma urate and Parkinson's disease in the Atherosclerosis Risk in Communities (ARIC) Study. *Am J Epidemiol* 169 (9) 1064-9, 2009. PMID: 19299404; PMCID: PMC2727240 (NIEHS DIR paper of the month)
- 49 Scholz SW, Houlden H, Schulte C, Sharma M, Li A, Berg D, Melchers A, Paudel R, Gibbs JR, Simon-Sanchez J, Paisan-Ruiz C, Bras J, Ding J, **Chen H**, Traynor BJ, Arepalli S, Zonozi RR, Revesz T, Holton J, Wood N, Lees A, Oertel W, Wüllner U, Goldwurm S, Pellecchia MT, Illig T, Riess O, Fernandez HH, Rodriguez RL, Okun MS, Poewe W, Wenning GK, Hardy JA, Singleton AB, Gasser T: SNCA variants are associated with increased risk for multiple system atrophy. *Ann Neurol*. 65(5):610-4, 2009. PMID: 19475667; PMCID: PMC3520128
- 50 Simon KC, **Chen H**, Gao X, Schwarzschild MA, Ascherio A: Reproductive factors exogenous estrogen use, and risk of Parkinson's disease. *Mov Disord* 24(9):1359-65, 2009. PMID: 19424986; PMCID: PMC2751573
- 51 Simón-Sánchez J, Schulte C, Bras JM, Sharma M, Gibbs JR, Berg D, Paisan-Ruiz C, Lichtner P, Scholz SW, Hernandez DG, Krüger R, Federoff M, Klein C, Goate A, Perlmutter J, Bonin M, Nalls MA, Illig T, Gieger C, Houlden H, Steffens M, Okun MS, Racette BA, Cookson MR, Foote KD, Fernandez HH, Traynor BJ, Schreiber S, Arepalli S, Zonozi R, Gwinn K, van der Brug M, Lopez G, Chanock SJ, Schatzkin A, Park Y, Hollenbeck A, Gao J, Huang X, Wood NW, Lorenz D, Deuschl G, **Chen H**, Riess O, Hardy JA, Singleton AB, Gasser T: Genome-wide association study reveals genetic risk underlying Parkinson's disease. *Nature Genetics* 41(12):1308-12, 2009 (with editorial) PMID: 19915575; PMCID: PMC2787725
- 52 Xu Q, Song Y, Hollenbeck A, Blair A, Schatzkin A, **Chen H**: Day napping and short night sleeping are associated with higher risk of diabetes in older adults. *Diabetes Care* 33(1):78-83, 2010. PMID: 19825823; PMCID: PMC2797990
- 53 **Chen H**, Huang X, Guo X, Mailman RB, Park Y, Kamel F, Umbach DM, Xu Q*, Hollenbeck A, Schatzkin A, Blair A: Smoking duration, intensity, and risk of Parkinson disease. *Neurology* 74 (11): 878-84, 2010 (with editorial and press release) PMID: 20220126; PMCID: PMC2836869. (NIEHS DIR paper of the month)

- 54 Fang F, Xu Q, Park Y, Huang X, Hollenbeck A, Blair A, Schatzkin A, Kamel F, **Chen H**: Depression and the subsequent risk of Parkinson's disease in the NIH-AARP Diet and Health Study. *Mov Disord* 25(9):1157-62, 2010 PMID: 20310050; PMCID: PMC2914462
- 55 Xu Q, Park Y, Huang X, Hollenbeck A, Blair A, Schatzkin A, **Chen H**: Physical activities and future risk of Parkinson disease. *Neurology* 75(4):341-8, 2010 (with journal highlight) PMID: 20660864; PMCID: PMC2918886.
- 56 Gardener H, Gao X, **Chen H**, Schwarzschild MA, Spiegelman D, Ascherio A: Prenatal and early life factors and risk of Parkinson's disease. *Mov Disord* 25(11):1560-7, 2010 PMID: 20740569; PMCID: PMC3132935
- 57 Simon KC, Gao X, **Chen H**, Schwarzschild MA, Ascherio A: Calcium channel blocker use and risk of Parkinson's disease. *Mov Disord* 25(12):1818-22, 2010 PMID: 20669249 PMCID: PMC2939261
- 58 O'Reilly EJ, Gao X, Weisskopf MG, **Chen H**, Schwarzschild MA, Spiegelman D, Ascherio A: Plasma urate and Parkinson's disease in women. *Am J Epidemiol* 172(6):666-70, 2010 PMID: 20682521 PMCID: PMC2950819
- 59 Gao X, **Chen H**, Schwarzschild MA, Ascherio A: Use of ibuprofen and risk of Parkinson disease. *Neurology* 76(10):863-9, 2011 (with editorial) PMID: 21368281; PMCID: PMC3059148
- 60 Song Y, Xu Q, Park Y, Hollenbeck A, Schatzkin A, **Chen H**: Multivitamins, individual vitamin and mineral supplements, and risk of diabetes among older U.S. adults. *Diabetes Care* 34(1):108-14, 2011 PMID: 20978095 PMCID: PMC3005464
- 61 Ma W, **Chen H**, Jiang L, Song G, Kan H: Stock volatility as a risk factor for coronary heart disease death. *European Heart Journal* 32(8): 1006-11, 2011 PMID: 21196446; PMCID: PMC3076666
- 62 Gao J, Xu H, Weinberg C, Huang X, Park Y, Hollenbeck A, Blair A, Schatzkin A, Burch L, **Chen H**: An Exploratory Study on the *CHRNA3-CHRNA5-CHRNA4* Cluster, Smoking, and Parkinson's Disease. *Neurodegener Dis* 8(5):296-9, 2011 PMID: 21228559; PMCID: PMC3121544
- 63 Gao J, Huang X, Park Y, Hollenbeck A, Blair A, Schatzkin A, **Chen H**: Daytime napping, nighttime sleeping, and Parkinson disease. *Am J Epidemiol* 173(9):1032-8, 2011 PMID: 21402730; PMCID: PMC3121222.
- 64 Xu Q, Park Y, Huang X, Hollenbeck A, Blair A, Schatzkin A, **Chen H**: Diabetes and risk of Parkinson's disease. *Diabetes Care* 34(4):910-5, 2011 PMID: 21378214; PMCID: PMC3064050
- 65 International Parkinson Disease Genomics Consortium (IPDGC – Chen member): Imputation of sequence variants for identification of genetic risks for Parkinson's disease: a meta-analysis of genome-wide association studies. *Lancet* 377(9766): 641-9 (with editorial) PMID: 21292315
- 66 Liu R, Gao X, Lu Y, **Chen H**: Meta-analysis of the relationship between Parkinson disease and melanoma. *Neurology* 76 (23): 2002-9, 2011 (with journal highlight and press release) PMID: 21646627; PMCID: PMC3116643
- 67 Gao X, **Chen H**, Schwarzschild MA, Ascherio A: A prospective study of bowel movement frequency and risk of Parkinson's disease. *Am J Epidemiol* 174(5):546-51, 2011 PMID: 21719744; PMCID: PMC3202149
- 68 International Parkinson's Disease Genomics Consortium (IPDGC – Chen member), Wellcome Trust Case Control Consortium 2 (WTCCC2): A two-stage meta-analysis identifies several new loci for Parkinson's disease. *PLoS Genet* 7(6): e1002142, 2011 PMID: 21738488; PMCID: PMC3128098
- 69 Gao J*, Huang X*, Park Y, Liu R, Hollenbeck A, Schatzkin A, Mailman RB, **Chen H**: Apolipoprotein E genotypes and the risk of Parkinson disease. *Neurobiol Aging*

