Xin Qi, Ph.D.

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PERSONAL INFORMATION

Education

School:	Department of Pharmacy, Shenyang Pharmaceutical University, China
Degree:	B.S.
Dates:	September 1995- June 1999
School:	Department of Pharmacology, Shenyang Pharmaceutical University, China
Degree:	M.S.
Dates:	September 1999 – March 2002
School:	Department of Pharmacology, Graduate School of Pharmaceutical Sciences, Hokkaido University, Japan
Degree:	Ph.D.
Dates:	April 2002- March 2005

Post-Graduate Training

Institution:	Department of Chemical and Systems Biology, Stanford University School of Medicine
Position:	Postdoctoral fellow at Daria Mochly-Rosen lab
Dates:	April 2005 – September 2010
Institution:	Department of Chemical and Systems Biology, Stanford University School of Medicine
Position:	Research Associate
Dates:	October 2010 – February 2011

ACADEMIC APPOINTMENTS

Position/Rank:	Tenure-Track Assistant Professor
Institution/Department:	Department of Physiology & Biophysics, Case Western Reserve University School of Medicine
Dates:	March 1, 2011 – June 30, 2017
Position/Rank:	Associate Professor (with Tenure)
Institution/Department:	Department of Physiology & Biophysics, Case Western Reserve University School of Medicine
Dates:	July 1, 2017 – June 30, 2020
Position/Rank	Professor
Institution/Department:	Department of Physiology &Biophysics, Case Western Reserve University School of Medicine
Dates	July 1, 2020-present
Position/Rank	Jeanette M. and Joseph S. Silber Professor in Brain Sciences, Case Western Reserve University
Dates	June 9, 2023-present

OTHER ACADMIC POSITIONS

2018-present	Associate Editor, Frontiers- Cellular Neuroscience
2019-present	Associate Editor, Frontiers-Neurodegeneration
2018-2022	Associate Director, Graduate Program of Physiology & Biophysics, CWRU
2020- Present	Member, Harrington Discovery Institute Executive Review Board
2022- 2023	Topic Editor, Women in Cellular Neuropathology
2022-present	Director, Department Graduate Program of Physiology & Biophysics, CWRU
2023-present	Associate Editor, Frontiers-Molecular Biosciences
2023-present	co-Director, Center for Mitochondrial Research and Therapeutics, CWRU

HONORS AND AWARDS

2002-2005	Research Fellowship, Uehara Memorial Research Foundation, Japan
2003-2005	Zonda Women Fellowship, Zonda Foundation, Japan
2009	Stanford University Cardiovascular Institute Young Investigator Award
2012, 2013	Spitz Scholar, The Spitz Brain Health Innovation Fund
2016-2017	CAHH Investigator, Council to Advanced Human Health, CWRU
2017-2018	Falk Medical Research Trust Catalyst Award, Falk Medical Foundation
2018-2021	Harrington Rare Disease Scholar Award, Harrington Discovery Institute
2019-2021	Falk Transformative Research Award, Falk Medical Foundation
2022-2025	Vinney Scholar for Alzheimer's disease, Harrington Discovery Institute
2023	Faculty Distinguished Research Award, Case Western Reserve University
2023-2024	The John S. Diekhoff Award for Excellence in Graduate Mentoring, CWRU

MEMBERSHIP IN PROFESSIONAL SOCIETIES

2011 – present	Society for Neuroscience (SFN)
2014 – present	American Society for Neurochemistry (ASN)
2016 – present	American Association for the Advancement of Science (AAAS)
2023 –present	American Physiology Society (APS)

PATENTS

US 8,784,393 B2	Inhibitors of Mitochondrial Fission and Methods of Use Thereof
US 11,129,866 B2	Inhibitors of Valosin-containing Protein and Methods of Use Thereof
US2021/0322524 A1	Compositions and methods for treating neurodegenerative disorders
Pending	Development of mitochondrial enhancer for treating neurodegenerative diseases
Pending	Inhibitors of alpha-synuclein-mitochondrial interaction and method of use
Pending	Mutant Huntingtin mimetic protein-like polymers and uses thereof

