

Jui-Hung Jimmy Yen, Ph.D.
Associate Professor of Microbiology and Immunology
Indiana University School of Medicine
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Education

Ph.D., Immunology, 2007
Rutgers University, NJ

M.S., Immunology, 2003
Rutgers University, NJ

B.S., Microbiology, 1998
Soochow University, Taiwan

Professional Employments

Associate Professor with Tenure 2020 - present
Department of Microbiology and Immunology, Indiana University School of Medicine, IN
Research Director – Indiana University School of Medicine - Fort Wayne

- ◆ Study immune-mediated CNS inflammation in the disease of ischemic stroke and multiple sclerosis.
- ◆ Investigate the protective effect of IFN β in ischemic stroke
- ◆ Investigate the role of IRG1 in immunometabolism in the context of neuroinflammation
- ◆ Investigate the impact of minor stroke on cerebral amyloid angiopathy and Alzheimer's disease
- ◆ Investigate molecular mechanisms underlying detrimental effects of hyperglycemia in diabetic stroke
- ◆ Site director of Host Defense course (the course covers Immunology, Bacteriology and Virology)
- ◆ Course director of IU School of Medicine Medical Research Elective

Assistant Professor 2013 - 2020

Department of Microbiology and Immunology, Indiana University School of Medicine, IN

- ◆ Studied immune-mediated CNS inflammation in the disease of ischemic stroke and multiple sclerosis
- ◆ Investigated anti-inflammation and neuroprotection of Nrf2 pathway in ischemic stroke and MS
- ◆ Investigated the role of IRG1 in immunometabolism in the context of neuroinflammation
- ◆ Investigated molecular mechanisms underlying detrimental effects of hyperglycemia in diabetic stroke
- ◆ Site director of Host Defense course
- ◆ Course director of Medical Microbiology and Immunology

Associate Scientist 2009 - 2012

Department of Microbiology and Immunology, Temple University School of Medicine, PA

- ◆ Investigated the molecular mechanisms involved in the effects of IFN β in models of multiple sclerosis, experimental autoimmune encephalomyelitis (EAE)
- ◆ Investigated molecular mechanisms of beneficial effects of IFN β therapy in ischemic stroke
- ◆ Studied the immunomodulatory effect of IFN β and DHA on microglia
- ◆ Studied the effects of omega-3 and omega-6 fatty acid on IL-17-producing $\gamma\delta$ T cells
- ◆ Studied the role of Muc1, a mucin-like protein, in EAE
- ◆ In charge of maintaining the departmental flow cytometry facility and training new users

Post-Doctoral Fellow 2007 - 2009

Department of Microbiology and Immunology, Temple University School of Medicine, PA

- ◆ Studied the role of IFN β in dendritic cell migration and apoptosis
- ◆ Studied the role of the omega 3 fatty acid DHA in inflammatory and autoimmune diseases
- ◆ Maintained and operated departmental flow cytometry facility and training new users

Research Assistant 2006 - 2007

Department of Physiology, Temple University School of Medicine, PA

- ◆ Studied the effects of Prostaglandin E2 (PGE2) on dendritic cell migration
- ◆ Trained students in advanced molecular techniques
- ◆ Set up and maintained the laboratory flow cytometry unit
- ◆ Maintained the laboratory colonies of transgenic and knockout mice

Teaching Assistant 2002 - 2005

Department of Biological Sciences, Rutgers University, NJ

- ◆ Studied the role of prostaglandin E2 (PGE2) on CD11c expression in dendritic cells
- ◆ Lectured in General Biology and Microbiology for undergraduate students
- ◆ Rated over 4 (out of a maximum of 5 points) by students in overall class quality each semester

Awards and Honors

- 2021 The American Association of Immunologists Laboratory Grant. IMMUNOLOGY, 2021.
- 2020 Outstanding Professor of Basic Science, IU School of Medicine Class of 2020 Faculty Award
- 2019 The American Association of Immunologists Early Career Faculty Travel Grant, IMMUNOLOGY, 2019. San Diego, CA
- 2018 AAI Travel Grant for the 5th European Congress of Immunology
- 2018 Outstanding Professor of Basic Science, IU School of Medicine Class of 2018 Faculty Award
- 2017 Outstanding reviewer as the top 10th percentile of reviewers in terms of the number of manuscript reviews completed in the last two years for the Journal "Brain Behavior and Immunity"
- 2017 Indiana University Trustee Teaching Award
- 2016 The American Association of Immunologists Early Career Faculty Travel Grant, the 103rd Annual Meeting of the American Association of Immunologists, Seattle, WA
- 2015 Outstanding reviewer as the top 10th percentile of reviewers for the Journal "Brain Behavior and Immunity"
- 2015 The American Association of Immunologists Early Career Faculty Travel Grant, the 102nd Annual Meeting of the American Association of Immunologists, New Orleans, LA
- 2014 The American Association of Immunologists Early Career Faculty Travel Grant, the 101st Annual Meeting of the American Association of Immunologists, Pittsburgh, PA
- 2013 The American Association of Immunologists Early Career Faculty Travel Grant, the 100th Annual Meeting of the American Association of Immunologists, Honolulu, HI
- 2012 The Milstein Travel Award, Cytokine 2012, the 10th Joint Annual Meeting of the International Cytokine Society (ICS) and the International Society for Interferon and Cytokine Research (ISICR), Geneva, Switzerland
- 2011 The American Association of Immunologists Trainee Travel Award, the 98th Annual Meeting of the American Association of Immunologists, San Francisco, CA
- 2010 The American Association of Immunologists Travel Grant for the 14th International Congress of Immunology, Kobe, Japan
- 2010 The American Association of Immunologists Trainee Travel Award, the 97th Annual Meeting of the American Association of Immunologists, Baltimore, MD
- 2009 The American Association of Immunologists Trainee Travel Award, the 96th Annual Meeting of the American Association of Immunologists, Seattle, WA
- 2009 Keystone Symposia Scholarship, Multiple Sclerosis, Keystone Symposia, Santa Fe, NM
- 2008 The American Association of Immunologists Trainee Travel Award, the 95th Annual Meeting of the American Association of Immunologists, San Diego, CA
- 2006-07 Rutgers Graduate School Excellence Fellowship
- 2006-07 Travel Award, Taipei Economic Cultural Office in New York
- 2006 Travel Award, Great Lakes International Imaging and Flow Cytometry Association 15th annual meeting, Pittsburgh, PA
- 2004 Travel Award, Graduate School, Rutgers University
- 2003-05 Johnson & Johnson Fellowship in Neuroimmunology
- 2002-05 Rutgers Graduate School Teaching Assistantship
- 1998 Excellent Graduation Thesis, Microbiology Department, Soochow University, Taiwan

Scientific Grant Reviewer

- 2016.10 Temporary member, grant reviewer, Cellular & Molecular Biology of Glia Study Section (CMBG), NIH
- 2018.01 Member, grant review: Spinal Cord and Brain Injury Fund Research Grant Program, Indiana State Department of Health
- 2018.02 Member, grant review: Postdoc and Predoctoral Fellowships, Brain II, Basic Science Committee, American Heart Association
- 2018.09 Member, grant review: Postdoc and Predoctoral Fellowships, Brain II, Basic Science Committee, American Heart Association
- 2018.10 Temporary member, grant review, Cellular & Molecular Biology of Glia Study Section (CMBG), NIH
- 2018.10 Ad hoc reviewer, Alzheimer's Research UK, the UK's leading dementia research charity
- 2019.03 Member, grant reviewer, ZAT1 AJT (10) 1 NCCIH Training and Education Review Panel (CT)
- 2019.10 Member, grant review: Postdoc and Predoctoral Fellowships, Brain II, Basic Science Committee, American Heart Association
- 2019.10 Ad hoc reviewer, Alzheimer's Research UK, the UK's leading dementia research charity
- 2021.02 Temporary member, grant review, Cellular & Molecular Biology of Glia Study Section (CMBG), NIH
- 2021.02 Member, grant review: Spinal Cord and Brain Injury Fund Research Grant Program, Indiana State Department of Health
- 2021.05 Member, grant review: 2021 Spring Core Pilot Funding program, CTSI, Indiana
- 2021.06 Temporary member, grant review, ZRG1 MDCN M (91) S-The Blood-Brain Barrier, Neurovascular System and CNS Therapeutics Study Section, NIH

