

Revised: October 3, 2018

UNIVERSITY CURRICULUM VITAE FORMAT(Medical/Dental Schools, SGS, SPH)

DATE: February 23, 2025

NAME: Hong Li, Ph.D.

PRESENT TITLE: Associate Professor with Tenure

Director, Center for Advanced Metabolomics & Proteomics Research

HOME ADDRESS: 10 W 15th Street, Apt 1418, New York, NY, 10011

OFFICE ADDRESS: Department of Microbiology, Biochemistry and Molecular Genetics
Center for Advanced Metabolomics & Proteomics Research
RBHS-New Jersey Medical School
205 South Orange Ave., Newark, NJ 07103

TELEPHONE NUMBER/E-MAIL ADDRESS: 917-670-9355 (C)/973-972-8396 (O)/liho2@rutgers.edu

CITIZENSHIP: USA

EDUCATION:

- A. Undergraduate Graduate and Professional
University of Nevada
Reno, NV
B.S. (Biochemistry) *Date Awarded: 1992*
- B. Graduate and Professional
University of Nevada
Reno, NV
Ph.D. (Biochemistry) *Date Awarded: 1997*

POSTGRADUATE TRAINING:

- A. Internship and Residencies N/A
Location
Discipline
Inclusive Dates
- B. Research Fellowships N/A
Location
Discipline
Inclusive Dates
- C. Postdoctoral Appointments
Albert Einstein College of Medicine.
Molecular Pharmacology
Bronx, NY
1997-1998

MILITARY:

ACADEMIC APPOINTMENTS:

Department of Microbiology, Biochemistry and Molecular Genetics
Rutgers University-NJMS
Associate Professor with Tenure
7/2013-present

*Department of Biochemistry and Molecular Biology
UMDNJ-NJMS
Associate Professor with Tenure
7/2010-7/2013*

*Department of Biochemistry and Molecular Biology
UMDNJ-NJMS
Associate Professor
7/2005-6/2010*

*Department of Biochemistry and Molecular Biology
UMDNJ-NJMS
Assistant Professor
1/2000-6/2005*

Administrative Appointments

*Rutgers University-Center for Advanced Metabolomics & Proteomics Research
Director
2025-present*

*Rutgers University-Institute for Quantitative Biomedicine
Member
2017-present*

*Rutgers University-Cancer Institute of New Jersey
Member
2017-present*

*Rutgers University-Brain Health Institute
Member
2014-present*

*Rutgers University-Rutgers Center for Lipid Research
Member
2010-present*

*UMDNJ/Rutgers-NJMS University Hospital Cancer Center
Member
7/2007-present*

*UMDNJ/Rutgers University-Center for Advanced Proteomics Research
Director
2005-2025*

*UMDNJ/Rutgers University-Joint Mass Spectrometry Core Facility
Director
2000-2005*

HOSPITAL APPOINTMENTS: *(If applicable) N/A*

*Department
Hospital Name
Title
Inclusive Dates (Month/Year)*

OTHER EMPLOYMENT OR MAJOR VISITING APPOINTMENTS: *(If applicable)*

*Scientist II
Synaptic Pharmaceutical Corporation
Paramus, NJ
Pharmacology
1998-1999*

PRIVATE PRACTICE *(If applicable): N/A*

LICENSURE: *specialty/#/expiration N/A*

DRUG LICENSURE: CDS: *#/expiration* DEA: *#/expiration N/A*

CERTIFICATION: *specialty/#/expiration N/A*

MEMBERSHIPS, OFFICES AND COMMITTEE ASSIGNMENTS IN PROFESSIONAL SOCIETIES:

*American Society of Mass spectrometry
Member
1992-present*

*Association of Biomedical Research Facilities
Member
1992-present*

HONORS AND AWARDS:

*Title: Fulbright Research Fellow at Pasteur Institute -Paris
Awarded By Commission Fulbright Franco-Américaine and US Department of State
Date 2017*

BOARDS OF DIRECTORS/TRUSTEES POSITIONS: N/A

SERVICE ON NATIONAL GRANT REVIEW PANELS, STUDY SECTIONS, COMMITTEES:

*2026 Grant Reviewer, S10 High End Instrumentation, NIH OD
2025 Grant Reviewer, P30/P50 Center of Excellence Program, NIH NIDA
2024 Grant Reviewer, NIH RC2 High Impact, Interdisciplinary Science in NIDDK Research
2021 Grant Reviewer, NIH CSR – Transformative Research Award (TRA)
2018 Grant Reviewer, Society for Redox Biology and Medicine
2016 Grant Reviewer, NIH BIOMEDICAL TECHNOLOGY RESEARCH RESOURCE (P41)
2016-10 ZRG1 CB-D 40 P
2016 Grant Reviewer, NIH ZNS1 SRB-N (12): NINDS Institutional Center Core Grants to
Support Neuroscience Research (P30) & High Impact Neuroscience Research Resource
Grants (R24) ZRG1 F04B-D (20)*