STUDY SECTIONS/GRANT REVIEW COMMITTEES

2013	Medical Research Council (MRC), UK (June)
2015	NIH MDCN Special emphasis panel (Feb cycle) NIH NOMD study section (Feb cycle) NIH CMND study section (June cycle) The Wellcome Trust Biomedical Research Fellowship Program, UK (Nov)
2016	NIH MDCN Special emphasis panel (April)
2017	NIH MDCN Special emphasis panel (Feb, Oct cycle) NIH NCF study section (June cycle)
2018	AIBS for the Nevada-INBRE research Program 2018 (Jan cycle) Volkswagen Foundation, Lichtenberg Professorships Program, Germany (Oct) NIH ZRG1 CFS/ME special emphasis panel (Nov cycle)

2019 NIH BDCN-Q special emphasis panel (March cycle)
NIH ZRG1 MDCN-T Special emphasis panel (April cycle)
NIH NOMD study section (Nov cycle)
NIH ZRG1 CFS-N (80)S study section (Dec cycle)

2020 Israel Science Foundation (Feb)
NIH CMND study section (March cycle)
NIH NOMD study section (June cycle)
External reviewer for the Health and Medicine Division of the National Academy of Sciences (NAS), Engineering, and Medicine (June)
NIH ZRG1 CFS/ME special emphasis panel (March, Nov cycle)

2022 NIH NOMD study section (June cycle)

2019-2021 NIH ZRG1 ETTN-H (11) B Small Business: Drug Discovery for Aging, Neuropsychiatric and Neurologic Disorders

2020, 2021, 2023 Innovation reviewer, National Academy of Medicine (NAM) Catalyst Award

2021, 2023 Discovery Award for Neurological Disorders, Department of Defense Congressionally Directed Medical Research Programs

2022-2026 Standing member of NIH NOMD study section (nominated as the Chair of the study section)

INDUSTRY RELATIONSHIP

2018- Present Co-founder, JanusQ LLC
2024- Present Scientific co-founder, BeanPod Biosciences

COMMITTEE SERVICE

International/National

Organization: Conference "24 hours of Huntington's disease"
Committee Name/Role: Co-organizer of Conference Organization Committee
Dates of Service: October 4-5, 2012, Cleveland, Ohio

Organization: American Society of Neurochemistry
Committee Name/Role: Co-Chair on session of Mitochondrial Dysfunction in Neuro-degeneration Session
Dates of Service: March 13-18, 2015, 46th annual meeting, Atlanta, Georgia

Organization: 9th World Gene Convention-2018
Committee Name/Role: Symposium Chair on session of "Drug Discovery Science and Technology, BioDrugs"
Dates of Service: November 13-15, 2018, Singapore

Organization: Drug Discovery & Therapy World Congress 2019
Committee Name/Role: Track Chair on session of "CNS Drug Discovery & Therapy"
Dates of Service: September 3-5, 2019, Boston

Local – *Selected service*

Case Western Reserve University and School of Medicine

2014- 2022 Member, Admission Committee of Biomedical Sciences Training Program (PhD program)
2015- Present Member, Interview Committee for the CWRU Medical School (MD) Program
2018- 2021 Member, Search Committee for faculty position, Department of Pathology, CWRU
2019- Present Member, Steering committee of Neurodegeneration T32 training grant
2021- 2024 Member, University Faculty Senate Finance Committee, CWRU
2022- 2023 Member, School of Medicine Standing Committee on Budget, Finance and Compensation

2023- Present Member, Steering Committee of Medical Scientist Training Program (MD/PhD program)

CWRU Departmental Committees

2013- 2021 Academic Advisor of Master Program, Department of Physiology & Biophysics
2014- Present Member, Department Committee on Appointment, Promotion and Tenure (DCAPT)
2015- Present Member, Infrastructure Committee, Department of Physiology & Biophysics
2020- Present Chair, Department Committee on Appointment, Promotion and Tenure (DCAPT)
2022- Present Chairs Cabinet member, Department of Physiology & Biophysics, CWRU
2023- Present co-Chair, Department Faculty Search Committee, CWRU