Scientific Journal Editor

- 2020 - Present Topic editor, International Journal of Molecular Sciences
- 2020 - Present Topic editor, Frontiers in Neurology

Scientific Journal Reviewer

- 2021 – Present Brain Research Bulletin, CNS Neuroscience & Therapeutics, International Immunopharmacology, Inflammation
- 2020 – Present European Journal of Neuroscience, Cell cycle, Frontiers in Immunology, Brain Research
- 2019 – Present Neuroscience, Neuropsychiatric Disease and Treatment, Acta Pharmaceutica Sinica B
- 2018 – Present Journal of Neurological Science, Prostaglandins, Leukotrienes and Essential Fatty Acids
Canadian Journal of Physiology and Pharmacology, European Journal of Pharmacology
- 2017 – Present Neural Regeneration Research, Phytomedicine
- 2016 – Present Journal of Neuroinflammation; Brain and Behavior; Journal of Cerebral Blood Flow & Metabolism; Journal of Visualized Experiments
- 2014 Acta Neuropathologica
- 2014 PLOS ONE
- 2013 – Present Brain, Behavior, and Immunity
- 2012 – Present Journal of Leukocyte Biology
- 2011 Neurochemistry International
- 2010 British Journal of Pharmacology

Conference Chair

- 2019 Block symposia: Innate Cells in Anti-Pathogen and Cytokine Responses session, the annual meeting of American Association of Immunologists (AAI), 2019

Research Support**Ongoing Research Support**

NIH R01NS102449-01A1 Yen (PI) 06/15/18-04/30/23
 Interferon beta modulates neuroinflammation and extends tPA therapeutic window in ischemic stroke
 The goal of this study is to assess the effects of interferon beta on the suppression of neuroinflammation and extension of tPA therapeutic window in ischemic stroke.
 Role: PI

Anna Yoder MS Fund Yen (PI) 07/01/18-06/30/22
 The role of Itaconate in CNS immunometabolism following MS/EAE
 The goal of this study is to assess the anti-inflammatory effect of Itaconate through modulating CNS immunometabolism in MS/EAE.
 Role: PI

Indiana University Research Start-up Fund Yen (PI) 01/01/13-12/31/22
 Indiana University School of Medicine Research Start-up Fund
 The purpose of this grant is to fund PI's preliminary studies for extramural grant submission.
 Role: PI

Center for Diabetes and Metabolic Disease Pilot & Feasibility Grant Yu (PI) 07/01/21-06/30/22
 Deciphering the molecular crosstalk of obesity-related cerebrovascular dysfunction in vascular cognitive impairment and dementia.
 The goal of this project is to determine how obesity-induced neuroinflammation dysregulates molecular and cellular interactions in the blood-brain barrier network and leads to neurovascular dysfunction.
 Role: Co-Investigator

Pre-Clinical Neuroimaging Pilot Grant Yu (PI) 07/01/21-06/30/22
 Identifying novel MRI markers of cerebral small vessel dysfunction in a mixed vascular and Alzheimer's dementia mouse model.
 The objective of this project is to apply MRI techniques to examine cerebral vessel health in a mixed vascular and Alzheimer's dementia preclinical model.
 Role: Co-Investigator.

Pending

NIH R21AG070971-01 Yu (PI) 09/01/21-08/30/23
 Dynamic immune cell landscape in late-onset Alzheimer's disease: role of ApoE-mediated microglial lipid metabolism
 The goal of this study is to elucidate the role of ApoE in microglial lipid metabolism related to late-onset Alzheimer's disease development.
 Role: Co-Investigator

Bright Focus Foundation Alzheimer's Disease Research Yu (PI) 07/01/21-06/30/24
 Deciphering microvascular inflammation and angiopathy in the mixed Alzheimer's and vascular dementia
 This proposal identifies unique new insights into the blood-brain barrier biology that links inflammation in cerebral microvasculature and AD.
 Role: Co-PI

Completed Research Support

AHA SDG 12SDG8170005 Yen (PI) 01/01/12-12/31/16
 IFN β modulates inflammatory responses in cerebral ischemia
 The goal of this study is to assess the protective effect of IFN β treatment in cerebral ischemia and to evaluate the modulatory effects of IFN β in ischemia-induced neuroinflammation.
 Role: PI

Anna Yoder MS Fund Yen (PI) 07/01/13-06/30/16
 Novel function of anti-inflammatory compound D3T for the treatment of MS
 The goal of this study is to assess the therapeutic effect of D3T in the animal model of MS and to investigate the molecular mechanisms underlying the protective effect of D3T in MS.
 Role: PI

Anna Yoder MS Fund Yen (PI) 07/01/16-06/30/18
 Novel agents with anti-inflammatory properties for the treatment of MS/EAE
 The goal of this study is to assess the therapeutic effect of novel anti-inflammatory agents in EAE and to evaluate the therapeutic potential of using these novel anti-inflammatory agents in MS.
 Role: PI

Indiana University Research Enhancement Grant Yen (PI) 07/01/17-06/30/18
 The purpose of this grant is to support PI's stroke research for NIH R01 grant submission.
 Role: PI

Indiana CTSI Core Pilot Yu (PI) 03/01/19-02/28/21
 Deciphering ischemic stroke-induced molecular signatures in innate immune cells using single-cell RNA sequencing.
 The goal of this study is to develop single-cell RNA sequencing technology for neuroinflammation research.
 Role: Co-PI

Invited/Public Presentations

2021

- ◆ Center for Brain Health, Louisiana State University Health, Shreveport. Title: Interferon beta modulates neuroinflammation & alleviates tPA-induced adverse effects in ischemic stroke. September 1st.
- ◆ Virtual Indiana CTSI Regional Campuses Retreat. Title: Immunoresponsive gene 1 modulates the severity of brain injury in cerebral ischemia. July. 16th.

2020

- ◆ Division of Basic Medical Sciences, General Kaohsiung Veterans Hospital, Taiwan. Title: The role of IRG1 in neuroinflammation. December, 12th.
- ◆ Faculty retreat. Department of Microbiology and Immunology, Indiana University School of Medicine. Title: IFN β alleviates delayed tPA-induced adverse effects via modulation of MMP3/9 production in ischemic stroke. August 5th.
- ◆ Department of Neurology and Neurological Institute, General Taipei Veterans Hospital, Taiwan. Title: Interferon beta modulates neuroinflammation & extends tPA therapeutic window in ischemic stroke. January 14th.
- ◆ The Graduate Institute of Brain and Mind Sciences, College of Medicine, National Taiwan University, Taiwan. Title: Single-cell RNA sequencing analysis of ischemic brain following cerebral ischemia. January 13th.

2019

- ◆ Indiana University Trustees visit of IUSM-FW. Title: Neuroinflammation research at IUSM-FW. June 13th.
- ◆ Division of Basic Medical Sciences, General Kaohsiung Veterans Hospital, Taiwan. Title: Applying Single-Cell RNA Sequencing for Neuroinflammation Research. September 12th.

2018

- ◆ Anatomy and Cell Biology Fall Research Forum. Title: Inhibition of Neuroinflammation by D3T through Nrf2 Defense Pathway. October 13th.
- ◆ Anna Yoder MS Fund education/outreach event, IUSM-FW. Title: The protective role of Nrf2 in MS. October 10th.
- ◆ Manchester University College of Pharmacy, Fort Wayne, IN. Title: D3T as a Novel Therapeutic Agent for the Treatment of Ischemic Stroke & Multiple Sclerosis. August 16th.
- ◆ Department of Microbiology and Immunology, Indiana University School of Medicine, Indianapolis, IN. Title: Interferon Beta as a Novel Therapeutic Agent for the Treatment of Ischemic Stroke. June 14th.