- 32(11):2106.e1-6, 2011 PMID: 21741729 PMCID: PMC3172377 (* equal contribution) (NIEHS DIR paper of the month)
- 70 Hamza TH, **Chen H**, Hill-Burns EM, Rhodes SL, Montimurro J, Kay DM, Tenesa A, Kusel VI, Sheehan P, Eaaswarkhanth M, Yearout D, Roberts J, Agarwal P, Bordelon Y, Park Y, Wang L, Gao J, Vance JM, Kendler KS, Scott W, Ritz B, Nutt J, Factor SA, Zabetian CP, Payami H: Genome-wide gene-environment study identifies glutamate receptor gene GRIN2A as a Parkinson's disease modifier gene via interaction with coffee. *PLoS Genet* 7(8):e1002237, 2011 PMID: 21876681 PMCID: PMC3158052
- 71 Huang X, Auinger P, Eberly S, Oakes D, Schwarzschild M, Ascherio A, Mailman R, **Chen H**; Parkinson Study Group DATATOP Investigators: Serum cholesterol and the progression of Parkinson's disease: results from DATATOP. *PLoS One* 6(8):e22854, 2011 PMID: 21853051 PMCID: PMC3154909
- 72 Gao J, Huang X, Park Y, Hollenbeck A, **Chen H**: An exploratory study on CLU, CR1 and PICALM and Parkinson disease. *PLoS One* 6(8):e24211, 2011. PMID: 21912625; PMCID: PMC3166161
- 73 Fang F, **Chen H**, Wirdefeldt K, Ronnevi LO, Al-Chalabi A, Peters TL, Kamel F, Ye W: Infections of the central nervous system, sepsis and amyotrophic lateral sclerosis *PLoS One* 6(12):e29749 2011. PMID: 22216353; PMCID: PMC3246484
- 74 Meng S, Song F, **Chen H**, Gao X, Amos CI, Lee JE, Wei Q, Qureshi AA, Han J: No Association between Parkinson Disease Alleles and the Risk of Melanoma. *Cancer Epidemiol Biomarkers Prev* 21(1):243-5 2012. PMID: 22086882; PMCID: PMC3253945
- 75 Wen HB, Zhang ZX, Wang H, Li L, **Chen H**, Liu Y, Zhang B, Xu Q: Epidemiology and clinical phenomenology for Parkinson's disease with pain and fatigue. *Parkinsonism & Related Disorders* 18 (Suppl 1):S222-5, 2012; PMID: 22166441; NIHMS459812
- 76 Liu R, Guo X, Park Y, Huang X, Sinha R, Freedman ND, Hollenbeck A, Blair A, **Chen H**: Caffeine Intake, Smoking, and Risk of Parkinson Disease in Men and Women. *Am J Epidemiol* 175(11):1200-7, 2012; PMID: 22505763; PMCID: PMC3370885
- 77 Fang F, Wirdefeldt K, Jacks A, Kamel F, Ye W, **Chen H**: CNS Infections, sepsis, and the risk for Parkinson's disease. *Int J Epidemiol*. 41(4):1042-9. 2012; PMID: 22523201; PMCID: PMC3429872
- 78 Du G, Lewis M, Shaffer M, **Chen H**, Yang Q, Mailman R, Huang X: Serum cholesterol and nigrostriatal R2* values in Parkinson's disease *PLoS One* 7(4):e35397, 2012 PMID: 22530017; PMCID: PMC3328461
- 79 Gao J, Nalls M, Shi M, Joubert B, Hernandez D, Huang X, Hollenbeck A, Singleton A, **Chen H**: An exploratory analysis on gene-environment interactions for Parkinson disease. *Neurobio Aging* 33(10):2528.e1-6, 2012. PMID: 22763023 PMCID: PMC3419385
- 80 Hu G, Horswell R, Wang Y, Besse J, Xiao K, **Chen H**, Heymsfield SB, Ryan DH, Katzmarzyk PT: Body mass index and the risk of dementia among Louisiana middle and low income diabetic patients. *PLoS One* 7(9): e44537, 2012. PMID: 22957079; PMCID: MC3434129
- 81 International Parkinson's Disease Genomics Consortium (IPDGC – Chen member)) and The Wellcome Trust Case Control Consortium 2 (WTCCC2): Using genome-wide complex trait analysis to quantify 'missing heritability' in Parkinson's disease. *Hum Mol Genet*. 21(22): 4996-5009, 2012. PMID: 22892372; PMCID: PMC3576713
- 82 Fang F, **Chen H**, Feldman A, Kamel F, Ye W, Wirdefeldt K: Head injury and Parkinson's disease: A population-based study. *Mov Disord* 27(13):1632-5, 2012. (with editorial). PMID: 23143933
- 83 Mittag F, Büchel F, Saad M, Jahn A, Schulte C, Bochdanovits Z, Simón-Sánchez J, Nalls MA, Keller M, Hernandez DG, Gibbs JR, Lesage S, Brice A, Heutink P, Martinez

- M, Wood NW, Hardy J, Singleton AB, Zell A, Gasser T, Sharma M; International Parkinson's Disease Genomics Consortium (IPDGC – Chen member): Use of support vector machines for disease risk prediction in genome-wide association studies: concerns and opportunities. *Hum Mutat*. 33(12):1708-18, 2012. PMID: 22777693
- 84 Holmans P, Moskvina V, Jones L, Sharma M; The International Parkinson's Disease Genomics Consortium (IPDGC – Chen member)), Vedernikov A, Buchel F, Sadd M, Bras JM, Bettella F, Nicolaou N, Simón-Sánchez J, Mittag F, Gibbs JR, Schulte C, Durr A, Guerreiro R, Hernandez D, Brice A, Stefánsson H, Majamaa K, Gasser T, Heutink P, Wood NW, Martinez M, Singleton AB, Nalls MA, Hardy J, Morris HR, Williams NM. A pathway-based analysis provides additional support for an immune-related genetic susceptibility to Parkinson's disease. *Hum Mol Genet* 22(5):1039-49, 2013; PMID: 23223016; PMCID: PMC3561909
- 85 Zhang G, Ding H, **Chen H**, Ye X, Li H, Lin X, Ke Z: Association of thiamine nutritional status and depressive symptoms among older Chinese adults. *J Nutr* 143(1):53-8, 2013. PMID:23173173; PMCID: PMC3521461
- 86 Global Burden of Diseases Study Group (middle author, many co-authors): A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet* 380(9859): 2224-60, 2013. PMID: 23245609
- 87 Global Burden of Diseases Study Group (middle author, many co-authors): Disability-adjusted life years (DALYs) for 291 diseases and injuries in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet* 380(9859): 2197-223, 2013. PMID:23245608
- 88 Global Burden of Diseases Study Group (middle author, many co-authors): Years lived with disability (YLDs) for 1160 sequelae of 289 diseases and injuries 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet* 380(9859): 2163-96, 2013. PMID: 23245607
- 89 Global Burden of Diseases Study Group (middle author, many co-authors): Common values in assessing health outcomes from disease and injury: disability weights measurement study for the Global Burden of Disease Study 2010. *Lancet* 380(9859): 2129-43, 2013. PMID: 23245605
- 90 Global Burden of Diseases Study Group (middle author, many co-authors): Global and regional mortality from 235 causes of death for 20 age groups in 1990 and 2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet* 380(9859): 2095-128 2013. PMID: 23245604
- 91 Klebe S, Golmard JL, Nalls MA, Saad M, Singleton AB, Bras JM, Hardy J, Simon-Sanchez J, Heutink P, Kuhlenbäumer G, Charfi R, Klein C, Hagenah J, Gasser T, Wurster I, Lesage S, Lorenz D, Deuschl G, Durif F, Pollak P, Damier P, Tison F, Durr A, Amouyel P, Lambert JC, Tzourio C, Maubaret C, Charbonnier-Beaupel F, Tahiri K, Vidailhet M, Martinez M, Brice A, Corvol JC; French Parkinson's Disease Genetics Study Group and the International Parkinson's Disease Genomics Consortium (IPDGC – Chen member). The Val158Met COMT polymorphism is a modifier of the age at onset in Parkinson's disease with a sexual dimorphism. *J Neurol Neurosurg Psychiatry*. 84(6):666-73, 2013. PMID: 2340806; PMCID: PMC3646288
- 92 Gao J, Xu H, Huang X, **Chen H**: Genetic variations of SLC2A9 in relation to Parkinson's disease *Transl Neurodegener*. 2(1):5. 2013. PMID: 23422251; PMCID: PMC3598344
- 93 Liu R, Guo X, Park Y, Wang J, Huang X, Hollenbeck A, Blair A, **Chen H**: Alcohol consumption, types of alcohol, and Parkinson's disease. *PLoS One* 8(6):e66452, 2013. PMID: 23840473; PMCID: PMC3686735