2014 Grant Reviewer, NIH Special Emphasis Panel: Biochemistry and Biophysical Chemistry Fellowships ZRG1 F04B-D (20)

2014 Grant Reviewer, NIH Competitive Renewal Study Panel, Development for Protein Affinity Reagents. ZRG12014 BST-K50

2014 Grant Reviewer, NIH Special Emphasis Panel: Review Committee for Environmental Exposure and Neurodegenerative Diseases (R21 & R01s) ZESI LWJ K R I

2011 Grant Reviewer, NIH CSR - Technology Development of New Affinity Reagents against the Human Proteome BST-M (51)

2011 Grant Reviewer, NIH NIEHS - Biomarkers Indicative of Mitochondrial Dysfunction. ZESI LWJ-J (MI) I

2009 Grant Reviewer, NIH NCRR Shared Instrumentation Program. ZRG1 BCMB-D (30) I

SERVICE ON MAJOR COMMITTEES:

A. International (Name, Inclusive Dates)

2021 Grant Reviewer, Fulbright Binational Egyptian Student Program

2018 Grant Reviewer, The Netherlands Organization for Health Research and Development, NWO Investment in Scientific Infrastructure

2017 Grant Reviewer, French Ministry of Higher Education and Research

2009 Grant Reviewer, WELLCOME TRUST PROGRAMME GRANT

B. National (Name, Inclusive Dates) N/A

C. Medical School/University (Name, Inclusive Dates)

NJMS Research Recognition Committee, 2017-2019

NJMS Faculty Council, 2015-2016

Vice President for Research, NJMS Faculty Organization, 2014-2015

Chair, Faculty Investigator Group, 2013-2014

Hurricane Sandy Response Evaluation Committee, 2012-2013

Proteomics Core Advisory Committee, 2000-present

Technology Task Force, 2008-present

Research Technology Advisory Group, RTAG, 2009-present

Newark Campus Laboratory Safety Committee, 2011-present

Branding and Image - Strategic Plan Steering Committee Workgroup, 2012

Rutgers Shared Instrumentation Grant Review Committee, 2014

D. Hospital (Name, Inclusive Dates) N/A

E. Department (Name, Inclusive Dates)

Biochemistry and Pathology/MBGC seminar program coordinator, 2011-2013

Computation and Network Committee, 2000-present

E. Editorial Boards (Journal Name, Inclusive Dates) N/A

F. AdHoc Reviewer (Journal Name, Inclusive Dates)

Journal of Proteome Research, 2000-present

Journal of Proteomics, 2000-present

Journal of Neuroscience Method, 2005-present

Journal of Chromatography, 2010-present

Journal of Biological Chemistry, 2009-present

Journal of Cellular and Molecular Medicine, 2008-present
Mini-Reviews in Medicinal Chemistry, 2008-present
Molecular and Cellular Neuroscience, 2008-present
Bioinformatics, 2010-present
Cancer Therapy, 2009-present
Placenta, 2009-present
Expert Review in Proteomics- 2009-present
Antioxidant and Redox Signaling, 2010-present
Molecular Vision, 2010-present
Integrative Ophthalmology and Visual Science, 2011-present
Free Radical Biology and Medicine, 2011-present
Rapid Communication in Mass Spectrometry, 2011-present
Apoptosis, 2012- present
Developmental Neuroscience, 2012- present
Proteomics, 2012-present
Proteomics-Clinical Applications, 2012-present
BBA Proteomics, 2013-present
Amino Acids, 2020-present

SERVICE ON GRADUATE SCHOOL COMMITTEES:

Thesis Committee: Keith Christophers – Biochemistry Mol Biology
Thesis Committee: Kenneth M. Wannemacher– Biochemistry Molec Biology
Thesis Committee: Veera D'mello– Biochemistry Mol Biology
Thesis Committee: Can Huang – Pharmacology Physiology
Thesis Committee: Chuanglong Cui -Microbiology
Thesis Committee: Narayani Nagarajan -Cell Biology
Thesis Committee: Dan Shao -Cell Biology
Thesis Committee: Jessica Mann -Microbiology
Thesis Committee: GANAPATHY Sriram – Microbiology, Biochemistry Molec Genetics
Thesis Committee: Geng Ke – Microbiology, Biochemistry Molec Genetics
Thesis Committee: Jaemin Byun –Cell Biology and Molecular Medicine
Thesis Committee: Narayani Nagarajan–Cell Biology and Molecular Medicine
Thesis Committee: Yangfe Yang–Cell Biology and Molecular Medicine
Thesis Committee: Sara Gilmast– Pharmacology Physiology
Thesis Committee: Ju Youn Lee– Biochemistry Mol Biology
Thesis Committee: Anton Kolomeyer– Ophthalmology
Thesis Committee: Iab Campbell – Microbiology, Biochemistry Molec Genetics
Thesis Committee: Jamie Francisco – Cell Biology and Molecular Medicine

SERVICE ON HOSPITAL COMMITTEES:

SERVICE TO THE COMMUNITY:

SPONSORSHIP (Primary Mentorship) OF CANDIDATES FOR POSTGRADUATE DEGREE:

SPONSORSHIP (Primary Mentorship) OF POSTDOCTORAL FELLOWS:

<i>Gang Xiao</i>	<i>2001-2002</i>
<i>Yan Li</i>	<i>2002-2004</i>
<i>Longwen Deng</i>	<i>2002-2004</i>
<i>Jin Qian</i>	<i>2003-2005</i>
<i>Tong Liu</i>	<i>2004-present</i>
<i>Sanqiang Pan</i>	<i>2004-2005</i>
<i>Qun Wang</i>	<i>2004</i>
<i>KS Latha</i>	<i>2005</i>

<i>Oleg Borisov</i>	2005
<i>Mohit R. Jain</i>	2005-2014
<i>Shengjie Bian</i>	2005-2008
<i>Cexiong Fu</i>	2005-2009
<i>Yan Wang</i>	2006
<i>Ahmet T. Baykal</i>	2006-2008
<i>Wei-wen Ge</i>	2006-2007
<i>Jennifer E. Grant</i>	2006-2007
<i>Changgong Wu</i>	2007-2014
<i>Bingjun Jiang</i>	2009-2010
<i>Andrew Parrott</i>	2010-2011
<i>Qing Li</i>	2010-2013
<i>Amit Ketkar</i>	2010-2011

TEACHING RESPONSIBILITIES: (Teaching effectiveness should be addressed in nominating letter)