- ◆ Division of Basic Medical Sciences, General Kaohsiung Veterans Hospital, Taiwan. Title: Interferon beta modulates neuroinflammation & extends tPA therapeutic window in ischemic stroke. November 16th.
- ◆ Graduate Institute of Clinical Medical Sciences, Chang Gung University, Taiwan. Title: Interferon beta modulates neuroinflammation & extends tPA therapeutic window in ischemic stroke. November 21st.
- ◆ Institute of Clinical Medicine, National Yang-Ming University, Taiwan. Title: Interferon beta modulates neuroinflammation & extends tPA therapeutic window in ischemic stroke. November 23rd.
- ◆ National Laboratory Animal Center, Taiwan. Title: D3T as a novel therapeutic agent for the treatment of multiple sclerosis and ischemic stroke. November 26th.

2017

- ◆ Division of Basic Medical Sciences, General Kaohsiung Veterans Hospital. Title: D3T as a Novel Therapeutic Agent for the Treatment of Ischemic Stroke & Multiple Sclerosis. December 1st.
- ◆ The Graduate Institute of Brain and Mind Sciences, College of Medicine, National Taiwan University, Taiwan. Title: Nrf2 Pathway and Neuroinflammation. November 23rd.
- ◆ Department of Biology, University of Saint Francis, Fort Wayne, IN. Title: D3T as a Novel Therapeutic Agent for the Treatment of Ischemic Stroke & Multiple Sclerosis. November 10th.
- ◆ Multiple Sclerosis Art Show. Title: Therapeutic effect of D3T in the treatment of MS/EAE. October 4th
- ◆ Academia in the US. Panel Discussions. Boston Taiwanese Biotechnology Association. Boston. August 5th.
- ◆ Department of Microbiology and Immunology, Indiana University School of Medicine, Indianapolis, IN. Title: The role of Nrf2 in neuroinflammation. June 8th.
- ◆ Anna Yoder MS Fund education/outreach event, IPFW. Title: Multiple Sclerosis: Immunopathogenesis, Research, Diet. May 24th.
- ◆ InSight TV interview to promote Anna Yoder MS Fund education/outreach event. May 19th. <http://www.wpta21.com/clip/13344310/anna-yoder-ms-fund>

2016

- ◆ Institute of Biomedical Sciences, Academia Sinica, Taiwan. Title: Interferon modulates neuroinflammation in ischemic stroke. December 5th.
- ◆ General Kaohsiung Veterans Hospital, Taiwan. Title: Interferon modulates neuroinflammation in ischemic stroke. December 2nd.
- ◆ China Medical University, Taiwan. Title: 3H-1, 2-dithiole-3-thione as a novel therapeutic agent for the treatment of experimental autoimmune encephalomyelitis. November 29th.
- ◆ The Graduate Institute of Brain and Mind Sciences, College of Medicine, National Taiwan University, Taiwan. Title: Interferon modulates neuroinflammation in ischemic stroke. November 21st.
- ◆ Anna Yoder MS Fund education/outreach event, Kosciusko Community Hospital. Title: MS: What you need to know about multiple sclerosis. November 3rd.
- ◆ Anatomy and Cell Biology Fall Research Forum. Title: Interferon modulates neuroinflammation in ischemic stroke. October 29th.
- ◆ Department of Microbiology and Immunology, Indiana University School of Medicine, Indianapolis, IN. Title: Interferon modulates neuroinflammation in ischemic stroke. October 6th.
- ◆ Anna Yoder MS Fund education/outreach event, Parkview Noble Hospital wellness Center. Title: MS: What you need to know about multiple sclerosis. June 23rd.
- ◆ Disease management, imaging and therapeutics, The 2016 Annual Meeting of the Consortium of Multiple Sclerosis Centers. Title: 3H-1, 2-dithiole-3-thione as a novel therapeutic agent for the treatment of experimental autoimmune encephalomyelitis. June 3rd.
- ◆ Indiana University School of Medicine-North West, Gary, IN. Title: Interferon modulates inflammatory response in ischemic stroke. May 5th.

2015

- ◆ Anna Yoder MS Fund education/outreach event, Fort Wayne Self Help Group, Rehabilitation Hospital of Fort Wayne, IN. Title: Beneficial effects of omega-3 DHA and anti-inflammatory compound in multiple sclerosis. June 1st.
- ◆ Anna Yoder MS Fund education/outreach event, Indiana University School of Medicine, Fort Wayne, IN. Title: Beneficial effects of omega-3 DHA in multiple sclerosis. April 16th.
- ◆ Anna Yoder MS Fund education/outreach event, Indiana University School of Medicine, Fort Wayne, IN. Title: Beneficial effects of omega-3 DHA in multiple sclerosis. April 9th.

- ◆ Anna Yoder MS Fund education/outreach event, Decatur, IN. Title: Beneficial effects of omega-3 DHA and anti-inflammatory compound in multiple sclerosis. February 16th.
- 2014
- ◆ Anna Yoder MS Fund education/outreach event, Indiana University Purdue University, Fort Wayne, IN. Title: Beneficial effects of omega-3 DHA in multiple sclerosis. September 23rd.
 - ◆ Anna Yoder MS Fund education/outreach event, DeKalb Memorial Hospital, Auburn, IN. Title: Beneficial effects of omega-3 DHA in multiple sclerosis. September 15th.
 - ◆ Anna Yoder MS Fund education/outreach event, Huntington University, Huntington, IN. Title: Beneficial effects of dietary omega-3 DHA in multiple sclerosis. May 22nd.
- 2013
- ◆ Division of Basic Medical Sciences, Kaohsiung Veterans General Hospital, Taiwan. Title: Interferon Beta & Neuroinflammation: Relevance to Multiple Sclerosis and Ischemic Stroke. November 25th.
 - ◆ Graduate Institute of Brain and Mind Sciences, College of Medicine, National Taiwan University, Taipei, Taiwan. Title: Interferon Beta & Neuroinflammation: Relevance to Multiple Sclerosis and Ischemic Stroke. November 18th.
 - ◆ The 2013 Boston Taiwanese Biotechnology Symposium, MIT, Boston. Title: A novel function of IFN β in promoting the generation of anti-inflammatory M2-like microglia in vitro and in vivo. June 15th.
 - ◆ Department of Anatomy and Cell Biology, Indiana University School of Medicine, Indianapolis, IN. Title: Interferon Beta & Neuroinflammation. May 22nd.
 - ◆ Block Symposium, the 100th Annual Meeting of the American Association of Immunologists. Title: Higher susceptibility to experiment autoimmune encephalomyelitis in Muc1-deficient mice is associated with increased Th1/Th17 responses. May 6th.
 - ◆ Department of Microbiology and Immunology, Indiana University School of Medicine, Indianapolis, IN. Title: Interferon Beta & Neuroinflammation. March 17th.
- 2012
- ◆ Morton Klein Conference, Temple University School of Medicine. Title: IFN β modulates inflammatory immune responses in dendritic cells and Th1/Th17 cells. October 29th.
 - ◆ Department of Microbiology and Immunology, Chicago Medical School, Rosalind Franklin University. Title: Interferon Beta & Neuroinflammation. September 25th.
 - ◆ 10th Joint Annual Meeting of the International Cytokine Society (ICS) and International Society for Interferon and Cytokine Research (ISICR), Geneva, Switzerland. Title: A novel function of IFN β in promoting the generation of anti-inflammatory M2-like microglia in vitro and in vivo. September 3rd.
 - ◆ Indiana University School of Medicine-Fort Wayne, IN. Title: Interferon Beta & Neuroinflammation. June 27th.
 - ◆ Temple Autoimmunity Center Annual Retreat. Title: IFN β promotes the conversion of pro-inflammatory M1-like into anti-inflammatory M2-like microglia. June 15th.
 - ◆ Department of Biological Sciences, University of Toledo, Toledo, OH. Title: Interferon Beta modulates neuroinflammation. May 16th.
 - ◆ Department of Pathology, Microbiology and Immunology, University of South Carolina School of Medicine, Columbia, SC. Title: Interferon Beta & Neuroinflammation. February 22nd.
- 2011
- ◆ Block Symposium, the 98th Annual Meeting of the American Association of Immunologists. Title: ERK activation is required for PGE2-induced MMP-9 production in bone-marrow derived DCs. May 9th.
- 2010
- ◆ Block Symposium, the 97th Annual Meeting of the American Association of Immunologists. Title: IFN β : an anti-inflammatory cytokine which inhibits dendritic cell migration and proinflammatory cytokine production.
 - ◆ Graduate Institute of Microbiology, College of Medicine, National Taiwan University, Taiwan. Title: The molecular mechanisms involved in the beneficial effect of IFN β treatment in autoimmune disease, Multiple Sclerosis.
 - ◆ Institute of Biomedical Sciences, National Sun Yat-Sen University, Taiwan. Title: The molecular mechanisms of IFN β treatment in autoimmune disease, Multiple Sclerosis.
 - ◆ Temple Autoimmunity Center Annual Retreat. Title: IFN β exerts its anti-inflammatory effects through inhibiting dendritic cell migration and pro-inflammatory cytokine production.