Educational Committees

2012- 2015 Matthew Cohen, PhD thesis committee member, Department of Pharmacology
2014- 2016 Chun-Lun Ni, PhD thesis committee member, Department of Microbiology
2014- 2019 Di Hu, PhD Advisor, Department of Physiology and Biophysics
2015- 2016 Anne Jessica Roe, Master Advisor, Department of Physiology and Biophysics
2017- 2019 Awuri Asuru, PhD thesis committee member, Center for Proteomics
2017- 2022 Yutong Shang, PhD Advisor, Department of Physiology & Biophysics
2018- 2023 Preethy Sridharan, MD/PhD thesis committee member, Department of Pathology
2019- 2020 Katherine Horan, PhD advisor, Department of Physiology & Biophysics
2020- 2022 Jessica Dudman, PhD advisor, Department of Physiology & Biophysics
2020- 2022 Jose Diaz-Aponte, PhD thesis committee member and Chair, Department of Physiology & Biophysics
2020- 2022 Filipa Blasco Tavares Pereira Lopes, PhD thesis committee member, Center for Proteomics
2020- 2023 Solomiia Boyko, PhD thesis committee member, Department of Physiology & Biophysics
2020- Present Aya Jishi, PhD advisor, Department of Physiology & Biophysics
2020- Present Omid Hajihassani, PD thesis committee member, Department of Biochemistry
2021- Present Emily Arzola, PhD thesis committee member, Department of Neuroscience
2021- 2022 Angela Whittsette, Master thesis committee member, Department of Physiology & Biophysics
2022- Present Anika Wu, PhD thesis committee member, Department of Neuroscience
2022- Present Yeojung Koh, PhD thesis committee member, Department of Pathology
2022- Present Xin Lan, PhD thesis committee member, Department of Biochemistry
2022- Present Brandon Miller, PhD thesis committee member and chair, Department of Physiology & Biophysics
2022- Present Cassandra Barone, PhD advisor, Department of Physiology & Biophysics
2023- Present Kyle McGill Perce, PhD advisor, Department of Physiology & Biophysics
2023- Present Jack Zunren Liu, PhD advisor, Department of Physiology & Biophysics
2023- Present Katie Dominic, MD/PhD thesis committee member and Chair, Department of Physiology & Biophysics
2023- Present Marnie Williams, PhD thesis committee member and chair, Department of Physiology & Biophysics
2023- Present Xi Chen, PhD thesis committee member and chair, Department of Physiology & Biophysics
2023- Present Jennifer Pan, PhD thesis committee member and chair, Department of Physiology & Biophysics
2023- Present Beverley Wood, PhD thesis committee member and chair, Department of Physiology & Biophysics

Mentoring junior faculty

2022- Present Agustin Gonzalez-Vicente, Instructor committee member, Department of Physiology & Biophysics, CWRU
2022- Present Alexa Jung A Woo, Assistant Professor, Department of Pathology, CWRU
2022- Present Aaron Burberry, Assistant Professor, Department of Pathology, CWRU
2022- Present Ignazio Cali, Assistant Professor, Department of Pathology, CWRU

2022- Present Tian Liu, Assistant Professor, Department of Pathology, CWRU

TEACHING ACTIVITIES

CWRU Medical Program Teaching

2012 – 2019 Year one, Block 2-School of Medicine, Cell Physiology and Cancer Biology, Medium Size Group

2012 – 2019 Year one, Block 4-School of Medicine, Cardiovascular Cell Physiology, Medium Size Group / Team-based learning

2016 – 2019 Year one, Block 6- School of Medicine, Cognition, Sensation, and Movement, Medium size group

CWRU Graduate Program Teaching

2011 Mitochondria in human health and diseases

2013 Thematic workshop: Mitochondrial diseases- Identification and Treatment

2014 – 2020 PHOL514: Advanced Cardiac Physiology
- Mitochondria & oxidative stress
- Ischemia/reperfusion and preconditioning