- 94 Global Burden of Diseases Study Group (middle author, many co-authors): The State of US Health: Burden of Diseases, Injuries and Risk Factors 1990 to 2010. *JAMA* 310(6):591-608. 2013 PMID: 23842577
- 95 Pichler I, Del Greco M F, Gögele M, Lill CM, Bertram L, Do CB, Eriksson N, Foroud T, Myers RH; PD GWAS Consortium, Nalls M, Keller MF; International Parkinson's Disease Genomics Consortium (IPDGC – Chen member); Wellcome Trust Case Control Consortium 2, Benyamin B, Whitfield JB; Genetics of Iron Status Consortium, Pramstaller PP, Hicks AA, Thompson JR, Minelli C: Serum iron levels and the risk of Parkinson disease: a mendelian randomization study. *PLoS Med*. 2013 Jun;10(6):e1001462. doi: 10.1371/journal.pmed.1001462. Epub 2013 Jun 4. PMID: 23750121; PMCID: PMC3672214
- 96 Chen R*, Wang C*, Meng X*, **Chen H**, Thach TQ, Wong CM, Kan H: Both low and high temperature may increase the risk of stroke mortality. *Neurology* (*equal contribution) 81(12):1064-1070, 2013 PMID: 23946311; PMCID:PMC3795588
- 97 Rinsky JL, Hoppin JA, Blair A, He K, Beane-Freeman LE, **Chen H**: Agricultural exposures and stroke mortality in the Agricultural Health Study. *J Toxicol Environ Health A* 76(13):798-814, 2013. PMID: 24028665; PMCID: PMC3773612
- 98 Wirdefeldt K, Weibull CE, **Chen H**, Kamel F, Lundholm C, Fang F, Ye W: Parkinson's disease and cancer: A register-based family study. *Am J Epidemiology* 179(1):85-94. 2014. PMID: 24142916; PMCID:PMC3864714
- 99 Kamel F, Goldman SM, Umbach DM, **Chen H**, Richardson G, Barber MR, Meng C, Marras C, Korell M, Kasten M, Hoppin JA, Comyns K, Chade A, Blair A, Bhudhikanok GS, Ross GW, Langston JW, Sandler DP, Tanner CM: Dietary fat intake, pesticide use, and Parkinson's disease *Parkinson Relat Disord* 20(1):82-7. 2014. PMID: 24120951
- 100 Zhang ZX, **Chen H**, Chen SD, Shao M, Sun SG, Qu QM, Zhang BR, Liu YM, Xu Q, Wan X, Li L, Wen HB, Chen X, Chen HB, Liu ZG, Wang J, Wang G. Chinese culture permeation in the treatment of Parkinson disease: a cross-sectional study in four regions of China. *BMC Res Notes*. 7(1):65. 2014. PMID: 24476129; PMCID: PMC3928922
- 101 Liu R, Baird D, Park Y, Freedman N, Huang X, Hollenbeck A, Blair A, **Chen H**: Female reproductive factors, postmenopausal hormone use, and Parkinson's disease *Mov Disord* 29(7):889-96. 2014 PMID:24352877; PMCID:PMC4057969 (with editorial)
- 102 Du G, Lewis M, Sterling N, Kong L, **Chen H**, Mailman R, Huang X: Substantia nigra changes in agricultural workers having chronic paraquat exposure *Neurotoxicol Teratol* 41:60-4, 2014. PMID: 24334261; PMCID: PMC3943901
- 103 Dong J, Gao J, Nalls M, Gao X, Huang X, Han J, Singleton AB, **Chen H**, and the International Parkinson's Disease Genomics Consortium (IPDGC): Susceptibility Loci for Pigmentation and Melanoma in Relation to Parkinson's disease *Neurobio Aging* 35(6):1512.e5-10, 2014. PMID: 24439955; PMCID: PMC3961492
- 104 Guo X, Park Y, Freedman ND, Sinha R, Hollenbeck A, Blair A, **Chen H**: Sweetened beverages, coffee, and tea in relation to depression among older US adults *PLoS One* 9(4):e94715. doi: 10.1371/journal.pone.0094715, 2014. PMID: 24743309; PMCID: PMC3990543
- 105 Lucassen EB, Sterling NW, Lee EY, **Chen H**, Lewis MM, Kong L, Huang X: History of smoking and olfaction in Parkinson's disease *Movement Disorders* 29(8):1069-74, 2014. PMID: 24833119; PMCID:PMC4107167
- 106 **Chen H**, Huang X, Guo X, Peddada S: Individual and joint prevalence of three non-motor symptoms in the US general population *Movement Disorders* 29(10):1316-9. 2014 PMID: 24985078; PMCID: PMC4183355
- 107 Nalls MA, Pankratz N, Lill CM, Do CB, Hernandez DG, Saad M, DeStefano AL, Kara E, Bras J, Sharma M, Schulte C, Keller MF, Arepalli S, Letson C, Edsall C, Stefansson H,

- Liu X, Pliner H, Lee JH, Cheng R; International Parkinson's Disease Genomics Consortium (IPDGC); Parkinson's Study Group (PSG) Parkinson's Research: The Organized GENetics Initiative (PROGENI); 23andMe; GenePD; NeuroGenetics Research Consortium (NGRC); Hussman Institute of Human Genomics (HIHG); The Ashkenazi Jewish Dataset Investigator; Cohorts for Health and Aging Research in Genetic Epidemiology (CHARGE); North American Brain Expression Consortium (NABEC); United Kingdom Brain Expression Consortium (UKBEC); Greek Parkinson's Disease Consortium; Alzheimer Genetic Analysis Group, Ikram MA, Ioannidis JP, Hadjigeorgiou GM, Bis JC, Martinez M, Perlmutter JS, Goate A, Marder K, Fiske B, Sutherland M, Xiromerisiou G, Myers RH, Clark LN, Stefansson K, Hardy JA, Heutink P, **Chen H**, Wood NW, Houlden H, Payami H, Brice A, Scott WK, Gasser T, Bertram L, Eriksson N, Foroud T, Singleton AB: Large-scale meta-analysis of genome-wide association data identifies six new risk loci for Parkinson's disease. *Nature Genetics* 46(9):989-93 2014 PMID:25064009; PMCID: PMC4146673
- 108 Dong J, Beard J, Umbach DM, Park YK, Huang XM, Blair A, Kamel F, **Chen H**: Dietary fat intake and risk for Parkinson's disease *Movement Disorders*. 29(13):1623-30, 2014 PMID: 25186946; PMCID:PMC4216604
- 109 Jones RR, DellaValle CT, Flory AR, Nordan A, Hoppin HA, **Chen H**, Giglierano J, Lynch C, Beane-Freeman LE, Rushton G, Ward MH: Accuracy of Residential Geocoding in the Agricultural Health Study *Int J Health Geogr*. 13(1):37. 2014. PMID: 25292160; PMCID:PMC4203975
- 110 Nalls MA, Bras J, Hernandez DG, Keller MF, Majounie E, Renton AE, Saad M, Jansen I, Guerreiro R, Lubbe S, Plagnol V, Gibbs JR, Schulte C, Pankratz N, Sutherland M, Bertram L, Lill CM, DeStefano AL, Faroud T, Eriksson N, Tung JY, Edsall C, Nichols N, Brooks J, Arepalli S, Pliner H, Letson C, Heutink P, Martinez M, Gasser T, Traynor BJ, Wood N, Hardy J, Singleton AB; International Parkinson's Disease Genomics Consortium (IPDGC- **Chen member**); Parkinson's Disease meta-analysis consortium. NeuroX, a fast and efficient genotyping platform for investigation of neurodegenerative diseases. *Neurobiol Aging*. 36(3):1605.e7-12. 2015. PMID: 25444595; PMCID: PMC4317375
- 111 **Chen H**, Zhao EJ, Zhang W, Lu Y, Liu R, Huang X, Ciesielski-Jones AJ, Justice MA, Cousins DS, Peddada S: Meta-analyses on prevalence of selected Parkinson's nonmotor symptoms before and after diagnosis. *Transl Neurodegener*. 4(1):1. doi: 10.1186/2047-9158-4-1. eCollection 2015 PMID: 25671103 PMCID: PMC4322463
- 112 Gao J, Liu R, Zhao E, Huang X, Nalls M, Singleton AB, **Chen H**: Head injury, potential interaction with genes, and risk for Parkinson's disease. *Parkinson Relat Disord* 21(3):292-6, 2015. PMID:25603768, PMCID:PMC4428147
- 113 Liu R, Umbach D, Peddada S, Tröster AI, Huang X, **Chen H**: Potential sex differences in non-motor symptoms in early drug-naive Parkinson disease: *Neurology* (with editorial), 2015, PMID: 25925983 (NIEHS DIR paper of the month)
- 114 Huang X, Alonso A, Guo X, Evans A, Umbach DM, Lichtenstein ML, Ballantyne CM, Mailman R, Mosley H, **Chen H**: Serum Cholesterol, Statins, and Parkinson's Risk in the Atherosclerosis Risk in Communities (ARIC) Study: *Movement Disorders* 30(4):552-9, 2015. PMID: 25639598. PMCID: PMC4390443
- 115 Alonso A, Huang X, Mosley TH, Heiss G, **Chen H**: Heart rate variability and the incidence of Parkinson's disease: the ARIC study: *Ann Neurol* doi: ;77(5):877-83. doi: 10.1002/ana.24393, 2015. PMID: 25707861 (NIEHS DIR paper of the month, and DIR paper of the year)
- 116 GBD 2013 Mortality and Causes of Death Collaborators (**Chen H member**): Global, regional, and national age-sex specific all-cause and cause-specific mortality for 240