- ◆ Graduate Institute of Life Science, National Chengchi University, Taiwan. Title: Anti-inflammatory properties of IFN β in autoimmune disease, Multiple Sclerosis.

2009

- ◆ Block Symposium, the 96th Annual Meeting of the American Association of Immunologists. Title: IFN β inhibits DC migration in vitro and in vivo.
- ◆ Morton Klein Conference, Temple University School of Medicine. Title: IFN β inhibits DC migration through STAT-1 mediated suppression of CCR7 and MMP-9.

2008

- ◆ Block Symposium, the 95th Annual Meeting of the American Association of Immunologists. Title: IFN β induces mature dendritic cell apoptosis through the caspase-11/caspase-3 pathway.
- ◆ Cell Survival and Programmed Cell Death, the 4th Congress of the Federation of Immunology Societies of Asia-Oceania (FIMSA 2008). Title: IFN β selectively induces apoptosis in mature dendritic cells through the caspase-11/caspase-3 pathway.
- ◆ Eicosanoids and Other Mediators of Chronic Inflammation, Keystone Symposium. Title: PGE2 induced MMP-9 promotes dendritic cell migration in vitro and in vivo.
- ◆ Department of Microbiology and Immunology, National Cheng Kung University, Taiwan. Title: IFN β regulates mature DC apoptosis.
- ◆ Morton Klein Conference, Temple University School of Medicine. Title: IFN β induces apoptosis through the caspase-11/caspase-3 pathway in mature dendritic cells.

2007

- ◆ Block Symposium, the 94th Annual Meeting of the American Association of Immunologists. Title: Prostaglandin E2 induces MMP-9 production in myeloid dendritic cells.

Peer-reviewed Publications

1. P-C. Kuo, W-T. Weng, B. A. Scofield, D. Furnas, H. C. Paraiso, I-C. Yu, and **J-H. Yen**. Immunoresponsive gene 1 modulates the severity of brain injury in cerebral ischemia. **Brain Communications**. 2021. <https://doi.org/10.1093/braincomms/fcab187>
2. L-W. Chen, P-H. Chen, and **J-H. Yen**. Inhibiting adipose tissue M1 cytokine expression decreases DPP4 activity and insulin resistance in a type 2 diabetes mellitus mouse model. **PLoS One**. 2021 May 27;16(5):e0252153
3. W-T. Weng, P-C. Kuo, D. A. Brown, B. A. Scofield, D. Furnas, H. C. Paraiso, P-Y. Wang, I-C. Yu, and **J-H. Yen**. 4-Ethylguaiaicol modulates neuroinflammation and Th1/Th17 differentiation to ameliorate disease severity in experimental autoimmune encephalomyelitis. **J Neuroinflammation**. 2021 May 11;18(1):110
4. P-C. Kuo, W-T. Weng, B. A. Scofield, D. Furnas, H. C. Paraiso, A. J. Intriago, K. D. Bosi, I-C. Yu, and **J-H. Yen**. Interferon beta alleviates delayed tPA-induced adverse effects via modulation of MMP3/9 production in ischemic stroke. **Blood advances**. 2020. Sep 22;4(18):4366-4381
5. P-C. Kuo, W-T. Weng, B. A. Scofield, H. C. Paraiso, D. A. Brown, P-Y. Wang, I-C. Yu, and **J-H. Yen**. Dimethyl itaconate, an itaconate derivative, exhibits immunomodulatory effects on neuroinflammation in experimental autoimmune encephalomyelitis. **J Neuroinflammation**. 2020 Apr 29;17(1):138
6. H. C. Paraiso, X. Wang, P-C. Kuo, D. Furnas, B. A. Scofield, F-L. Chang, **J-H. Yen** and I-C. Yu. Isolation of Mouse Cerebral Microvasculature for Molecular and Single-Cell Analysis. **Front Cell Neurosci**. 2020 Apr 9;14:84.
7. L-L. Teng, G-L. Lu, W-S. Lin, Y-Y. Cheng, T-E. Hsueh, Y-C. Huang, N-H. Hwang, J-W. Yeh, R-M. Liao, S-Z. Fan, **J-H. Yen**, T-F. Fu, T-F. Tsai, M-S. Wu, L-C. Chiou, P-Y. Wang. Serotonin receptor HTR6-operated mTORC1 signaling mediates dietary restriction-induced memory enhancement. **PLoS Biology**. 2019. Mar 18;17(3):e2007097
8. B. Gabet, P-C. Kuo, S.I Fuentes, Y. Patel, A. Adow, M. Alsakka, P. Avila, T. Beam, **J-H. Yen**, and D. A Brown. Identification of N-benzyl tetrahydroisoquinolines as novel anti-neuroinflammatory agents. **Bioorganic & Medicinal Chemistry**. 2018 Nov 15;26(21):5711-5717
9. W-S Lin, S-R Yeh, S-Z Fan, L-Y Chen, **J-H Yen**, T-F Fu, M-S Wu, and P-Y Wang. Insulin-like signaling in female Drosophila links diet and sexual attractiveness. 2018. **FASEB**. doi: 10.1096/fj.201800067R