2014 – Present PHOL466: Cell Signaling
- MAPK signaling

2017 – Present CBIO456: Since you were born: Nobel Prize Biomedical Research 1995-2016
- Mechanism of signal transduction in the nervous system

2018 – Present PATH444: Neurodegenerative Diseases
- Induced pluripotent stem cells and its application in neurodegenerative diseases

2023- Present PATH555: Advanced topics in neurodegeneration research
- Mitochondrial proteostasis and quality control

Master Program Teaching

2017-2023 Translational Physiology 483
- Development of mitochondrial enhancers for treatment of neurodegenerative diseases

2019-2023 PHOL 402A Physiology Basis of Diseases
- Nervous system

Invited Lectures

International

2008 Invited talk, Keystone Symposia on Hypoxia, Vancouver, Canada

2017 Invited talk, New Medicine Program Seminar, Research & Development, UCB Scientific Research Company, Brussels, Belgium

2018 Invited talk, 9th World Gene Convention-2018, Singapore

2018 Invited talk, International Drug Discovery Science and Technology, Boston

2018 Invited talk, Neuroscience World Conference (Society for Neuroscience)-Session of Alpha-synuclein Biology

2018 Invited talk, Keystone Symposia -- Advances in Neurodegenerative Disease Research and Therapy (Z3), Colorado

2019 Invited talk, Drug Discovery & Therapy World Congress 2019, Track "*CNS Drug Discovery & Therapy*", Boston

2020 Invited talk, International Conference on Medical Pathology (MedPath-2020), Houston, TX, USA

2021 Invited talk, 14th Gottingen meeting of the German Neuroscience Society, Germany

National

2004 Invited talk, 10th Free Radical Conference in Hokkaido, Sapporo, Japan

2004 Invited talk, 124th Japanese Pharmaceutical Congress, Sendai, Japan

2008 Invited talk, 14th meeting on Protein Phosphorylation and Cell Signaling, Salk Institute, La Jolla, CA

2010 Invited talk, Department of Pharmacology, University of Minnesota Twin Cities

2010 Invited talk, Department of Pharmacology, Purdue University
2012 Invited talk, Gordon Research Conference, Brain Energy Metabolism & Blood Flow, Waterville, ME
2012 Invited talk, Bio-X IIP Symposium, Stanford University
2012 Invited talk, 24 hours of Huntington's Disease, Cleveland, OH
2012 Invited talk, Mitochondria & Metabolism Symposium, Philadelphia, PA
2014 Invited talk, Department of Genetics, University of Alabama School of Medicine
2015 Invited talk, 46th Annual Meeting of American Society For Neurochemistry, Atlanta, Georgia
2016 Invited talk, Spring Brain Conference, Sedona, Arizona
2016 Invited talk, Scientific program in FutuRx, New York City (December 2016)
2017 Invited talk, 3rd Neurological Disorder Summit, San Francisco
2018 Invited Research Seminar, The Michael J Fox Parkinson's Disease Foundation, New York
2019 Invited talk, Department of Pharmacology & Therapeutics, University of Florida, Gainesville
2019 Invited Sanofi Research Seminar Series—"Development of novel therapeutics for Neurodegenerative diseases", Sanofi Pharmaceutical Company, Boston
2019 Invited Research Seminar, Harrington Discovery Institute Scientific Symposium 2019, Cleveland
2021 Invited talk, Neuroscience department of Gladstone Institute and University of California at San Francisco
2021 Invited talk, Department of Biochemistry & Molecular Biology University of Massachusetts
2022 Invited talk, International Research on Neurodegenerative Disease 2022, Omaha, NE
2022 Invited talk, Department of Pathology, University of Texas Southwestern Medical Center, Dallas, TX
2022 Invited talk, Department of Internal Medicine, Texas Tech University Health Sciences Center, Lubbock, TX
2023 Invited talk, Department of Neuroscience and Pharmacology, University of Iowa School of Medicine
2023 Invited talk, Harrington Discovery Institute Annual Symposium 2023, Cleveland, Ohio
2023 Invited talk, Department of Physiology & Biophysics, State University of New York at Buffalo
2023 Invited talk, 10th Meeting of Translational Research in Mitochondria/Metabolism Aging & Disease, Pittsburgh, PA
2024 Invited talk, Department of Neuroscience, University of Connecticut School of Medicine