A. Lectures or Course Directorships

School, course name, lecture title, hours

GRADUATE COURSE	DATE	SCHOOL	DIRECTOR
<i>Protein Structure</i>	<i>Fall 2000</i>	<i>NJMS</i>	<i>Wagner</i>
<i>Core Curriculum</i>	<i>Fall 2000</i>	<i>NJMS</i>	<i>Howells</i>
<i>Molecular Biology of the News</i>	<i>Spring 2001</i>	<i>NJMS</i>	<i>Mathews</i>
<i>Biochemical Techniques</i>	<i>Spring 2001</i>	<i>NJMS</i>	<i>Wagner</i>
<i>Biophysical Chemistry</i>	<i>Spring, 2001</i>	<i>Rutgers-NWK</i>	<i>Jordan</i>
<i>Protein Structure</i>	<i>Fall 2001</i>	<i>NJMS</i>	<i>Wagner</i>
<i>Bioinformatics</i>	<i>Spring 2002</i>	<i>NJMS</i>	<i>Byrnes</i>
<i>Computational Biology</i>	<i>Spring 2002</i>	<i>RWJMS</i>	<i>Byrnes</i>
<i>Molecular Biology of the News</i>	<i>Spring 2003</i>	<i>NJMS</i>	<i>Mathews</i>
<i>Advanced Immunology</i>	<i>Spring 2003</i>	<i>NJMS</i>	<i>Raveche</i>
<i>Protein Structure</i>	<i>Fall 2003</i>	<i>NJMS</i>	<i>Wagner</i>
<i>Analytical Method</i>	<i>Fall 2004</i>	<i>NJMS</i>	<i>Wagner</i>
<i>Protein Structure</i>	<i>Fall 2004</i>	<i>NJMS</i>	<i>Wagner</i>
<i>Molecular Biology of the News</i>	<i>Spring 2005</i>	<i>NJMS</i>	<i>Mathews</i>
<i>Intro to Genomics, Proteomics</i>	<i>Spring 2005</i>	<i>NJMS</i>	<i>Mathews</i>
<i>Adv Genomics, Proteomics</i>	<i>Fall 2005</i>	<i>NJMS</i>	<i>Mathews</i>
<i>Protein Structure</i>	<i>Fall 2005</i>	<i>NJMS</i>	<i>Wagner</i>
<i>Intro to Genomics, Proteomics</i>	<i>Spring 2006</i>	<i>NJMS</i>	<i>Mathews</i>
<i>Fundamental of Biochem</i>	<i>Spring 2006</i>	<i>NJMS</i>	<i>Kotenko</i>
<i>Intro to Genomics, Proteomics</i>	<i>Fall 2006</i>	<i>NJMS</i>	<i>Mathews</i>
<i>Protein Structure</i>	<i>Fall 2006</i>	<i>NJMS</i>	<i>Wagner</i>
<i>Cell Biology</i>	<i>Fall 2006</i>	<i>Rutgers-NWK</i>	<i>Kim</i>
<i>Adv Genomics, Proteomics</i>	<i>Spring 2007</i>	<i>NJMS</i>	<i>Tian</i>
<i>Molecular Biology of the News</i>	<i>Spring 2007</i>	<i>NJMS</i>	<i>Rogers</i>
<i>Intro to Genomics, Proteomics</i>	<i>Fall 2007</i>	<i>NJMS</i>	<i>Tian</i>
<i>Core Course</i>	<i>Fall 2007</i>	<i>NJMS</i>	<i>Rogers</i>
<i>Master Core Course</i>	<i>Fall 2007</i>	<i>NJMS</i>	<i>Wagner</i>
<i>Protein Dynamics in Health</i>	<i>Spring 2008</i>	<i>NJMS</i>	<i>Suzuki</i>
<i>Fundamental of Biochem</i>	<i>Spring 2008</i>	<i>NJMS</i>	<i>Kotenko</i>
<i>Intro to Genomics, Proteomics</i>	<i>Fall 2008</i>	<i>NJMS</i>	<i>Tian</i>
<i>Core Course</i>	<i>Fall 2008</i>	<i>NJMS</i>	<i>Rogers</i>
<i>Master Core Course</i>	<i>Fall 2008</i>	<i>NJMS</i>	<i>Wagner</i>
<i>Protein Dynamics in Health</i>	<i>Spring 2009</i>	<i>NJMS</i>	<i>Suzuki</i>
<i>Molecular Biology of the News</i>	<i>Spring 2009</i>	<i>NJMS</i>	<i>Rogers</i>
<i>Intro to Genomics, Proteomics</i>	<i>Fall 2009</i>	<i>NJMS</i>	<i>Tian</i>
<i>Core Course</i>	<i>Fall 2009</i>	<i>NJMS</i>	<i>Rogers</i>
<i>Protein Dynamics in Health</i>	<i>Spring 2010</i>	<i>NJMS</i>	<i>Suzuki</i>