10. P-C. Kuo, D. A. Brown, B. A. Scofield, H. C. Paraiso, P-Y. Wang, I-C. Yu, and **J-H Yen**. Dithiolethione ACDT Suppresses Neuroinflammation and Ameliorates Disease Severity in Experimental Autoimmune Encephalomyelitis. 2018. **Brain, Behavior, and Immunity**. 70(2018) 76-87
 11. H. C. Paraiso, E.T, P-C. Kuo, E. T. Curfman, H. J. Moon, R. D. Sweazey, **J-H. Yen**, F-L. Chang, and I-C. Yu. Dimethyl fumarate protects CNS against to reactive microglia and long-term memory deficits in response to systemic inflammation. 2018. **Journal of Neuroinflammation**. 2018 15:100
 12. W-S. Lin, J-H. Lo, J-H. Yang, H-W. Wang, S-Z. Fan, **J-H. Yen**, and P-Y. Wang. Ludwigia octovalvis extract improves glycemic control and memory performance in diabetic mice. 2017. **Journal of Ethnopharmacology**. 207(2017) 211-219
 13. I-C. Yu, P-C. Kuo, **J-H. Yen**, H. C. Paraiso, E. T. Curfman, B. C. Hong-Goka, R. D. Sweazey, and F-L. Chang. A combination of three repurposed drugs administered at the time of reperfusion as a promising therapy for post-ischemic brain injury. 2017. **Translational Stroke Research**. 2017 Jun 17. doi: 10.1007/s12975-017-0543-5
 14. P-C. Kuo, I-C. Yu, B. A. Scofield, D. A. Brown, E. T. Curfman, H. C. Paraiso, F-L. Chang, and **J-H. Yen**. 3H-1, 2-dithiole-3-thione as a novel therapeutic agent for the treatment of ischemic stroke through Nrf2 defense pathway. 2017, **Brain, Behavior, and Immunity**. 62(2017) 180-192.
 15. **J-H. Yen**. Immunomodulatory effect of G-CSF on the CNS infiltrating monocytes in ischemic stroke. 2017. **Brain, Behavior, and Immunity**. Brief commentary. 60 (2017) 13–14.
 16. K. M Hooper, **J-H. Yen**, W. Kong, K. M Rahbari, P-C. Kuo, A. M Gamero, and D. Ganea. Prostaglandin E2 inhibition of IL-27: a novel mechanism which involves IRF1. 2017. **J. Immunol**. 198:1521-1530.
 17. D. A. Brown, S. Betharia, **J-H. Yen**, P-C. Kuo, and H. Mistry. Further structure-activity relationships study of dithiolethiones: correlation of electronic properties to glutathione induction, toxicity, and neuroprotection. Chemistry Central Journal. **Chemistry Central Journal**. 2016 10:64 DOI: 10.1186/s13065-016-0210-z
 18. P-C. Kuo, D. A. Brown, B. A. Scofield, I-C. Yu, F-L. Chang, P-Y. Wang, and **J-H. Yen**. 3H-1, 2-dithiole-3-thione as a novel therapeutic agent for the treatment of experimental autoimmune encephalomyelitis. 2016. **Brain, Behavior, and Immunity**. 57(2016) 173-186.
 19. P-C. Kuo, B. A. Scofield, I-C. Yu, F-L. Chang, D. Ganea, and **J-H. Yen**. Interferon beta modulates inflammatory response in cerebral ischemia. 2016. **J Am Heart Assoc**. 2016;5:e002610 doi: 10.1161/JAHA.115.002610.
 20. W-S. Lin, C-W. Huang, Y-S. Song, **J-H. Yen**, P-C. Kuo, T-F. Fu, M-S. Wu, H. Wang, P-Y. Wang. Reduced gut acidity induces an obese-like phenotype in *Drosophila melanogaster* and in mice. **PLOS ONE**. 2015 Oct 5;10(10):e0139722. doi: 10.1371/journal.pone.0139722
 21. **J-H. Yen**, W. Kong, K. M. Hooper, F. Emig, K. M. Rahbari, P-C. Kuo, B. A. Scofield, and D. Ganea. Differential effects of IFN β on IL-12, IL-23, and IL-10 expression in TLR-stimulated dendritic cells. 2015. **J. Leukoc. Biol**. 98: 689–702
- Journal of Leukocyte Biology highlighted “Leading Edge Research” with a dedicated editorial.**
22. C-W. Huang, H. Bai, M-S Wu, **J-H. Yen**, T-F. Fu, M. Tatar, and P-Y. Wang. Tequila regulates insulin-like signaling and extends life span in *Drosophila melanogaster*. 2015. **J Gerontol A Biol Sci Med Sci**. 70(12):1461-9
 23. D. A. Brown, S. Betharia, **J-H. Yen**, Q. Tran, H. Mistry, and K. Smith. Synthesis and structure-activity relationships study of dithiolethiones as inducers of glutathione in the SH-SY5Y neuroblastoma cell line. 2014. **Bioorganic & Medicinal Chemistry Letters**. 24(2014):5829-5831
 24. **J-H. Yen**, S. Xu, Y. Park, D. Ganea and K. Kim. Higher susceptibility to experimental autoimmune encephalomyelitis in Muc1-deficient mice is associated with increased Th1/Th17 responses. *Brain, Behavior, and Immunity*. 2013. **Brain, Behavior, and Immunity**. 29(2013):70-81
 25. J. H. Nishimori, T. N. Newman, G. O. Oppong, G. J. Rapsinski, **J-H. Yen**, S. G. Biesecker, R. P. Wilson, B. P. Butler, M. G. Winter, R. M. Tsois, D. Ganea and C. Tukul. Microbial amyloids induce IL-17A/IL-22 responses via Toll-like receptor 2 activation in the intestinal mucosa. 2012. **Infect. Immun**. 80(12):4398-408
 26. V. P. Kocieda, S. Adhikary, F. Emig, **J-H. Yen**, M. G. Toscano and D. Ganea. Prostaglandin E2-induced IL-23 is regulated by CREB and C/EBP β in bone marrow derived dendritic cells. 2012. **J. Biol. Chem**. 287(44):36922-35

27. S. Adhikary, V. Kocieda, **J-H. Yen**, R. Tuma and D. Ganea. Signaling through cannabinoid receptor 2 suppresses dendritic cell migration by inhibiting matrix metalloproteinase-9 expression. 2012. **Blood**. 120(18):3741-9
28. **J-H. Yen**, V. P Kocieda, H. Jing and D. Ganea. PGE2 induces matrix metalloproteinase-9 expression in murine dendritic cells through two independent signaling pathways leading to AP-1 activation. 2011. **J. Biol. Chem**. 286(45):38913-38923
29. D. Ganea, V. Kocieda, W. Kong and **J-H. Yen**. Modulation of dendritic cell function by PGE2 and DHA: A framework for understanding the role of dendritic cells in neuroinflammation. 2011. **Clinical Lipidology**. 6(3): 277-291
30. W. Kong, **J-H. Yen** and D. Ganea. Docosahexaenoic acid prevents dendritic cell maturation, inhibits antigen-specific Th1/Th17 differentiation and suppresses experimental autoimmune encephalomyelitis. 2011. **Brain, Behavior, and Immunity**. 25(2011):872-882
31. **J-H. Yen**, W. Kong, and D. Ganea. IFN- β inhibits dendritic cell migration through STAT-1 mediated transcriptional suppression of CCR7 and metalloproteinase-9. 2010. **J. Immunol**. 184:3478-3486
32. W. Kong, **J-H. Yen**, E. Vassiliou, S. Adhikary, M.G. Toscano and D. Ganea. Docosahexaenoic acid prevents dendritic cell maturation and in vitro and in vivo expression of the IL-12 cytokine family. **Lipids Health Dis**. 2010 Feb 1;9(1):12
33. **J-H. Yen** and D. Ganea. Interferon beta induces mature dendritic cell apoptosis through caspase-11/caspase-3 pathway. 2009. **Blood**. 114(7): 1344-1354
34. T. Khayrullina, **J-H. Yen**, H. Jing and D. Ganea. In vitro differentiation of dendritic cells in the presence of prostaglandin E2 alters the IL-12/IL-23 balance and promotes differentiation of Th17 cells. 2008. **J. Immunol**. 181: 721-735
35. **J-H. Yen**, T. Khayrullina and D. Ganea. PGE2-induced metalloproteinase-9 is essential for dendritic cell migration. 2008. **Blood**. 111(1): 260-270
36. A. F. Shebanie, **J-H. Yen**, T. Khayrullina, F. Emig, M. Zhang, R. Tuma and D. Ganea. The proinflammatory effect of prostaglandin E2 in experimental inflammatory bowel disease is mediated through IL-23 \rightarrow IL-17 axis. 2007. **J. Immunol**. 178:8138-8147
37. L. Liu, **J-H. Yen** and D. Ganea. A Novel VIP Signaling Pathway in T cells: cAMP \rightarrow Protein Tyrosine Phosphatase (SHP-2?) \rightarrow JAK2/STAT4 \rightarrow Th1 differentiation. **Peptides**. 2007. **Peptides**. 28(9): 1814-1824
38. H. Jing, **J-H. Yen** and D. Ganea. A novel-signaling pathway mediates the inhibition of CCL3/4 expression by prostaglandin E2. 2004. **J. Biol. Chem**. 279(53): 55176-55186
39. D. Srinivasan, **J-H. Yen**, D. Joseph and W. Friedman. Cell Type-Specific IL-1 Signaling in CNS. 2004. **J. Neurosci**. 24(29): 6482-6488