- causes of death, 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet* 385(9963):117-71. 2015. PMID: 25530442; PMCID: PMC4340604
- 117 Kirrane E, Bowman C, Davis JA, Hoppin JA, Blair A, **Chen H**, Patel M, Sandler DP, Tanner CM, Vinikoor-Imler L, Ward M, Luben TJ, Kamel F. Associations of ozone and PM2.5 concentrations with Parkinson's disease among participants in the Agricultural Health Study *J Occup Environ Med* 57(5):509-17, 2015. PMID: 25951420
- 118 Chen R, Zhao A, **Chen H**, Zhao Z, Cai J, Wang C, Yang C, Li, H, Xu X, Ha S, Li T, Kan, H: Cardiopulmonary benefits of reducing indoor particles of outdoor origin: a randomized double-blind crossover trial of air purifiers. *Am J Coll Cardio* (with editorial) 65:2279–87, 2015. PMID: 26022815
- 119 Global Burden of Disease Study 2013 Collaborators (**Chen H** member): Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet*. 2015 Jun 7. pii: S0140-6736(15)60692-4. PMID:26063472
- 120 GBD 2013 Risk Factors Collaborators (**Chen H** member): Global, regional and national comparative risk assessment of 79 behavioural, environmental/occupational and metabolic risks or clusters of risks in 188 countries 1990-2013: a systematic analysis for the GBD 2013. *Lancet* (in press)
- 121 GBD 2013 Risk Factors Collaborators (**Chen H** member): Global, regional, and national disability-adjusted life years (DALYs) for 306 diseases and injuries and healthy life expectancy (HALE) for 188 countries, 1990-2013: quantifying the epidemiological transition. *Lancet*. 2015 Aug 27. pii: S0140-6736(15)61340-X. doi: 10.1016/S0140-6736(15)61340-X. [Epub ahead of print] PMID:26321261
- 122 **Chen H**, Ding D, Wang J, Zhao Q, Meng H, Li H, Gao Y, Shu X, Tanner CM, Hong Z, Yang G: Parkinson's disease research in a prospective cohort in China *Parkinson Relat Disord* 2015 Aug 20. pii: S1353-8020(15)00359-4. doi: 10.1016/j.parkreldis.2015.08.020. [Epub ahead of print] PMID:26318964
- 123 Wu SH, Shu XO, Milne G, Xiang YB, Zhang X, Cai Q, Fazio S, Linton MF, **Chen H**, Purdue M, Rothman N, Gao YT, Zheng W, Yang G: Uric acid correlates to oxidation and inflammation in opposite directions in women. *Biomarkers*;20(4):225-231, 2015. PMID: 26301880
- 124 Dong J, Yang J, Tranah G, Franceschini N, Parimi N, Alkorta-Aranburu G, Xu Z, Alonso A, Cummings S, Fornage F, Huang X, Kritchevsky S, Liu Y, London SJ, Niu L, Wilson RS, De Jager PL, Yu L, Singleton AB, Harris T, Thomas HM, Pinto JM, Bennett D, **Chen H**: Genome-Wide Meta-Analysis on the Sense of Smell among US Older Adults. *Medicine* 94(47):e1892. 2015 PMID: 26632684
- 125 Sterling NW, Lichtenstein M, Lee EY, Lewis MM, Evans A, Eslinger PJ, Du G, Gao X, **Chen H**, Kong L, Huang X: Higher plasma cholesterol is associated with preserved executive and fine motor functions in Parkinson's disease. *Aging Dis* 7(3):237-45. doi: 10.14336/AD.2015.1030
- 126 Shrestha S, Lutsey PL, Alonso A, Huang X, Mosley TH, **Chen H**: Mid-life serum 25-hydroxyvitamin D concentrations and risk of Parkinson's disease in a prospective cohort study *Movement Disorders* (with editorial) 2016, April 19. doi: 10.1002/mds.26573. PMID:27090608
- 127 Freedman M, Wu J, **Chen H**, Engels EA, Enewold LR, Freedman ND, Goedert JJ, Kuncel RW, Gail MH, Pfeiffer RM: Associations between cancer and Parkinson's disease in US elderly adults, *Int J Epidemiol* 2016 Mar 17. pii: dyw016. [Epub ahead of print] PMID: 26989123

- 128 Liu B, **Chen H**, Fang F, Tillander A, Wirdefeldt K: Early-life Factors and Risk of Parkinson's Disease: A Register-based Cohort Study *PLoS One* 2016 Apr 15;11(4):e0152841. doi: 10.1371/journal.pone.0152841. eCollection 2016 PMID:27082111
- 129 Liu R, Young M, Chen JC, Kaufman J, **Chen H**: Ambient air pollution exposures and risk of Parkinson disease *Environ Health Perspect.* 2016 124(11):1759-1765 PMID: 27285422 PMCID: [PMC5089873](#) DOI:[10.1289/EHP135](#)
- 130 Rinsky JL, Richardson DB, Wing S, Beard JD, Alavanja M, Beane Freeman LE, **Chen H**, Henneberger PK, Kamel F, Sandler DP, Hoppin JA. Assessing the potential for bias from non-response to a study follow-up interview: An example from the Agricultural Health Study. *Am J Epidemiol.* 2017 May 9. doi: 10.1093/aje/kwx098. [Epub ahead of print] PubMed PMID: 28486574.
- 131 Deziel NC, Freeman LE, Graubard BI, Jones RR, Hoppin JA, Thomas K, Hines CJ, Blair A, Sandler DP, **Chen H**, Lubin JH, Andreotti G, Alavanja MC, Friesen MC. Relative Contributions of Agricultural Drift, Para-Occupational, and Residential Use Exposure Pathways to House Dust Pesticide Concentrations: Meta-Regression of Published Data. *Environ Health Perspect.* 2017 Mar;125(3):296-305. doi:10.1289/EHP426. Epub 2016 Jul 26. PubMed PMID: 27458779; PubMed Central PMCID:PMC5332194.
- 132 Freedman M, Wu J, **Chen H**, Kuncl RW, Enewold LR, Engels EA, Freedman ND, Pfeiffer RM: Associations between cancer and Alzheimer's disease in a U.S. Medicare population: case-control and cohort studies *Cancer Med* 2016. 5(10):2965-2976. doi: 10.1002/cam4.850 PMID: 27628596 PMCID: [PMC5083750](#)
- 133 Lubin J, Albanes D, Hoppin J, **Chen H**, Lerro C, Weinstein S, Sandler D, Freeman LB: Greater coronary heart disease risk with lower intensity and longer duration smoking compared with higher intensity and shorter duration smoking: congruent results in two diverse cohorts *Nicotine & Tobacco Research* 2016 Dec 9. pii: ntw290. [Epub ahead of print] PubMed PMID: 27941116.
- 134 Dong J, Wyys A, Yang J, Nalls M, Tranah G, Franceschini N, Xu Z, Schulte C, Alvaro A, Cummings S, Fornage F, Zaykin D, Li L, Huang X, Kritchevsky S, Liu Y, London SJ, Gasser T, Wilson RS, De Jager PL, Singleton AB, Pinto JM, Harris T, Thomas HM, Bennett D, Yu L, **Chen H**: Genome-Wide Association Analysis of the Sense of Smell in U.S. Older Adults: Identification of Novel Risk Loci in African-Americans and White-Americans. *Mol Neurobiol* 2016 Nov 23. [Epub ahead of print] PubMed PMID: 27878761; PubMed Central PMCID: PMC5441979.
- 135 Yaffe K, Freimer D, **Chen H**, Asao K, Rosso A, Rubin S, Tranah G, Cummings S, and Simonsick E: Olfaction and risk of dementia in a biracial cohort of older adults. *Neurology.* 2017 Jan 31;88(5):456-462. doi: 10.1212/WNL.0000000000003558. Epub 2016 Dec 30. PubMed PMID: 28039314; PubMed Central PMCID: PMC5278947.
- 136 **Chen H**, Shrestha S, Huang X, Jain S, Guo X, Tranah G, Garcia M, Satterfield S, Philips C, Harris T: Olfaction and incident Parkinson disease in U.S. white and black older adults *Neurology* (with editorial and press release) 2017 Sep 6. pii:10.1212/WNL.0000000000004382. doi:10.1212/WNL.0000000000004382. [Epub ahead of print] PubMed PMID: 28878051.
- 137 Liu B, Fang F, Pedersen N, Tillander A, Ludvigsson JF, Ekblom AR, Svenningsson P, **Chen H**, Wirdefeldt K: Vagotomy and Parkinson disease: A Swedish register-based Matched-Cohort Study *Neurology* 2017 May 23;88(21):1996-2002. doi:10.1212/WNL.0000000000003961. Epub 2017 Apr 26. PubMed PMID: 28446653
- 138 Liu G, Sterling N, Kong L, Lewis M, Mailman RB, **Chen H**, Leslie D, Huang X: Statins may facilitate Parkinson's disease: Insight gained from a large, national claims database.