Local

2011 Department of Neuroscience, Case Western Reserve University School of Medicine
2012 The MetroHealth Seminar, Cleveland
2012 National Center for Regenerative Medicine Retreat, Cleveland
2013 Neurology grand rounds, Neurological Institute of University Hospital, Cleveland, OH
2014 Department of Pathology, Case Western Reserve University School of Medicine
2015 Department of Molecular Medicine, Cleveland State University, Cleveland
2015 Cardiovascular Institute, Case Western Reserve University School of Medicine
2016 Annual Council to Advance Human Health Executive Session, Boston
2016 Department of Pharmacology, Case Western Reserve University School of Medicine
2016 Annual Council to Advance Human Health Executive Session, Cleveland (November 2016)
2017 3rd Annual Data and Life Science Collaboration and Symposium, Cleveland
2017 Department of Cellular and Molecular Medicine, Cleveland Clinic Foundation
2023 Department of Otolaryngology-Head Surgery, University Hospitals Cleveland Medical Center

Trainees / Mentees

Postdoctoral trainees

Year	Name	Current position
2011-2014	Yu-Chin Su	Investigator, Institute of Cellular and Organismic Biology, Taiwan
2011-2016	Xing Guo	Professor, Nanjing Medical University, China
2014-2020	Yuanyuan Zhao	Research Associate, Cleveland Clinic Foundation
2020-2021	Xin Tun	Scientist, StemRim, Japan
2021-2022	Trong Bao Nyugen	Scientist in biotech company, US

2021-2023	Shuai Wang	Associate Professor, Jining Medical University, China
2022-2023	Rui Zhang	Scientist, Vertex Pharmaceuticals, US
2018-present	Rihua Wang	Research Scientist, CWRU
2019-present	Di Hu	Research Scientist, CWRU
2020-present	Philip Ropelewski	Postdoctoral Scholar, CWRU
2023-present	Yutong Shang	Postdoctoral Scholar, CWRU
2023-present	Na Liu	Postdoctoral Scholar, CWRU
2023-present	Dongming Yang	Postdoctoral Scholar, CWRU

Ph.D. Student Trainees

Year	Name	Department
2014- 2019	Di Hu	Department of Physiology & Biophysics, CWRU
2017- 2022	Yutong Shang	Department of Physiology & Biophysics, CWRU
2020- Present	Aya Jishi	Department of Physiology & Biophysics, CWRU
2021- Present	Cassandra Barone	Department of Physiology & Biophysics, CWRU
2022- Present	Zunren Jack Liu	Department of Physiology & Biophysics, CWRU
2022- Present	Kyle McGill Percy	Department of Physiology & Biophysics, CWRU
2023- Present	Sarah Cooke	Department of Physiology & Biophysics, CWRU

Medical Student Trainees

Year	Name	Institution
2016-2017	Evan Miller	Medical School of CWRU
2017	Nicholas Venetos	Medical School of CWRU
2018	Yeong-Ran Ahn	Medical School of CWRU
2023	Juliana Condoleo	Medical School of CWRU

Master Student Trainees

Year	Name	Current position
2015-2016	Anne Roe	PhD candidate at University of California at Los Angeles
2019-2020	Omid Hajihassani	PhD candidate at CWRU
2019-2020	Katherine Horan	Research Assistant at CWRU
2020-2022	Jessica Dudman	Research Assistant at CWRU

Undergraduate Student Trainees

Year	Name	Institution
2012	Leslie Gair	Miami University
2014	Phyu Khin	Montana State University
2016	Hajar Alreedi	Alfaisal University, Saudi Arabia
2018- 2019	David Yan	Case Western Reserve University
2020-2022	Zunren Jack Liu	Case Western Reserve University
2023-present	Julien Kouassi	Case Western Reserve University
2023-present	Elissa Frankel	Case Western Reserve University

RESEARCH SUPPORT

Current Research Support

NIH R01AG650240 (Qi, X) 3/1/2020-12/31/2024
NIH/NIA
Title: Role of brain lipid metabolism in Alzheimer's disease
Direct cost: $1,875,230; Indirect cost: $1,143,890

The major goal of this project is to determine the role of ATAD3A oligomerization in the pathogenesis of AD.