Conference Abstracts

1. P-C. Kuo, W-T. Weng, B. A. Scofield, D. Furnas, H. C. Paraiso, I-C. Yu, and **J-H. Yen**. Immunoresponse gene 1 modulates the severity of brain injury in cerebral ischemia. Virtual Keystone Symposia: Neurodegenerative Diseases: Genes, Mechanisms and Therapeutics. June 7-9, 2021.
2. I-C. Yu, H. C. Paraiso, P-C. Kuo, B. A. Scofield, F-L. Chang, and **J-H. Yen**. Single-cell transcriptome analysis reveals CNS innate immune landscape plasticity in diet-induced obesity and type 2 diabetes. Virtual IMMUNOLOGY 2021. May 10-15, 2021
3. P-C. Kuo, W-T. Weng, D. A. Brown, B. A. Scofield, H. C. Paraiso, A. I-C. Yu, and **J-H. Yen**. 4-Ethylguaiaicol modulates neuroinflammation and Th1/Th17 differentiation to ameliorate disease severity in experimental autoimmune encephalomyelitis. Virtual IMMUNOLOGY 2021. May 10-15, 2021. **This study was selected for the oral presentation at Block Symposium.**
4. P-C. Kuo, W-T. Weng, B. A. Scofield, D. Furnas, H. C. Paraiso, A. J. Intriago, K. D. Bosi, I-C. Yu, and **J-H. Yen**. Interferon beta ameliorates delayed tPA-exacerbated brain injury through alleviating tPA-induced adverse effects in ischemic stroke. International Stroke Conference. March 17–19, 2021.
5. P-C. Kuo, W-T. Weng, B. A. Scofield, D. Furnas, H. C. Paraiso, A. J. Intriago, K. D. Bosi, I-C. Yu, and **J-H. Yen**. Interferon beta ameliorates neuroinflammation and alleviates delayed tPA-induced adverse effects in ischemic stroke. Keystone Symposia: Neuro-Immune Interactions in the Central Nervous System. June 19-23, 2020, Keystone, CO.

6. I-C. Yu, H. C. Paraiso, P-C. Kuo, D. J. Furnas, B. A. Scofield, W-T. Weng, R. D. Sweazey, F-L. Chang, and **J-H. Yen**. Single-cell transcriptome profiling reveals heterogeneity of brain myeloid cells and unique subsets that regulate T cell immunity and cerebrovascular inflammation in diet-induced obesity. *IMMUNOLOGY*, 2020. May 8-12, 2020, Honolulu, Hawaii.
7. P-C. Kuo, W-T. Weng, B. A. Scofield, H. C. Paraiso, D. A. Brown, P-Y. Wang, I-C. Yu, and **J-H. Yen**. Dimethyl itaconate, an itaconate derivative, exhibits immunomodulatory effects on neuroinflammation in experimental autoimmune encephalomyelitis. *IMMUNOLOGY*, 2020. May 8-12, 2020, Honolulu, Hawaii.
8. H. C. Paraiso, P-C. Kuo, B. A. Scofield, W-T. Weng, R. D. Sweazey, **J-H. Yen**, F-L. Chang, I-C. Yu. Loss of Nrf2 in microglia results in impaired homeostasis and induces a pro-inflammatory subset of disease-associated microglia. Neuroscience 2019. October 19.23, 2019, Chicago, IL. ***This study was selected for an oral presentation at the session of "Microglial activation in disease states"***.
9. I-C. Yu, H. C Paraiso, P-C. Kuo, B. A. Scofield, R. D. Sweazey, F-L. Chang¹, and **J-H. Yen**. Functional Nrf2 restrains inflammatory and transcriptional phenotypes in microglia and its deficiency recapitulates the aging phenotype. *IMMUNOLOGY*, 2019. May 9-13, 2019, San Diego, CA. ***This study was selected for an oral presentation at the section of "Innate cells in anti-pathogen and cytokine responses"***.
10. P-C. Kuo, D. A. Brown, B. A. Scofield, H. C. Paraiso, P-Y. Wang, and **J-H. Yen**. Dithiolethione ACDT suppresses neuroinflammation and ameliorates disease severity in experiment autoimmune encephalomyelitis. 5th European Congress of Immunology. September 2-5, 2018, Amsterdam, Netherlands.
11. P-C. Kuo, D. A. Brown, B. A. Scofield, H. C. Paraiso, P-Y. Wang, and **J-H. Yen**. Dithiolethione ACDT suppresses neuroinflammation and ameliorates disease severity in experiment autoimmune encephalomyelitis. Keystone Symposia. Neuroinflammation. June 17-21, 2018, Keystone, CO.
12. P-C. Kuo, I-C. Yu, B. A. Scofield, D. A. Brown, E. T. Curfman, H. C. Paraiso, F-L. Chang, and **J-H. Yen**. Induction of Nrf2/HO-1 pathway suppresses neuroinflammation in ischemic stroke. Keystone Symposia. Neuroinflammation. June 19-23, 2017, Keystone, CO.
13. P-C. Kuo, I-C. Yu, B. A. Scofield, D. A. Brown, E. T. Curfman, H. C. Paraiso, F-L. Chang, and **J-H. Yen**. Induction of Nrf2/HO-1 pathway suppresses neuroinflammation in ischemic stroke. The 104th Annual Meeting of the American Association of Immunologists. May 12-16, 2017, Washington, D.C.
14. P-C. Kuo, B. A. Scofield, D. A. Brown, and **J-H. Yen**. Amelioration of cerebral ischemic stroke by induction of Nrf2/HO-1 pathway. Neuroscience 2016. November 12-16, 2016, San Diego, CA
15. H. C. Paraiso, P-C. Kuo, **J-H Yen**, G. A. Wemhoff, R. D. Sweazey, F-L Chang, I-C Yu. Dimethyl fumarate modulates pro-inflammatory microglia activation via the nuclear-erythroid factor 2-independent and -dependent pathways. Neuroscience 2016. November 12-16, 2016, San Diego, CA
16. P-C. Kuo, D. A. Brown, B. A. Scofield, I-C. Yu, F-L. Chang, and **J-H. Yen**. 3H-1, 2-dithiole-3-thione as a novel therapeutic agent for the treatment of experimental autoimmune encephalo-myelitis. The 2016 Annual Meeting of the Consortium of Multiple Sclerosis Centers. June 1-4, 2016, Washington D.C. ***This study was selected for the oral presentation at Block Symposium***.
17. K. M Hooper, **J-H. Yen**, W. Kong, and D. Ganea. PGE2 and IL-27: novel pro-inflammatory mechanisms involving dendritic cells and Tr1 cells. The 103rd Annual Meeting of the American Association of Immunologists. May 13-17, 2016, Seattle, WA
18. P-C. Kuo, D. A. Brown, B. A. Scofield, I-C. Yu, F-L. Chang, and **J-H. Yen**. 3H-1, 2-dithiole-3-thione as a novel therapeutic agent for the treatment of experimental autoimmune encephalo-myelitis. The 103rd Annual Meeting of the American Association of Immunologists. May 13-17, 2016, Seattle, WA
19. P-C. Kuo, B. A. Scofield, D. A. Brown, and **J-H. Yen**. Induction of phase II detoxification enzymes through Nrf2 pathway provides protective effects in cerebral ischemic stroke. Neuroscience 2015. October 17-21, 2015, Chicago, IL.
20. I-C. Yu, **J-H. Yen**, P-C, Kuo, B. C. Hong-Goka, R. D. Sweazey, and F-L. Chang. Targeting ischemic brain injury with cocktail drugs during reperfusion ameliorates delayed neuronal cell death following transient global cerebral ischemia. Neuroscience 2015. October 17-21, 2015, Chicago, IL.
21. P-C. Kuo, B. A. Scofield, D. A. Brown, and **J-H. Yen**. Activation of Nrf2 pathway provides a protective effect in cerebral ischemic stroke. 2015 IUSM Postdoc Symposium. October 9, 2015, Indianapolis, IN
22. P-C. Kuo, B. A. Scofield, and **J-H. Yen**. Interferon-beta provides protective effects in ischemic stroke through its anti-inflammatory properties. Indiana CTSI 6th annual meeting. September 11, 2015, Indianapolis, IN
23. T. James, B. A. Scofield, and **J-H. Yen**. Suppression of inflammatory cytokine IL-12 and IL-23 by novel anti-inflammatory compounds in LPS-activated dendritic cells. 28th Annual Midwest Alliance for Health Education Student Research Fellowship Program Reception. August 5, 2015, Fort Wayne, IN