- Mov Disord.* 2017 Apr 3. doi: 10.1002/mds.27006. [Epub ahead of print] PubMed PMID: 28370314.
- 139 Dong J, Pinto JM, Guo X, Alonso A, Tranah G, Cauley JA, Garcia M, Satterfield S, Huang X, Harris T, Mosley TH Jr, **Chen H**. The Prevalence of Anosmia and Associated Factors Among U.S. Black and White Older Adults. *J Gerontol A Biol Sci Med Sci.* 2017 May 11. doi: 10.1093/gerona/glx081. [Epub ahead of print] PubMed PMID: 28498937.
- 140 GBD 2015 Tobacco Collaborators (Chen member). Smoking prevalence and attributable disease burden in 195 countries and territories, 1990-2015: a systematic analysis from the Global Burden of Disease Study 2015. *Lancet.* 2017 May 13;389(10082):1885-1906. doi: 10.1016/S0140-6736(17)30819-X. Epub 2017 Apr 5. PubMed PMID: 28390697.
- 141 Geissler JM; International Parkinson Disease Genomics Consortium members (Chen), Romanos M, Gerlach M, Berg D, Schulte C. No genetic association between attention-deficit/hyperactivity disorder (ADHD) and Parkinson's disease in nine ADHD candidate SNPs. *Atten Defic Hyperact Disord.* 2017 Jun;9(2):121-127. doi:10.1007/s12402-017-0219-8. Epub 2017 Feb 7. PubMed PMID: 28176268.
- 142 Jansen IE, Ye H, Heetveld S, Lechler MC, Michels H, Seinstra RI, Lubbe SJ, Drouet V, Lesage S, Majounie E, Gibbs JR, Nalls MA, Ryten M, Botia JA, Vandrovcova J, Simon-Sanchez J, Castillo-Lizardo M, Rizzu P, Blauwendraat C, Chouhan AK, Li Y, Yogi P, Amin N, van Duijn CM; International Parkinson's Disease Genetics Consortium (IPGDC **Chen** member)., Morris HR, Brice A, Singleton AB, David DC, Nollen EA, Jain S, Shulman JM, Heutink P. Discovery and functional prioritization of Parkinson's disease candidate genes from large-scale whole exome sequencing. *Genome Biol.* 2017 Jan 30;18(1):22. doi: 10.1186/s13059-017-1147-9. PubMed PMID: 28137300; PubMed Central PMCID: PMC5282828.
- 143 Li H, Cai J, Chen R, Zhao Z, Ying Z, Wang L, Chen J, Hao K, Kinney PL, **Chen H**, Kan H. Particulate Matter Exposure and Stress Hormone Levels: A Randomized, Double-Blind, Crossover Trial of Air Purification. *Circulation.* 2017 Aug 15;136(7):618-627. doi: 10.1161/CIRCULATIONAHA.116.026796. PubMed PMID: 28808144.
- 144 Lewis MM, Sterling NW, Du G, Lee EY, Shyu G, Goldenberg M, Allen T, Stetter C, Kong L, Snipes SA, Jones BC, **Chen H**, Mailman RB, Huang X. Lateralized basal ganglia vulnerability to pesticide exposure in asymptomatic agricultural workers. *Toxicol Sci.* 2017 Jun 19. doi: 10.1093/toxsci/kfx126. [Epub ahead of print] PubMed PMID: 28633499.
- 145 Rossi A, Berger K, **Chen H**, Leslie D, Mailman RB, Huang X. Projection of the prevalence of Parkinson's disease in the coming decades: Revisited. *Mov Disord.* 2017 Jun 7. doi: 10.1002/mds.27063. [Epub ahead of print] PubMed PMID: 28590580.
- 146 Montgomery MP, Postel E, Umbach DM, Richards M, Watson M, Blair A, **Chen H**, Sandler DP, Schmidt S, Kamel F. Pesticide Use and Age-Related Macular Degeneration in the Agricultural Health Study. *Environ Health Perspect.* 2017 Jul 19;125(7):077013. doi:10.1289/EHP793. PubMed PMID: 28886597.
- 147 Shrestha S, Kamel F, Umbach DM, Beane Freeman LE, Koutros S, Alavanja M, Sandler DP, **Chen H**. Nonmotor symptoms and Parkinson disease in United States farmers and spouses. *PLoS One.* 2017 Sep 27;12(9):e0185510. doi:10.1371/journal.pone.0185510. eCollection 2017. PubMed PMID: 28953962.
- 148 GBD 2015 Neurological Disorders Collaborator Group (**Chen** member). Global, regional, and national burden of neurological disorders during 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet Neurol.* 2017 Sep 15. pii:S1474-4422(17)30299-5. doi: 10.1016/S1474-4422(17)30299-5. [Epub ahead of print] PubMed PMID: 28931491.

- 149 GBD 2016 DALYs and HALE Collaborators (**Chen** member). Global, regional, and national disability-adjusted life-years (DALYs) for 333 diseases and injuries and healthy life expectancy (HALE) for 195 countries and territories, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet*. 2017 Sep 16;390(10100):1260-1344. doi: 10.1016/S0140-6736(17)32130-X. PubMed PMID:28919118; PubMed Central PMCID: PMC5605707.
- 150 GBD 2016 Disease and Injury Incidence and Prevalence Collaborators (**Chen** member). Global, regional, and national incidence, prevalence, and years lived with disability for 328 diseases and injuries for 195 countries, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet*. 2017 Sep 16;390(10100):1211-1259. doi: 10.1016/S0140-6736(17)32154-2. PubMed PMID: 28919117; PubMed Central PMCID: PMC5605509.
- 151 GBD 2016 Mortality Collaborators (**Chen** member). Global, regional, and national under-5 mortality, adult mortality, age-specific mortality, and life expectancy, 1970-2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet*. 2017 Sep 16;390(10100):1084-1150. doi: 10.1016/S0140-6736(17)31833-0. PubMed PMID: 28919115; PubMed Central PMCID: PMC5605514.
- 152 Palta P, **Chen H**, Deal JA, Sharrett AR, Gross AL, Knopman D, Griswold M, Heiss G, Mosley TH. Olfactory Function and Neurocognitive Outcomes in Old Age: the Atherosclerosis Risk in Communities Neurocognitive Study (ARIC-NCS). *Alzheimers Dement* 2018 pii: S1552-5260(18)30073-6. doi: 10.1016/j.jalz.2018.02.019. PMID: 29605223 PMCID: PMC6097922.
- 153 Hall C, Heck JE, Sandler DP, Ritz B, **Chen H**, Krause N. Occupational and leisure-time physical activity differentially predict 6-year incidence of stroke and transient ischemic attack in women. *Scand J Work Environ Health*. 2018 Nov 19. pii: 3787. doi: 10.5271/sjweh.3787. PubMed PMID: 30448859.
- 154 Killinger BA, Madaj Z, Sikora JW, Rey N, Haas AJ, Vepa Y, Lindqvist D, **Chen H**, Thomas PM, Brundin P, Brundin L, Labrie V. The vermiform appendix impacts the risk of developing Parkinson's disease. *Sci Transl Med*. 2018 Oct 31;10(465). pii: eaar5280. doi: 10.1126/scitranslmed.aar5280. PubMed PMID: 30381408.
- 155 Deziel NC, Beane Freeman LE, Hoppin JA, Thomas K, Lerro CC, Jones RR, Hines CJ, Blair A, Graubard BI, Lubin JH, Sandler DP, **Chen H**, Andreotti G, Alavanja MC, Friesen MC. An algorithm for quantitatively estimating non-occupational pesticide exposure intensity for spouses in the Agricultural Health Study. *J Expo Sci Environ Epidemiol*. 2018 Oct 30. doi: 10.1038/s41370-018-0088-z. PubMed PMID: 30375516.
- 156 Wallen ZD, **Chen H**, Hill-Burns EM, Factor SA, Zabetian CP, Payami H. Plasticity-related gene 3 (LPPR1) and age at diagnosis of Parkinson disease. *Neurol Genet*. 2018 Oct 5;4(5):e271. doi: 10.1212/NXG.0000000000000271. eCollection 2018 Oct. PMID: 30338293; PMCID: PMC6186025.
- 157 Shrestha S, Kamel F, Umbach DM, Fan Z, Beane Freeman LE, Koutros S, Alavanja M, Blair A, Sandler DP, **Chen H**. Factors associated with dream enacting behaviors among US farmers. *Parkinsonism Relat Disord*. 2018 Jul 10. pii: S1353-8020(18)30306-7. doi: 10.1016/j.parkreldis.2018.07.003. [Epub ahead of print] PubMed PMID: 30007509.
- 158 US Burden of Disease Collaborators, Mokdad AH, Ballestros K, Echko M, Glenn S, Olsen HE, Mullany E, Lee A, Khan AR, Ahmadi A, Ferrari AJ, Kasaeian A, Werdecker A, Carter A, Zipkin B, Sartorius B, Serdar B, Sykes BL, Troeger C, Fitzmaurice C, Rehm CD, Santomauro D, Kim D, Colombara D, Schwebel DC, Tsoi D, Kolte D, Nsoesie E, Nichols E, Oren E, Charlson FJ, Patton GC, Roth GA, Hosgood HD, Whiteford HA, Kyu H, Erskine HE, Huang H, Martopullo I, Singh JA, Nachega JB, Sanabria JR, Abbas K, Ong K, Tabb K, Krohn KJ, Cornaby L, Degenhardt L, Moses M, Farvid M, Griswold M,