<i>Fundamental of Biochem</i>	Spring 2010	NJMS	Kotenko
<i>Core Course</i>	Fall 2010	NJMS	Rogers
<i>Intro to Genomics, Proteomics</i>	Spring 2011	NJMS	Tian
<i>Protein Dynamics in Health</i>	Spring 2011	NJMS	Suzuki
<i>Core Course</i>	Fall 2011	NJMS	Coffman
<i>Intro to Genomics, Proteomics</i>	Spring 2012	NJMS	Tian
<i>Protein Dynamics in Health</i>	Spring 2012	NJMS	Suzuki
<i>Fundamental of Biochem</i>	Spring 2012	NJMS	Kotenko
<i>Core Course</i>	Fall 2012	NJMS	Coffman
<i>Seminars in Biomed Sci</i>	Fall 2012	NJMS	Birge
<i>Molecular Biology of the News</i>	Spring 2013	NJMS	Pandey
<i>Intro to Genomics, Proteomics</i>	Spring 2013	NJMS	Li
<i>Protein Dynamics in Health</i>	Spring 2013	NJMS	Suzuki
<i>IBMS</i>	Fall 2013	NJMS	Coffman
<i>Seminars in Biomed Sci</i>	Fall 2013	NJMS	Birge
<i>Fundamental of Biochem</i>	Spring 2014	NJMS	Kotenko
<i>Molecular Biology of the News</i>	Spring 2014	NJMS	Pandey
<i>Intro to Genomics, Proteomics</i>	Spring 2014	NJMS	Li
<i>Protein Dynamics in Health</i>	Spring 2014	NJMS	Suzuki
<i>IBMS</i>	Fall 2014	NJMS	Coffman
<i>Seminars in Biomed Sci</i>	Fall 2014	NJMS	Birge
<i>GMM</i>	Fall 2014	NJMS	O'Connor
<i>Molecular Biology of the News</i>	Spring 2015	NJMS	Pandey
<i>Intro to Genomics, Proteomics</i>	Spring 2015	NJMS	Li
<i>Protein Dynamics in Health</i>	Spring 2015	NJMS	Suzuki
<i>IBMS</i>	Fall 2015	NJMS	Coffman
<i>Medical School MCS</i>	Fall 2015	NJMS	Humayun
<i>IBMS</i>	Fall 2016	NJMS	Mathews
<i>Medical School MCS</i>	Fall 2016	NJMS	Humayun
<i>Intro to Genomics, Proteomics</i>	Spring 2017	NJMS	Hasimi
<i>IBMS</i>	Fall 2017	NJMS	Rogers
<i>Intro to Genomics, Proteomics</i>	Spring 2018	NJMS	Hasimi
<i>Medical School MCS</i>	Fall 2018	NJMS	Suzuki
<i>IBMS</i>	Fall 2018	NJMS	Mathews
<i>Intro to Genomics, Proteomics</i>	Spring 2019	NJMS	Hasimi
<i>Medical Biochemistry & Genetics</i>	Spring 2019	NJMS	Humayun
<i>Ethical Scientific Conduct</i>	Spring 2019	NJMS	Lutz
<i>Medical School MCS</i>	Fall 2019	NJMS	Suzuki
<i>IBMS</i>	Fall 2019	NJMS	Mathews
<i>Intro to Genomics, Proteomics</i>	Spring 2020	NJMS	Husain
<i>Medical Biochemistry & Genetics</i>	Spring 2020	NJMS	Humayun
<i>Medical School MCS</i>	Fall 2020	NJMS	Suzuki
<i>IBMS</i>	Fall 2020	NJMS	Mathews
<i>Intro to Genomics, Proteomics</i>	Spring 2021	NJMS	Husain
<i>Medical Biochemistry & Genetics</i>	Spring 2021	NJMS	Humayun
<i>Medical School MCS</i>	Fall 2021	NJMS	Suzuki
<i>IBMS</i>	Fall 2021	NJMS	Mathews
<i>Medical Biochemistry & Genetics</i>	Spring 2022	NJMS	Humayun
<i>Ethical Scientific Conduct</i>	Spring 2022	NJMS	Lutz
<i>Intro to Genomics, Proteomics</i>	Spring 2022	NJMS	Husain
<i>Medical School MCS</i>	Fall 2022	NJMS	Suzuki
<i>IBMS</i>	Fall 2022	NJMS	Mathews
<i>Intro to Genomics, Proteomics</i>	Spring 2023	NJMS	Husain
<i>Medical Biochemistry & Genetics</i>	Spring 2023	NJMS	Humayun
<i>Medical School MCS</i>	Fall 2023	NJMS	Suzuki
<i>IBMS</i>	Fall 2023	NJMS	Mathews
<i>Intro to Genomics, Proteomics</i>	Spring 2024	NJMS	Husain

IBMS
Intro to Genomics, Proteomics
IBMS
Intro to Genomics, Proteomics

Fall 2024
Spring 2025
Fall 2025
Spring 2026

NJMS
NJMS
NJMS
NJMS

Berlin
Husain
Berlin
Hoque

B. Research Training (other than Primary Mentorship)

Post Doctoral Fellows: *name, dates (inclusive) of training*

<i>Gang Xiao</i>	2001-2002
<i>Yan Li</i>	2002-2004
<i>Longwen Deng</i>	2002-2004
<i>Jin Qian</i>	2003-2005
<i>Tong Liu</i>	2004-present
<i>Sanqiang Pan</i>	2004-2005
<i>Qun Wang</i>	2004
<i>KS Latha</i>	2005
<i>Oleg Borisov</i>	2005
<i>Mohit R. Jain</i>	2005-2014
<i>Shengjie Bian</i>	2005-2008
<i>Cexiong Fu</i>	2005-2009
<i>Yan Wang</i>	2006
<i>Ahmet T. Baykal</i>	2006-2008
<i>Wei-wen Ge</i>	2006-2007
<i>Jennifer E. Grant</i>	2006-2007
<i>Changgong Wu</i>	2007-2014
<i>Bingjun Jiang</i>	2009-2010
<i>Andrew Parrott</i>	2010-2011
<i>Qing Li</i>	2010-2013
<i>Amit Ketkar</i>	2010-2011