24. I-C. Yu, **J-H. Yen**, P-C, Kuo, B. C. Hong-Goka, R. D. Sweazey, and F-L. Chang. Early combination drug treatment ameliorates neuronal cell death and tissue damage after transient global and focal cerebral ischemia. *Brain* 2015. June 27-30, 2015, Vancouver, Canada
25. **J-H. Yen**, W. Kong, K. M. Hooper, F. Emig, K. M. Rahbari, P-C. Kuo, B. A. Scofield, and D. Ganea. Differential effects of IFN β on IL-12, IL-23, and IL-10 expression in TLR-stimulated dendritic cells. The 102nd Annual Meeting of the American Association of Immunologists. May 8-12, 2015, New Orleans, LA
26. K. M Hooper, **J-H. Yen**, W. Kong, and D. Ganea. IL-27 is negatively regulated by PGE2 in bone marrow-derived dendritic cells and macrophages. The 102nd Annual Meeting of the American Association of Immunologists. May 8-12, 2015, New Orleans, LA
27. P-C. Kuo, B. A. Scofield, and **J-H. Yen**. Interferon-Beta confers protective effects against ischemic stroke through its anti-inflammatory properties. 12th International Congress of Neuroimmunology. November 9-13, 2014, Mainz, Germany
28. P-C. Kuo, B. A. Scofield, and **J-H. Yen**. Interferon-Beta provides protective effects in ischemic stroke through its anti-inflammatory properties. *Neuroscience* 2014. November 15-19, 2014, Washington, DC
29. Z. D. Biehl, B. A. Scofield, and **J-H. Yen**. The effects of interferon-beta treatment on adult microglia and BV-2 microglial cell line. 27th Annual Midwest Alliance for Health Education Student Research Fellowship Program Reception. August 6, 2014, Fort Wayne, IN
30. **J-H. Yen**, W. Kong, K. M Hooper, P-C Kuo, and D. Ganea. Distinct roles of IFN β and IFN γ in the production of proinflammatory and antiinflammatory cytokines in bone marrow-derived dendritic cells. The 101st Annual Meeting of the American Association of Immunologists. May 2-6, 2014, Pittsburgh, PA
31. K. M Hooper, **J-H. Yen**, and D. Ganea. Prostaglandin E2 inhibits IL-27 production by bone marrow-derived dendritic cells. The 101st Annual Meeting of the American Association of Immunologists. May 2-6, 2014, Pittsburgh, PA
32. **J-H. Yen**, D. Ganea and K. Kim. Higher susceptibility to experiment autoimmune encephalomyelitis in Muc1-deficient mice is associated with increased Th1/Th17 responses. The 100th Annual Meeting of the American Association of Immunologists. May 3-7, 2013, Honolulu, Hawaii
33. **J-H. Yen** and D. Ganea. A novel function of IFN β in promoting the generation of anti-inflammatory M2-like microglia in vitro and in vivo. *Cytokines* 2012. September 11-14, 2012, Geneva, Switzerland
34. **J-H. Yen** and D. Ganea. IFN β promotes the conversion of pro-inflammatory M1-like into anti-inflammatory M2-like microglia. The 99th Annual Meeting of the American Association of Immunologists. May 4-8, 2012, Boston, MA
35. **J-H. Yen**, V. P Kocieda, J. Huie and D. Ganea. PGE2-induced MMP-9 expression in dendritic cells through two independent signaling pathways leading to AP-1 activation. The Annual Dawn Marks Research Day. June 20, 2011. Philadelphia, PA
36. Z. W. Reichenbach, **J-H. Yen**, W. Kong and R. Tuma. Development of a novel method for Rhodamine administration for intravital microscopic evaluation of white blood cell/endothelial cell interactions. The Annual Dawn Marks Research Day. June 20, 2011. Philadelphia, PA
37. W. Kong, **J-H. Yen**, S. Akhikary and D. Ganea. Docosahexaenoic acid modulates CD4⁺ T cell differentiation and is protective in experimental autoimmune encephalomyelitis. The Annual Dawn Marks Research Day. June 20, 2011. Philadelphia, PA
38. **J-H. Yen**, V. P Kocieda, J. Huie and D. Ganea. PGE2-induced MMP-9 production in bone-marrow derived DCs is mediated through ERK activation. The Temple University Autoimmunity Center Retreat. May 20, 2011. Philadelphia, PA
39. W. Kong, **J-H. Yen**, S. Akhikary and D. Ganea. Docosahexaenoic acid modulates CD4⁺ T cell differentiation and is protective in experimental autoimmune encephalomyelitis. The Temple University Autoimmunity Center Retreat. May 20, 2011. Philadelphia, PA
40. **J-H. Yen**, V. P Kocieda and D. Ganea. ERK activation is required for PGE2-induced MMP-9 production in bone-marrow derived DCs. The 98th Annual Meeting of the American Association of Immunologists. May 13-17, 2011, San Francisco, CA
41. W. Kong, **J-H. Yen**, S. Akhikary and D. Ganea. Docosahexaenoic acid modulates CD4⁺ T cell differentiation and is protective in experimental autoimmune encephalomyelitis. The 98th Annual Meeting of the American Association of Immunologists. May 13-17, 2011, San Francisco, CA
42. S. Xu, **J-H. Yen**, D. Ganea and K. C. Kim. Muc-1 mucine in dendritic cells: It's possible role in CD4⁺ T cell immune responses. 2011 American Thoracic Society International Conference. May 13-18, 2011, Denver, CO.