- Criqui M, Bell M, Nguyen M, Wallin M, Mirarefin M, Qorbani M, Younis M, Fullman N, Liu P, Briant P, Gona P, Havmoller R, Leung R, Kimokoti R, Bazargan-Hejazi S, Hay SI, Yadgir S, Biryukov S, Vollset SE, Alam T, Frank T, Farid T, Miller T, Vos T, Bärnighausen T, Gebrehiwot TT, Yano Y, Al-Aly Z, Mehari A, Handal A, Kandel A, Anderson B, Biroscak B, Mozaffarian D, Dorsey ER, Ding EL, Park EK, Wagner G, Hu G, **Chen H**, Sunshine JE, Khubchandani J, Leasher J, Leung J, Salomon J, Unutzer J, Cahill L, Cooper L, Horino M, Brauer M, Breitborde N, Hotez P, Topor-Madry R, Soneji S, Stranges S, James S, Amrock S, Jayaraman S, Patel T, Akinyemiju T, Skirbekk V, Kinfu Y, Bhutta Z, Jonas JB, Murray CJL. The State of US Health, 1990-2016: Burden of Diseases, Injuries, and Risk Factors Among US States. *JAMA*. 2018 Apr 10; 319(14): 1444-1472. doi: 10.1001/jama.2018.0158. PMID: 29634829; PMC5933332.
- 159 Shrestha S, Kamel F, Umbach DM, Freeman LEB, Koutros S, Alavanja M, Blair A, Sandler DP, **Chen H**. High Pesticide Exposure Events and Olfactory Impairment among U.S. Farmers. *Environ Health Perspect*. 2019 Jan;127(1):17005. doi:10.1289/EHP3713. PMID: 30648881.
- 160 Huang X, Sterling NW, Du G, Sun D, Stetter C, Kong L, Zhu Y, Neighbors J, Lewis MM, **Chen H**, Hohl RJ, Mailman RB. Brain cholesterol metabolism and Parkinson's disease. *Mov Disord*. 2019 Jan 25. doi: 10.1002/mds.27609. PMID: 30681742.
- 161 Zhang H, Bi W, Cui Y, **Chen H**, Chen J, Zhao Y, Kang G. Extreme-value sampling design is cost-beneficial only with a valid statistical approach for exposure-secondary outcome association analyses. *Stat Methods Med Res*. 2019 Apr 4:962280219839093. doi: 10.1177/0962280219839093. PubMed PMID: 30945605.
- 162 Lin Z, Chen R, Jiang Y, Xia Y, Niu Y, Wang C, Liu C, Chen C, Ge Y, Wang W, Yin G, Cai J, Clement V, Xu X, Chen B, **Chen H**, Kan H. Cardiovascular Benefits of Fish-Oil Supplementation Against Fine Particulate Air Pollution in China. *J Am Coll Cardiol*. 2019 Apr 30;73(16):2076-2085. doi: 10.1016/j.jacc.2018.12.093. PubMed PMID: 31023432.
- 163 Liu B, Luo ZH, Pinto JM, Shiroma EJ, Tranah GJ, Wirdefeldt K, Fang F, Harris TB, **Chen H**: Relationship between poor olfaction and mortality among community-dwelling older adults: A cohort study. *Ann Intern Med* May 21;170(10):673-681. doi: 10.7326/M18-0775 PMCID: [PMC7673250](https://pubmed.ncbi.nlm.nih.gov/32092703/)
- 164 Shrestha S, Parks CG, Keil AP, Umbach DM, Lerro CC, Lynch CF, **Chen H**, Blair A, Koutros S, Hofmann JN, Beane Freeman LE, Sandler DP. Overall and cause-specific mortality in a cohort of farmers and their spouses. *Occup Environ Med*. 2019 Sep;76(9):632-643. doi: 10.1136/oemed-2019-105724. PubMed PMID: 31413186.
- 165 Heinzl S, Berg D, Gasser T, **Chen H**, Yao C, Postuma RB; MDS Task Force on the Definition of Parkinson's Disease. Update of the MDS research criteria for prodromal Parkinson's disease. *Mov Disord*. 2019 Aug 14. doi: 10.1002/mds.27802. [Epub ahead of print] Review. PubMed PMID: 31412427.
- 166 Liu R, Umbach DM, Tröster AI, Huang X, **Chen H**. Non-motor symptoms and striatal dopamine transporter binding in early Parkinson's disease. *Parkinsonism Relat Disord*. 2020 Feb 11;72:23-30. doi: 10.1016/j.parkreldis.2020.02.001. [Epub ahead of print] PubMed PMID: 32092703.
- 167 Purdy F, Luo Z, Gardiner JC, Pinto JM, Shiroma EJ, Simonsick EM, Harris TB, **Chen H**. Olfaction and changes in body composition in a large cohort of older US adults. *J Gerontol A Biol Sci Med Sci*. 2020 Apr 8. pii: glaa085. doi:10.1093/gerona/glaa085. [Epub ahead of print] PubMed PMID: 32267924.
- 168 Goldenberg MDF, Huang X, **Chen H**, Kong L, Postolache TT, Stiller JW, Ryan KA, Pavlovich M, Pollin TI, Shuldiner AR, Mailman RB, Mitchell BD. Parkinson's Disease-Related Motor and Nonmotor Symptoms in the Lancaster Amish, Neuroepidemiology. 2020 Jul 31:1-6. doi: 10.1159/000509394. Online ahead of print. PMID: 32739915

- 169 Cao Z, Luo Z, Huang X, Pinto JM, Simonsick EM, Shiroma EJ, **Chen H**. Self-Reported Versus Objectively Assessed Olfaction and Parkinson's Disease Risk. *J Parkinsons Dis.* 2020 Sep 9. doi: 10.3233/JPD-202164. Online ahead of print. PMID: 32925101
- 170 Shrestha S, Parks CG, Umbach DM, Richards-Barber M, Hofmann JN, **Chen H**, Blair A, Beane Freeman LE, Sandler DP. Pesticide use and incident Parkinson's disease in a cohort of farmers and their spouses. *Environ Res.* 2020 Sep 10:110186. doi: 10.1016/j.envres.2020.110186. Online ahead of print. PMID: 32919961
- 171 Shrestha S, Umbach DM, Beane Freeman LE, Koutros S, Alavanja MCR, Blair A, **Chen H**[#], Sandler DP[#]. Occupational pesticide use and self-reported olfactory impairment in US farmers. *Occup Environ Med.* 2020 Oct 23:oemed-2020-106818. doi: 10.1136/oemed-2020-106818. Online ahead of print. PMID: 33097675 (co-senior author)
- 172 Liu B, Sjölander A, Pedersen NL, Ludvigsson JF, **Chen H**, Fang F, Wirdefeldt K. Irritable bowel syndrome and Parkinson's disease risk: register-based studies. *NPJ Parkinsons Dis.* 2021 Jan 5;7(1):5. doi: 10.1038/s41531-020-00145-8. PMID: 33402695; PMCID: PMC7785733
- 173 Cui C, Sun J, Pawitan Y, Piehl F, **Chen H**, Ingre C, Wirdefeldt K, Evans M, Andersson J, Carrero JJ, Fang F. Creatinine and C-reactive protein in amyotrophic lateral sclerosis, multiple sclerosis and Parkinson's disease. *Brain Commun.* 2020 Sep 18;2(2):fcaa152. doi: 10.1093/braincomms/fcaa152. eCollection 2020. PMID: 33543134 PMCID: PMC7850290
- 174 Chahine LM, Zhu X, Ehrenkranz R, **Chen H**, Glynn NW, Rosano C. Changes in Self-Reported Energy Levels in Prodromal Parkinson's Disease. *Mov Disord.* 2021 Feb 26. doi: 10.1002/mds.28535. Online ahead of print. PMID: 33634907 No abstract available.
- 175 Song S, Luo Z, Li C, Huang X, Shiroma EJ, Simonsick EM, **Chen H**. Changes in Body Composition Before and After Parkinson's Disease Diagnosis. *Mov Disord.* 2021 Feb 22:e28536. doi: 10.1002/mds.28536. Online ahead of print. PMID: 33615545
- 176 Shrestha S, Parks CG, Richards-Barber M, **Chen H**, Sandler DP: Parkinson's disease case ascertainment in a large prospective cohort. *PLoS One* May 19;16(5):e0251852. doi: 10.1371/journal.pone.0251852. eCollection 2021. PMID: 34010345
- 177 Wang K, Li C, Luo Z, Huang X, Shiroma EJ, Simonsick EM, **Chen H**. Blood cholesterol decreases as Parkinson's disease develops and progresses. *J Parkinsons Disease.* 2021 May 15. doi: 10.3233/JPD-212670. PMID: 34024785
- 178 Ma T, **Chen H**, Lu Q, Tong A. Polygenic Risk for Insomnia in Adolescents of Diverse Ancestry. *Frontiers in Genetics* 2021 May 10;12:654717. doi: 10.3389/fgene.2021.654717. eCollection 2021. PMID: 34040634; PMCID: [PMC8141920](#)
- 179 Yuan Y, Luo Z, Li C, Pinto JM, Shiroma EJ, Simonsick EM, **Chen H**. Poor Olfaction and Pneumonia Hospitalisation Among Community-Dwelling Older Adults: A cohort study. *Lancet Healthy Longevity* 2021; 2(5), e275-e282
- 180 Yuan Y, Li C, Luo Z, Simonsick EM, Shiroma EJ, **Chen H**. Olfaction and Physical Functioning in Older Adults: A Longitudinal Study. *J Gerontol A Biol Sci Med Sci.* 2021 Aug 11:glab233. doi: 10.1093/gerona/glab233. Online ahead of print. PMID: 34379770; PMCID not available
- 181 Felix C, Chahine LM, Hengenius J, **Chen H**, Rosso AL, Zhu X, Cao Z, Rosano C. Microstructure of gray matter in older adults with and without hyposmia. *Frontiers in Aging Neuroscience* 2021 Oct 22;13:648598. doi: 10.3389/fnagi.2021.648598. eCollection 2021. PMID: 34744681; [PMC8569942](#)
- 182 Wang C, Lin J, Niu Y, Wang W, Wen J, Lv L, Liu C, Du X, Zhang Q, Chen B, Cai J, Zhao Z, Liang D, Ji JS, **Chen H**, Chen R, Kan H. Impact of ozone exposure on heart rate variability and stress hormones: A randomized-crossover study. *J Hazard Mater.* 2021 Jul 26;421:126750. doi: 10.1016/j.jhazmat.2021.126750. PMID: 34339988