Pre Doctoral Students: *name, dates (inclusive) of training*

<i>Zhengbin Zhang</i>	2002
<i>Veera D'mello</i>	2003
<i>Kenneth M. Wannemacher</i>	2005
<i>Raghavendra, Shammana</i>	2007
<i>Raghavendr Sridhar</i>	2014
<i>Chuanlong Cui</i>	2015-present
<i>Brian Jun (Dental School)</i>	2018
<i>Ian Casaren (High School)</i>	2018
<i>Johanna Lu (High School)</i>	2018

CLINICAL RESPONSIBILITIES: (Clinical effectiveness should be addressed in nominating letter)

GRANT SUPPORT: (Please list in either chronological order with newest or most current first OR in reverse chronological order, as desired)

A. Principal Investigator

1. 1S10OD038256 (P.I.: Hong Li)

National Institutes of Health

An Orbitrap Astral Mass Spectrometer for Elevating Proteomics Sensitivity at Rutgers Biomedical and Health Sciences Newark Campus

Date: 08/01/25 to 07/31/26

Total Direct: \$1,960,930

2. 1S10OD034300-01A1 (P.I.: Hong Li)

National Institutes of Health

Bruker timsTOF HT Mass Spectrometer for Accelerating Proteomics Research at Rutgers Newark Campus

Date: 09/01/24 to 08/30/25

Total Direct: \$1,077,584

3. P30NS046593 (Contact PI, Multi-PI with Peter Lobel, RWJMS)

National Institutes of Health
Rutgers Mass Spectrometry Center for Integrative Neuroscience Research
Date: 07/01/15 to 06/30/21
Total Cost: \$2,544,000
Total Direct: \$1,600,000

Hong Li Portion for NJMS
Li efforts: 20%, with 5% on grant
Total Cost: \$1,526,400
Total Direct: \$960,000

4. S10 OD025047 (P.I.: Hong Li)

National Institutes of Health
Orbitrap Fusion Lumos Tribrid MS System for Proteomics Research at Rutgers
Newark Campus
Date: 05/01/18 to 04/30/19
Total Direct: \$1,092,346

5. Fulbright Research Scholar Award (P.I.: Hong Li)

J. William Fulbright Foreign Scholarship Program
Advanced Protein Technology Research Collaboration between Institut Pasteur and
Rutgers University
Date: 09/01/17—01/15/18
Total Award: €12,000

6. P30NS046593 (P.I.: Hong Li)

National Institutes of Health
Renewal of a UMDNJ NeuroProteomics Core Facility
Date: 12/1/2004-11/30/15
Total Cost: \$ 7,352,207
Total Direct: \$4,932,287

7. UMDNJ Foundation Award (P.I.: Hong Li)

Proteomic Analysis of Trx1 Mediated Redox Signal Transduction
Date: 7/01/07-6/30/09
Total Cost: \$70,000
Total Direct: \$70,000

8. NJ Equipment Leasing Fund Award (P.I.: Hong Li)

New Jersey Commission on Higher Education
Establishment of Center for Advanced Proteomics
Date: 10/15/01-10/14/03
Total Cost: \$1,660,000
Total Direct: \$1,660,000

B. Co-Investigator

1. R01HL171094 (P.I.: Diego Fraidenaich and Co-Investigator Hong Li (5%))

National Institutes of Health

Connexin 43: a new player in Duchenne muscular dystrophy associated cardiomyopathy

Date: 07/15/24 to 05/31/28

Total Cost: \$ 2,815,156

Total Direct: \$ 1,835,192

2. R01HL091469 (P.I.: Junichi Sadoshima and Co-Investigator Hong Li (5%))

National Institutes of Health

Cysteine oxidation in the heart

Date: 06/01/24 to 04/30/28

Total Cost: \$ 2,234,496

Total Direct: \$ 1,405,344

3.R01GM112415 (P.I.: Annie Beuve and Co-Investigator Hong Li (10%))

National Institutes of Health

NO Signaling by a Soluble Guanylyl Cyclase-Thioredoxin Transnitrosation

Date: 04/01/15 to 08/31/24

Total Cost: \$ 2,770,073

Total Direct: \$ 1,775,687

4. RENALYTIX AI contract (P.I. Evren Azeloglu, Mt Sinai School of Medicine. Hong Li, P.I.-Proteomics Core, 5%)

Renalytix AI

Multi-center Assessment of Survivors for Kidney Disease after COVID-19 (MASKeD-COVID)