NIH R01NS115903 (Qi, X) 5/1/2020-4/30/2024
NIH/NINDS
Title: Proteostasis dysregulation and alpha-synuclein
Direct cost: $1,501,788; Indirect cost: $916,090
The major goal of this project to investigate mitochondrial unfolded protein response in alpha-synuclein-associated Parkinson's disease and Lewy Body Dementia

NIH R01 AG076051 (Qi, X) 2/1/2022-11/30/2026
NIH/NIA
Title: Mechanism of white matter pathology in Alzheimer's disease
Direct cost: $1,886,635; Indirect cost: $1,150,847
The major goal of this project is to determine the role of oligodendrocyte impairment in white matter degeneration of AD.

NIH R01 AG074346-01A1 (Qi, X) 6/1/2022-5/30/2025
NIH/NIA
Title: Regulation of CHCHD6 in Alzheimer's disease
Direct cost: $1,326,729; Indirect cost: $809,304
The major goal of this project is to determine the role of mitochondrial MICOS component CHCHD6 in neurodegeneration and brain lipid metabolism of Alzheimer's disease

Vinney Award of Alzheimer's disease (Qi, X) 9/1/2022-9/30/2025
Harrington Discovery Institute (HDI)
Title: Development of ATAD3A peptide inhibitor as a potential treatment for Alzheimer's disease
Direct cost: $450,000
The major goal of this project is to optimize ATAD3A peptide inhibitors for treating Alzheimer's disease

NIH R01 5R01AG057557 (Xu, R) 9/15/2017-5/31/2024
NIH/NIA
Title: An integrated reverse engineering approach toward rapid drug re-positioning for Alzheimer's Disease
Role: Co-investigator
Direct Cost: $1,886,845; Indirect cost: $1,150,975 (no cost extension)
The goal of this project is develop AI-based platform and identify potential repurposed drug candidates for treating Alzheimer's disease

5R01LM012980 - 03S1 (Koyuturk, Mehmet) 4/1/2021-3/31/2024
NIH/NLM
Title: Alzheimer's supplement- Construction, Analysis, and Utilization of Co-Phosphorylation Networks to Characterize Cellular Signaling
Role: Co-investigator

Pending

NIH R01NS141199 (Qi, X) 12/1/2024-11/31/2029
NIH-NINDS
Title: Regulation of ATAD3A in TDP43-associated ALS/FTD
Direct cost: $2,467,232; Indirect cost: $1,509,750
The goal of this project is to elucidate mitochondria-dependent molecular and cellular mechanisms of TDP43 nuclear exclusion and its roles in neurodegeneration and neuroinflammation in ALS/FTD.

NIH R01NS139359 (Qi, X) 7/1/2024-6/30/2029

NIH/NINDS
Title: Mitochondrial signals, neuroinflammation and neurodegeneration in Huntington's Disease
Direct cost: $2,032,400; Indirect cost: $1,219,440
The goal of the project is to investigate mitochondrial signals promotes neuroinflammation and neurodegeneration in models of HD.

Completed research support

American Heart Association Beginning Grant-in-aid (12BGIA8800014) (Qi, X) 1/1/2012-12/31/2013
Title: Regulation of mitochondrial dynamics in ischemic stroke

Spitz Pilot Funds from Spitz foundation (Qi, X) 10/1/2012-9/30/2014
Title: Enhancing neuronal survival in Parkinson's Disease by inhibition of excessive mitochondrial fission

American Parkinson's Disease Association (Qi, X) 9/1//2013-8/30/2014
Title: Protection of mitochondrial function in patient neurons of Parkinson's disease