- 183 Shrestha S, Parks CG, Richards-Barber M, **Chen H**, Sandler DP. Parkinson's disease case ascertainment in a large prospective cohort. *PLoS One*. 2021,16(5):e0251852. doi: 10.1371/journal.pone.0251852. eCollection 2021. PMID: 34010345 [PMC8133399](#)
- 184 Yuan Y, Shrestha S, Luo Z, Li C, Plassman BL, Parks CG, Hofmann JN, Beane Freeman LE, Sandler DP, **Chen H**: High Pesticide Exposure Events and Dream-Enacting Behaviors Among US Farmers *Mov Disord*. 2022 Feb 13. doi: 10.1002/mds.28960. Online ahead of print; PMID: 35152487
- 185 Cao Z, Yang A, DiAloisio A, Suarez L, Deming-Halverson, Li C, Luo Z, Pinto J, Werder EJ, Sandler DP, **Chen H**: Assessment of Self-reported Sense of Smell, Objective Testing, and Associated Factors in Middle-aged and Older Women. *JAMA Otolaryngol Head Neck Surg*. 2022 Mar 10. doi: 10.1001/jamaoto.2022.0069. Online ahead of print. PMID: 35266981
- 186 Wang K, Luo Z, Li C, Pinto JM, Shiroma EJ, Simonsick EM, **Chen H**: Olfaction and kidney function in community-dwelling older adults. *PLoS One* 2022 Feb 25; 17(2):e0264448. doi: 10.1371/journal.pone.0264448. eCollection 2022 PMID: 35213666 [PMC8880852](#)
- 187 Parks CG, Shrestha S, Long S, Flottesmesch T, Woodruff S, **Chen H**, Andreotti G, Hofmann JN, Beane Freeman LE, Sandler DP: Completeness of cohort-linked U.S. Medicare data: an example from the Agricultural Health Study (1999-2016) *Prev Med Rep*. 2022 Mar 15;27:101766. doi: 10.1016/j.pmedr.2022.101766. eCollection 2022 Jun. PMID: 35369114 [PMC8971642](#)
- 188 Chen R, Jiang Y, Hu J, **Chen H**, Li H, Meng X, Ji JS, Gao Y, Wang W, Liu C, Fang W, Yan H, Chen J, Wang W, Xiang D, Su X, Yu B, Wang Y, Xu Y, Wang L, Li C, Chen Y, Bell ML, Cohen AJ, Ge J, Huo Y, Kan H: Hourly air pollutants and acute coronary syndrome onset in 1.29 million patients *Circulation* 2022 Apr 22. doi: 10.1161/CIRCULATIONAHA.121.057179. PMID: 35450432
- 189 Kamath V, Senjem ML, Spsychalla AJ, **Chen H**, Palta P, Mosley TH, Windham BG, Griswold M, Knopman DS, Gottesman RF, Jack CR, Sharrett AR, Schneider ALC. The Neuroanatomic Correlates of Olfactory Identification Impairment in Healthy Older Adults and in Persons with Mild Cognitive Impairment. *J Alzheimers Dis*. 2022 Jul 16. doi: 10.3233/JAD-220228. Online ahead of print. PMID: 35871337
- 190 Schneider ALC, Gottesman RF, Mosley TH, Shrestha S, Rowan NR, Sharrett AR, **Chen H**, Kamath V. Associations of Prior Head Injury With Olfaction in Older Adults: Results From the Atherosclerosis Risk in Communities (ARIC) Study. *JAMA Otolaryngol Head Neck Surg*. 2022 Jul 21. doi: 10.1001/jamaoto.2022.1920. Online ahead of print. PMID: 35862067
- 191 Song S, Luo Z, Li C, Huang X, Shiroma EJ, Simonsick EM, **Chen H**. Depressive symptoms before and after Parkinson's diagnosis-A longitudinal analysis. *PLoS One*. 2022 Jul 29;17(7):e0272315. doi: 10.1371/journal.pone.0272315. eCollection 2022. PMID: 35905124; PMC9337685
- 192 Stein E, Chern A, **Chen H**, Shiroma EJ, Devanand DP, Gudis DA, Overdevest JB. Association between social determinants of health and olfactory dysfunction in older adults: A population-based analysis. *Int Forum Allergy Rhinol*. 2022 Sep 14. doi: 10.1002/alr.23088. Online ahead of print. PMID: 36102027
- 193 Arsiwala-Scheppach LT, Ramulu PY, Sharrett AR, Kamath V, Deal JA, Guo X, Du S, Garcia Morales EE, Mihailovic A, **Chen H**, Abraham AG: Associations among Visual, Auditory, and Olfactory Functions in Community-Based Older Adults: The Atherosclerosis Risk in Communities (ARIC) Study. *Transl Vis Sci Technol*. 2022 Nov 1;11(11):2. doi: 10.1167/tvst.11.11.2. PMID: 36322079 PMCID: PMC9639698

- 194 Cao Z, Song S, Huang X, Li C, Luo Z, D'Aloisio AA, Suarez L, Hernandez DG, Singleton AB, Sandler DP, **Chen H**: Parkinson's disease case ascertainment in the Sister Study – a cohort for environmental health research *Journal of Parkinson's Disease* *J Parkinson's Disease* 2023 Jun 16. doi: 10.3233/JPD-230053. PMID: 37334620
- 195 Kamath V, Jiang K, Manning KJ, Mackin RS, Walker KA, Powell D, Lin FR, **Chen H**, Brenowitz WD, Yaffe K, Simonsick EM, Deal JA: Olfactory Dysfunction and Depression Trajectories in Community-Dwelling Older Adults. *J Gerontol A Biol Sci Med Sci*. 2023 Jun 26:glad139. doi: 10.1093/gerona/glad139. Online ahead of print. PMID: 37357824
- 196 Shrestha S, Zhu X, Sullivan KJ, Blackshear C, Deal JA, Sharrett AR, Kamath V, Schneider ALC, Jack CR, Huang J, Palta P, Reid RI, Knopman DS, Gottesman RF, **Chen H**, Windham BG, Griswold M, Mosley TH. Association of Olfaction and Microstructural Integrity of Brain Tissue in Community-Dwelling Adults: Atherosclerosis Risk in Communities Neurocognitive Study. *Neurology* 2023 Aug 4: 10.1212/WNL.0000000000207636. doi: 10.1212/WNL.0000000000207636. Online ahead of print. PMID: 37541841
- 197 Chamberlin KW, Li C, Luo Z, D'Aloisio AA, Pinto JM, Sandler DP, **Chen H**. Use of nonsteroidal anti-inflammatory drugs and poor olfaction in women. *Int Forum Allergy Rhinol*. 2023 Jul 18. doi: 10.1002/alr.23241. Online ahead of print. PMID: 37548119
- 198 Shrestha S, Zhu X, Kamath V, Sullivan KJ, Deal JA, Sharrett AR, Schneider ALC, Palta P, Gottesman RF, Windham BG, Mosley TH, Griswold ME, **Chen H**. Factors Associated with Poor Olfaction and Olfactory Decline in Older Adults in the ARIC Neurocognitive Study. *Nutrients* 2023 Aug 19;15(16):3641. doi: 10.3390/nu15163641. PMID: 37630831
- 199 Cao Z, Yang A, White AJ, Purdy F, Li C, Luo Z, D'Aloisio AA, Suarez L, Deming-Halverson S, Pinto JM, Chen JC, Werder EJ, Kaufman JD, Sandler DP, **Chen H**. Ambient Air Pollutants and Olfaction among Women 50-79 Years of Age from the Sister Study. *Environ Health Perspect* 2023 Aug;131(8):87012. doi: 10.1289/EHP12066. Epub 2023 Aug 18. PMID: 37594315