Date: 7/1/21-11/30/22

Total Cost: N/A

Hong Li Portion for Rutgers Subcontract

Total Subcontract to Rutgers \$260,000

5. R01DK118222 (P.I.: Evren Azeloglu and Co-Investigator Hong Li (5%))

National Institutes of Health

Mechanosensitive Determinants of Podocyte Physiology- Covid 19 Supplement

Date: 7/1/20 to 6/30/21

Total Subcontract to Rutgers: \$468,762

6. U54HG008098 (P.I. Ravi Iyengar, Mt Sinai School of Medicine. Hong Li, subcontract P.I.-Proteomics Core, 10%)

National Institutes of Health

Drug Combination Signatures for Prediction and Mitigation of Toxicity

Date: 9/10/14-6/30/20

Total Cost: \$12,598,116

Total Direct: \$7,743,690

Hong Li Portion for Rutgers Subcontract

Total Cost: \$908,904

Total Direct: \$571,650

7. R01AG023039 (P.I. Junichi Sadoshima, Co-Investigator Hong Li (5%))

National Institutes of Health

Redox Regulation in Myocardial Disease

Date: 05/15/14 to 01/31/19

Total Cost: \$1,351,640

Total Direct: \$950,716

8. R01HL091469 (P.I. Junichi Sadoshima, Co-Investigator Hong Li (5%))

National Institutes of Health
CARDIOPROTECTIVE EFFECTS OF THIOREDOXIN 1
Date: 3/3/13 to 02/28/18
Total Cost: \$2,659,030
Total Direct: \$1,675,860

9. R01HL112330 (P.I. Junichi Sadoshima, Co-Investigator Hong Li (5%))

National Institutes of Health
REGULATION OF MYOCARDIAL GROWTH AND DEATH BY THE HIPPO
PATHWAY
Date: 2/1/12 to 11/30/16
Total Cost: \$2,214,320
Total Direct: \$1,419,435

10. P50GM071558 (P.I. Ravi Iyengar, Mt Sinai School of Medicine. Hong Li, subcontract P.I.-Proteomics Core, 5%)

National Institutes of Health
SYSTEM BIOLOGY CENTER IN NEW YORK
Date: 9/1/13 to 8/31/14
Total Cost: \$2,000,001
Total Direct: \$1,264,580

Hong Li Portion for Rutgers Subcontract

Total Cost: \$39,750
Total Direct: \$25,000

11. 1R21AI076937-01A1 (Sergei Kotenko, P.I.)

National Institutes of Health
Evasion of antiviral protection by poxvirus-encoded interferon antagonists
Date: 6/05/09-5/31/11
Total Cost: \$427,625
Total Direct: \$275,000

12. 1R21AI073703-01A1 (Virendra Pandey, P.I.)

National Institutes of Health
Proteomics of HCV Replication Complex
Date: 5/07/09-4/30/11
Total Cost: \$427,625
Total Direct: \$275,000

13. ALR TIL Grant Award (Sergei Kotenko, P.I.)

American Lupus Research
Date: 1/1/09-12/31/10
Total Cost: \$ 489,202
Total Direct: \$ 452,964

14. Columbia University (Edouard Azzam, P.I.)

High Throughput Minimally Invasive Radiation Biodosimetry Center
Date: 8/1/08-7/31/10
Total Cost: \$85,000
Total Direct: \$67,460

15. 1R01AI057468-01A1 (Sergei Kotenko, P.I.)

National Institutes of Health

Role of Interferon-lambda in Antiviral Response

Date: 12/16/04-11/30/09

Total Cost: \$1,935,425

Total Direct: \$1,250,000

16. 2R01AI034552-12A1 (Michael Mathews, P.I.)

National Institutes of Health

Functions of Double-stranded RNA Binding Proteins

Date: 7/15/04-6/30/09

Total Cost: \$2,634,116

Total Direct: \$1,702,888

17. 1R21GM079255 (Beatrice Haimovich, P.I.)

National Institutes of Health

Induction of Autophagy in Human Macrophages by Lipopolysaccharide

Date: 1/01/07-12/31/08

Total Cost: \$427,900

Total Direct: \$275,000

18. 1S10RR021102 (Lin Yan, P.I.)

National Institutes of Health

QSTAR Elite Pro High Performance Quadrupole Time-of-Flight Mass Spectrometer

Date: 4/1/07-3/31/08

Total Cost: \$475,875

Total Direct: \$475,875

19. 2R01DA009113-04A1 (Richard Howells, P.I.)

National Institutes of Health

Purification and Mass Spectrometry of Opioid Receptors

Date: 4/01/93-1/31/08

Total Cost: \$971,875

Total Direct: \$625,000

20. 1R01HL067871-01A2 (Gill Diamond, P.I.)