NIH R21 AT008265-01A1 (Hoffer, Barry) 9/1/2014-3/31/2017
NIH/NINDS
Title: Role of GDNF, ER stress and mitochondrial function in effects of acupuncture in models of Parkinsonism
Role: Co-investigator

NIH1R21NS087588-01A1 (Zou/Tesar/Qi) 9/30/2014-8/31/2017
NIH/NINDS
Title: Generating iPSCs-derived neurons to explore formation and inhibition of human prions

NIH R01 NS094152 (Hoffer, Barry) 9/30/2015-6/30/2018
NIH/NINDS
Title: Repositioning Gliptins for Parkinson's Disease Treatment
Role: Co-investigator

Michaele J Fox Parkinson's Disease Foundation- Target Validation for Parkinson's disease (Qi, X)
10/1/2016-9/30/2017
Title: Targeting mitochondrial unfolded protein response in alpha-synuclein-associated Parkinson's disease

Falk Medical Research Trust Catalyst Award (Qi, X) 11/30/2017-11/30/2018
Title: Identification of mitochondrial enhancers for treatment of Huntington's disease

NIH R56 NS105632A1 (Qi, X) 4/1/2019-3/31/2020
NIH/NINDS
Title: Mitochondrial protein quality control and alpha-synuclein

NIH 5R01 NS088192 (Qi, X) 6/1/2014-5/31/2020
NIH/NINDS
Title: Dynamin-related protein 1, neurodegeneration and Huntington's disease

R01AG057028-01A1 (Miller, Jonathan) 9/30/2018-8/30/2020
NIH/NINDS
Title: Brain injury; Acute effects and progression to Alzheimer's-like psychopathology
Role: co-investigator

NIH R01GM117208-03S1 (Chance, Mark) 9/1/2018-6/30/2020
NIH/NIGM

Title: Phospho Proteomics and Alzheimer's Disease
Role: co-investigator

Harrington Rare Disease Scholar Award (Phase I and II) (Qi, X) 4/1/2018-8/30/2021
Harrington Discovery Institute
Title: Identification of mitochondrial enhancers for Huntington's disease

NIH R21 NS107897-01A1 (Qi, X) 3/15/2019-2/28/2021
NIH/NINDS
Title: Mitochondrial biomarker in Huntington's Disease

Falk Medical Research Transformative Award (Qi, X)
Falk Medical Research Trust 11/30/2019-8/30/2022
Title: Identification of small molecules for treatment of Huntington's disease
Total cost: $1,000,000, including 10% indirect cost

NIH R01 GM121583-1A1 (Ramachandran, R) 6/1/2017- 8/30/2023
NIH/NIGM
Title: Mechanism of Mitochondrial Dynamics
Role: Co-investigator
Direct Cost: $1,000,000; Indirect cost: $610,000

BIBLIOGRAPHY *(Chronological, from oldest to newest;* *, corresponding author)

Publications before joining CWRU

1. Hosoi T, Okuma Y, Kawagishi T, **Qi X** and Nomura Y. Bacterial endotoxin induces STAT3 activation in mouse brain. ***Brain Res.*** 2004 Oct 8; 1023(1):48-53. PMID: 15364018.

2. **Qi X**, Okuma Y, Hosoi T and Nomura Y. Edaravone protects against hypoxia/ischemia-induced endoplasmic reticulum dysfunction. ***J Pharmacol Exp Ther***. 2004 Oct; 311(1): 388-93. PMID: 15178695.

3. **Qi X**, Hosoi T, Okuma Y, Kaneko M and Nomura Y. Sodium 4-phenylbutyrate protects against cerebral ischemic injury. ***Mol Pharmacol***. 2004 Oct; 66(4): 899-908. PMID: 15226415.

4. **Qi X,** Okuma Y, Kaneko M, Hosoi T and Nomura Y. Induction of murine HRD1 in experimental cerebral ischemia. ***Brain Res Mol Brain Res.*** 2004 Nov 4; 130(1-2):30-8. PMID: 15519674

5. **Qi X**, Vallentin A, Churchill E and Mochly-Rosen D. DeltaPKC participates in endoplasmic reticulum stress-induced response in cultured cardiac myocytes and ischemic heart. ***J Mol Cell Cardiol***. 2007 Oct; 43(4): 420-8. PMID: 17825316.