B. Peer-Reviewed Reviews

- 200 **Chen H** and Ge KY: Update of the methods to detect vitamin A deficiency. *J Int Med: Hyg Sect* 24(2): 106-109. 1997
- 201 Ascherio A and **Chen H**: Caffeinated clues from epidemiology of Parkinson's disease *Neurology* 61 (11 Suppl 6): S51-S54, 2003. PMID: 14663011
- 202 Schernhammer E, **Chen H**, Ritz B: Circulating melatonin: A possible link between Parkinson's disease and cancer risk. *Cancer Causes Control* 17(4):577-82, 2006. PMID: 16596313
- 203 Bronstein J, Carvey P, **Chen H**, Cory-Slechta D, Dimonte D, Duda J, English P, Goldman S, Grate S, Hansen J, Hoppin J, Jewell S, Kamel F, Koroshetz W, Langston JW, Logroscino G, Nelson L, Ravina B, Rocca W, Ross GW, Schettler T, Schwarzschild M, Scott B, Seegal R, Singleton A, Steenland K, Tanner CM, Van Den Eeden S, Weisskopf MC: Meeting Report: Consensus Statement-Parkinson's Disease and the Environment: Collaborative on Health and the Environment and Parkinson's Action Network (CHE PAN) Conference 26-28 June 2007. *Environment Health Perspectives* 117(1):117-21, 2009. PMID: 19165397; PMCID: PMC2627854
- 204 Hancock DB, Scott WK, **Chen H**: Pesticide exposure and Parkinson's disease. *US Neurology* 4 (2) 48-50, 2009
- 205 **Chen H**, Huang X: Environmental Epidemiology of Sporadic Parkinson's Disease. *North American Journal of Medicine & Science* 3(2):73-78, 2010

- 206 Block M, Elder A, Auten R, Bilbo S, **Chen H**, Chen JC, Cory-Slechta D, Costa D, Diaz-Sanchez D, Doorman D, Gold D, Gray K, Jeng HA, Kaufman J, Kleinman M, Kirshner A, Lawler C, Miller DS, Nadadur S, Ritz B, Semmens E; Tonelli L, Veronesi B, Wright R, Wright R: The Outdoor Air Pollution and Brain Health Workshop. *Neurotoxicology* 33(5):972-84, 2012. PMID: 22981845; PMCID: PMC3726250
- 207 **Chen H**, Burton EA, Ross GW, Huang X, Savica R, Abbott RD, Ascherio A, Caviness JN, Gao X, Gray KA, Hong JS, Kamel F, Jennings D, Kirshner A, Lawler C, Liu R, Miller GW, Nussbaum R, Peddada S, Rick AC, Ritz B, Siderowf AD, Tanner CT, Tröster AI, Zhang J: Research on the pre-motor symptoms of Parkinson's disease - clinical and etiological implications. *Environ Health Perspect*. 121(11-12):1245-52. PMID: 23933572; PMCID: PMC3855519
- 208 Snyder HM, Ahles T, Calderwood S, Carrillo MC, **Chen H**, Chang CH, Craft S, De Jager P, Driver JA, Fillit H, Knopman D, Lotze M, Tierney MC, Petanceska S, Saykin A, Seshadri S, Shineman D, Ganguli M: Exploring the nexus of Alzheimer's disease and related dementias with cancer and cancer therapies: A convening of the Alzheimer's Association & Alzheimer's Drug Discovery Foundation. *Alzheimers Dement*. 2016 Dec 18. pii: S1552-5260(16)33090-4. doi: 10.1016/j.jalz.2016.11.002. [Epub ahead of print]
- 209 **Chen H** (Invited): The Changing Landscape of Parkinson Epidemiologic Research. *J Parkinsons Dis*. 2018;8(1):1-12. doi: 10.3233/JPD-171238. PubMed PMID: 29154293; PubMed Central PMCID: PMC5836408.
- 210 Darweesh SKL, Raphael KG, Brundin P, Matthews H, Wyse RK, **Chen H**, Bloem BR. (Invited): Parkinson Matters. *J Parkinsons Dis*. 2018;8(4):495-498. doi: 10.3233/JPD-181374. PubMed PMID: 30149463; PubMed Central PMCID: PMC6218141.
- 211 **Chen H**, Ritz B. (Invited): The Search for Environmental Causes of Parkinson's Disease: Moving Forward. *J Parkinsons Dis*. 2018;8(s1):S9-S17. doi: 10.3233/JPD-181493. PubMed PMID: 30584168; PubMed Central PMCID: PMC6311360.
- 212 Potashkin J, Huang X, Becker C, **Chen H**, Foltynie T, Marras C (invited). Understanding the links between cardiovascular disease and Parkinson's disease. *Mov Disord*. 2019 Sep 4. doi: 10.1002/mds.27836. [Epub ahead of print] PubMed PMID: 31483535.
- 213 **Chen H**, Wang K, Scheperjans F, Killinger B. Environmental triggers of Parkinson's disease - Implications of the Braak and dual-hit hypotheses. *Neurobiol Dis*. 2021 Dec 23;163:105601. doi: 10.1016/j.nbd.2021.105601. Online ahead of print. PMID: 34954321

C. Correspondences and Editorials

- 214 Weisskopf MG, O'Reilly E., **Chen H**, Schwarzschild MA, and Ascherio A: Reply: Plasma urate and risk of Parkinson's disease *Am J Epidemiol*, 167(6): 753-4, 2008. PMID: 18283033 (Letter)
- 215 Huang X, **Chen H**, Petrovitch H, Mailman R, Ross W: Reply: Plasma cholesterol and Parkinson's disease: is the puzzle only apparent? *Mov Disorders* 25(1):137, 2010. PMID: 20077471 (Letter)
- 216 **Chen H.**, Kamel F., Park Y, Hollenbeck A. Huang X: Reply: Smoking duration, intensity, and risk of Parkinson disease. *Neurology* 75(6):574-5, 2010. PMID: 20697113 (Letter)
- 217 **Chen H**, Gao X, Ascherio A: Prospective research on Parkinson nonmotor symptoms. *Arch Neurology* 68(1):137, 2011. PMID: 21220690 (Letter)
- 218 **Chen H** and Marder K: Milk consumption and the risk of nigral degeneration. *Neurology* 86: 2016 PMID:26658908 (Editorial)
- 219 **Chen H**: Are we ready for a potential increase in Parkinson's incidence? *JAMA: Neurology* (Editorial with press release) 2016 Aug 1;73(8):919-21. doi: 10.1001/jamaneurol.2016.1599. No abstract available. PMID: 27322659

- 220 **Chen H.** Author response: Olfaction and incident Parkinson disease in US white and black older adults. *Neurology*. 2018 May 15;90(20):941. doi:10.1212/WNL.0000000000005515. PubMed PMID: 29759999.
- 221 Liu B, Luo Z, **Chen H.** Relationship Between Poor Olfaction and Mortality. *Ann Intern Med*. 2019 Oct 1;171(7):526. doi: 10.7326/L19-0468. PubMed PMID: 31569244. (Letter)

D. Other Journal Publications

- 222 **Chen H:** Smoking duration, intensity, and Parkinson's disease. *Focus on Parkinson's Disease* 22 (1): 16-18, 2011 (Invited extended abstract, originally on *Neurology* 74 (11): 878-84, 2010)
- 223 **Chen H:** Physical activity and future risk of Parkinson's disease. *Focus on Parkinson's Disease* 22 (1): 19-21, 2011 (Invited extended abstract, originally on *Neurology* 75(4):341-8, 2010)

E. Books

- 224 Gallo V, **Chen H**, and Pearce N: *Oxford Textbook of Neurological and Neuropsychiatric Epidemiology (Chapter 11): Idiopathic Parkinson's disease and classification of Parkinsonisms*, 2020