43. **J-H. Yen** and D. Ganea. IFN β acts as an anti-inflammatory cytokine to inhibit dendritic cell migration and proinflammatory cytokine production. The 14th International Congress of Immunology, August 22-27, 2010, Kobe, Japan
44. W. Kong, **J-H. Yen** and D. Ganea. Dendritic cells a crucial target for the anti-inflammatory effects of docosahexaenoic acid (DHA). Keystone Symposium on Bioactive Lipids. June 5-11, 2010, Kyoto, Japan
45. **J-H. Yen**, W. Kong and D. Ganea. IFN β exerts its anti-inflammatory effects through inhibiting dendritic cell migration and pro-inflammatory cytokine production. The Temple University Autoimmunity Center Retreat. May 14, 2010. Merion Station, PA
46. W. Kong, **J-H. Yen**, S. Adhikary, M. Toscano and D. Ganea. Docosahexaenoic acid prevents bone marrow-derived dendritic cell maturation and modulates T cell differentiation. The Temple University Autoimmunity Center Retreat. May 14, 2010, Merion Station, PA
47. T. Newman, N. Carpino, D. Ganea, F. Saffadi, **J-H. Yen** and A. Tsygankov. TULA proteins are key to the regulation of T-cell driven inflammatory responses. The Temple University Autoimmunity Center Retreat. May 14, 2010, Merion Station, PA
48. **J-H. Yen**, W. Kong and D. Ganea. IFN β : an anti-inflammatory cytokine which inhibits dendritic cell migration and proinflammatory cytokine production. The 97th Annual Meeting of the American Association of Immunologists. May 7-11, 2010, Baltimore, MD
49. W. Kong, **J-H. Yen**, S. Adhikary, M. Toscano and D. Ganea. Docosahexaenoic acid inhibits cytokine production in dendritic cells and modulates T cell differentiation. The 97th Annual Meeting of the American Association of Immunologists. May 7-11, 2010, Baltimore, MD
50. T. Newman, N. Carpino, D. Ganea, F. Saffadi, **J-H. Yen** and A. Tsygankov. TULA-family proteins are the key to the regulation of T-cell driven inflammatory responses. The 97th Annual Meeting of the American Association of Immunologists. May 7-11, 2010, Baltimore, MD
51. **J-H. Yen** and D. Ganea. IFN β inhibits DC migration in vitro and in vivo. The 96th Annual Meeting of the American Association of Immunologists. May 8-12, 2009, Seattle, WA
52. W. Kong, **J-H. Yen** and D. Ganea. Anti-Inflammatory properties of docosahexaenoic acid (DHA) in bone marrow-derived dendritic cells. The 96th Annual Meeting of the American Association of Immunologists. May 8-12, 2009, Seattle, WA
53. **J-H. Yen** and D. Ganea. Induction of mature dendritic cells apoptosis by IFN β through the activation of caspase-11/caspase-3 pathway. Multiple Sclerosis, Keystone Symposia, January 21 - 26, 2009, Santa Fe, New Mexico
54. **J-H. Yen** and D. Ganea. IFN β selectively induces apoptosis in mature dendritic cells through the caspase-11/caspase-3 pathway. The 4th Congress of the Federation of Immunology Societies of Asia-Oceania (FIMSA 2008), October 17-20, 2008, Taipei, Taiwan.
55. **J-H. Yen** and D. Ganea. IFN β induces mature DC apoptosis through the caspase-11/caspase-3 pathway. Experimental Biology, April 5-9, 2008, San Diego, CA
56. T. Khayrullina, **J-H. Yen** and D. Ganea. Dendritic cell differentiation in the presence of PGE2 primes dendritic cells for a proinflammatory response, induces IL-23, and promotes Th17 differentiation. Experimental Biology, April 5-9, 2008, San Diego, CA
57. **J-H. Yen** and D. Ganea. PGE2 induced MMP-9 promotes dendritic cell migration. The 10th Annual Winter Eicosanoid Conference, March 9-12, 2008, Baltimore, MD
58. **J-H. Yen**, T. Khayrullina and D. Ganea. PGE2 induced MMP-9 promotes dendritic cell migration in vitro and in vivo. Keystone Symposia, January 7-12, 2008, Big Sky, Montana
59. **J-H. Yen**, T. Khayrullina and D. Ganea. Metalloproteinase-9 induced by PGE2 is essential for dendritic cell migration in vitro and in vivo. Seventh Annual Dawn B. Marks research conference, December 11, 2007, Philadelphia, PA
60. **J-H. Yen** and D. Ganea. PGE2 induced Metalloproteinase-9 is essential for dendritic cell migration. The International Society for Biological Therapy of Cancer. November 2-4, 2007, Boston, MA
61. **J-H. Yen**, T. Khayrullina and D. Ganea. PGE2 induces MMP-9 production in myeloid dendritic cells. The 94th Annual Meeting of the American Association of Immunologists. May 18-22, 2007, Miami Beach, FL
62. T. Khayrullina, **J-H. Yen** and D. Ganea. The role of PGE2 in EAE. The 94th Annual Meeting of the American Association of Immunologists. May 18-22, 2007, Miami Beach, FL
63. H. Jing, **J-H. Yen** and D. Ganea. PGE2 inhibits chemokine expression in dendritic cells through a novel signaling pathway. Keystone Symposia, February 25-March 2, 2007, Keystone, CO
64. M. Zhang, **J-H. Yen**, T. Khayrullina, D. Ganea and R. Tuma. Cannabinoid CB₂ receptor agonists attenuate experimental autoimmune encephalomyelitis (EAE) and reduce MOG-specific T cell proliferation. Experimental Biology, April 12-15, 2007, Washington, DC

65. **J-H. Yen** and D. Ganea. The role of PGE2 in DC CD11c integrin expression. Sixth Annual Dawn B. Marks research conference, Nonmember 20, 2006, Philadelphia, PA
66. **J-H. Yen** and D. Ganea. PGE2 downregulates the expression of CD11c in dendritic cells. Great Lakes International Imaging and Flow Cytometry Association (GLIFCA) 15th annual meeting, September 29-October 1, 2006, Pittsburgh, PA
67. **J-H. Yen** and D. Ganea. PGE2 downregulates the expression of CD11c in dendritic cells. The 93rd Annual Meeting of the American Association of Immunologists, May 12-16, 2006, Boston, MA
68. H. Jing, **J-H. Yen** and D. Ganea. A novel-signaling pathway mediates the inhibition of CCL3/4 expression by PGE2. The 92nd Annual Meeting of the American Association of Immunologists, April 2-6, 2005, San Diego, CA

Society Membership

American Association of Immunologists
 American Heart Association

Teaching

- 2021-22 Preparing for professional practice. Facilitator
- 2021.08 Elective Medical Research. Course director. Topic: Neuroinflammation in stroke and aging.
- 2021.5.7 Small group activity facilitator; Topic: Multiple Sclerosis; Course: Neuroscience & Behavior.
- 2020-21 IU School of Medicine-Ft. Wayne site director and instructor of Host Defense course – Student Evaluations: 4.9 (1-5 scale)
- 2021.3.8 Topic: T cell development and maturation. T cell activation and differentiation. Course: PHRM 318: Immunology. Manchester University College of Pharmacy. Spring 2021
- 2020.5.1 Small group activity facilitator; Topic: Multiple Sclerosis; Course: Neuroscience & Behavior.
- 2019-20 IU School of Medicine-Ft. Wayne site director and instructor of Host Defense course (Lecture Immunology, Bacteriology, and Virology to the first-year medical school students) – Student Evaluations: 5.0 (1-5 scale)
- 2018-19 IU School of Medicine-Ft. Wayne site director and instructor of Host Defense course (Lecture Immunology, Bacteriology, and Virology to the first-year medical school students) – Student Evaluations: 4.95 (1-5 scale)
- 2017-18 IU School of Medicine-Ft. Wayne site director and instructor of Host Defense course (Lecture Immunology, Bacteriology, and Virology to the first-year medical school students) – Student Evaluations: 5.0 (1-5 scale)
- 2016-17 IU School of Medicine-Ft. Wayne site director and instructor of Host Defense course (Lecture Immunology, Bacteriology, and Virology to the first-year medical school students) – Student Evaluations: 3.88 (1-4 scale)
- 2015-16 Course director and instructor of Medical Microbiology and Immunology (Lecture Immunology, Bacteriology, and Virology to the first-year medical school students) – Student Evaluations: 4.94 (1-5 scale)
- 2015-16 Medical Pathology (Lecture immune system disease and Infectious disease to the second year medical school students)
- 2014-15 Course director and instructor of Medical Microbiology and Immunology (Lecture Immunology, Bacteriology, and Virology to the first-year medical school students) – Student Evaluations: 4.75 (1-5 scale)
- 2014-15 Medical Pathology (Lecture immune system disease and Infectious disease to the second year medical school students)
- 2013-14 Medical Immunology (Lecture Immunology to the first-year medical school students) – Student Evaluations: 4.90 (1-5 scale)
- 2005-06 General Microbiology laboratory
- 2004-05 General Microbiology laboratory
- 2003-04 General Biology laboratory
- 2002-03 General Biology laboratory