6. **Qi X**, Inagaki K, Sobel RA and Mochly-Rosen D. Sustained pharmacological inhibition of deltaPKC protects against hypertensive encephalopathy through prevention of blood-brain-barrier breakdown. ***J Clin Invest***. 2008 Jan; 118(1): 173-82. PMID: 18097471.

    - ***Commentary****: Hypertensive encephalopathy and blood-brain-barrier: is deltaPKC a gatekeeper? J. Clin. Invest. 2008 118: 17-20.*
    - ***Media Report****: New Potential Target In The Treatment Of Fatal Brain Disease. Science Daily; Medical News Today*

7. **Qi X** and Mochly-Rosen D. Complex of deltaPKC and c-Abl communicates endoplasmic reticulum stress to mitochondria: an essential step for subsequent apoptosis. ***J Cell Sci.*** 2008 Mar 15; 121: 804-13. PMID: 18285444.

- ***Highlight****: deltaPKC/Abl: stressed to death, J Cell Sci 2008 121: e603;*
- ***Editor's choice****: Cell Biology Codependents in the Stress Response, Sci Signal, 2008, 1 (11): 99*

8. Sui H, Lu XG, Zhan LB, Jiang WZ, **Qi X**, Gong XY, and Niu XP. Decreased expression of spine-associated RapGAP (SPAR) in glutamate treated primary hippocampal neurons. ***J Clin Neurosci,*** 2010; 17: 1042–1046. PMID: 20547063.

9. Gong X, Lu X, Zhan L, Sui H, **Qi X**, Ji Z, Niu X, Liu L. Role of the SNK-SPAR Pathway in the Development of Alzheimer's Disease. ***IUBMB Life***. 2010 Mar; 62(3):214-21. PMID: 20146300.

10. Palaniyandi SS, **Qi X**, Ferreira JC, Yogalingam G and Mochly-Rosen D. Regulation of mitochondrial processes: a target for heart failure. ***Drug Discovery Today: Disease Mechanisms***, 2010; 7: 95-102. PMID: 21278905.

11. Shi X, Lu XG, Zhan LB, **Qi X**, Liang LN, Hu SY, Yun Y, Zhao SY, Sui H, Zhang FL. The effects of the Chinese medicine ZiBU PiYin recipe on the hippocampus in a rat model of diabetes-associated cognitive decline: a proteomic analysis. ***Diabetologia,*** *2011;* 54:1888–1899. PMID: 21509442.

12. **Qi X,** Disatnik MH, Shen N, Sobel RA and Mochly-Rosen D. Aberrant mitochondrial fission in neurons induced by delta protein kinase C under oxidative stress conditions, *in vivo*. ***Mol Biol Cell***. 2011 Jan; 22(2): 256-65. PMID: 21119009.

Publications after being an independent PI at CWRU (*, corresponding author)

13. **Qi X*,** Qvit N, Su YC and Mochly-Rosen D. A novel Drp1 inhibitor diminishes aberrant mitochondrial fission and neurotoxicity**.** ***J Cell Sci***. 2013 Feb 1;126(Pt 3):789-802. PMID: 23239023.

14. Su YC and **Qi X***. Impairment of Mitochondrial Dynamics: a target for treatment of neurological disorders? ***Future Neurology,*** 2013, May 8; 3: 333-346.

15. Disatnik M, Ferreira J, Campos JC, Gomes KS, Dourado P, **Qi X** and Mochly-Rosen D. Acute inhibition of excessive mitochondrial fission after myocardial infarction prevents long-term cardiac dysfunction. ***J Am Heart Assoc***. 2013 Oct 8;2(5):e000461. PMID: 24103571.

16. **Su YC and Qi X*. Inhibition of excessive mitochondrial fission reduced aberrant autophagy and neuronal damage caused by LRRK2 G2019S mutation.** ***Hum Mol Genet.*** **2013 Nov 15;22(22): 4545-61. PMID: 23813973.**

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