National Institutes of Health

Host-Pathogen Interactions in the Mammalian Airway

Role: Co-investigator

Date: 4/1/03-3/31/07

Total Cost: \$1,244,000

Total Direct: \$800,000

21. DBI-0100831 (Michael Mathews, P.I.)

National Science Foundation

Integrated LC/MS/MS System-QTOF

Date: 5/15/01-5/14/03

Total Cost: \$326,275

Total Direct: \$326,275

22. 1S10 RR15800-01A1 (Michael Mathews, P.I.)

National Institutes of Health

Integrated LC/MS/MS System-LCQ

Date: 5/1/02-4/30/03

Total Cost: \$307,650

Total Direct: \$307,650

C. Pending

1. R01 HL144626 (P.I.: Junichi Sadoshima and Co-Investigator Hong Li (5%))

National Institutes of Health

GSK-3beta inhibits lipotoxicity

Date: 04/01/26 to 03/30/31

Total Cost: \$ 2,227,000

Total Direct: \$ 3,540,785

JIT requested by NIH

PUBLICATIONS: (Please list newest or most current first; published or accepted for publication only; should be segregated into the following categories)

A. Refereed Original Article in Journal

1. Han X, Shen J, Yan J, Tacke R, Dai W, Mao Q, Queen Daguplo H, Liu S, Islam A, Liu T, Koch MC, Lin RZ, **Li H**, Anthony T, Xie P, Zhang L, Gao S, Simon MC, Chen X, Yang J, Su X, Zong WX. Impaired nitrogenous waste clearance promotes hepatocellular carcinoma. *Sci Adv.* 2026 Jan 9;12(2):eacc0766. doi: 10.1126/sciadv.aec0766. Epub 2026 Jan 9. PMID: 41512056; PMCID: PMC12787525.
2. Nakada Y, Titus AS, Mizushima W, Yang Y, Zhai P, Tian Y, Oka S, Kashihara T, Fefelova N, Pamarthi SH, Liu T, **Li H**, Xie LH, Takayama K, Ikeda S, Matsushita M, Huang CY, Hsu CP, Onoue K, Saito Y, Sadoshima J. p22^{phox} prevents the oxidation of SERCA2a and stabilizes it in the heart. *Nat Cardiovasc Res.* 2025 Sep;4(9):1187-1205. doi: 10.1038/s44161-025-00699-x. Epub 2025 Sep 3. PMID: 40903547; PMCID: PMC12436179.
3. Keller MA, Ivessa A, Liu T, **Li H**, Romanienko PJ, Nakamura M. KAT6A acetylation regulates AMPK function and hypertrophic remodeling in the heart. *Mol Metab.* 2025 Aug 25;101:102239. doi: 10.1016/j.molmet.2025.102239. Epub ahead of print. PMID: 40865637.
4. Nanditha Anandakrishnan, Zhengzi Yi, Zeguo Sun, Tong Liu, Jonathan Haydak, Sean Eddy, Pushkala Jayaraman, Stefanie DeFronzo, Aparna Saha, Qian Sun, Dai Yang, Anthony Mendoza, Gohar Mosoyan, Huei Hsun Wen, Jia Fu, Thomas Kehrer, Rajasree Menon, Edgar A. Otto, Bradley Godfrey, Joanna Yang, Mayte Suarez-Farinas, Sean Leffters, Akosua Twumasi, Kristin Meliambro, Alexander W. Charney, Adolfo Garcia-Sastre, Kirk N. Campbell, G. Luca Gusella, John Cijiang He, Lisa Miorin, Girish N. Nadkarni, Juan Wisnivesky, **Hong Li**, Matthias Kretzler, Steve G. Coca, Lili Chan, Weijia Zhang, Evren U. Azeloglu, Liquid Biopsy-Multiomics Link Adhesion Pathway Dysregulation to Kidney Injury Severity, *Kidney International Reports*, 2025. <https://doi.org/10.1016/j.ekir.2025.07.021>.
5. Sun Z, Yi Z, Wei C, Wang W, Ren T, Cravedi P, Tedla F, Ward SC, Azeloglu E, Schrider DR, Li Y, Khan A, Zanoni F, Fu J, Ali S, Liu S, Liang D, Liu T, **Li H**, Xi C, Vy TH, Mosoyan G, Sun Q, Kumar A, Zhang Z, Farouk S, Campbell K, Ochando J, Lee K, Coca S, Xiang J, Connolly P, Gallon L, O'Connell PJ, Colvin R, Menon MC, Nadkarni G, He JC, Kraft M, Jiang X, Zhang X, Kiryluk K, Cherukuri A, Lakkis FG, Zhang W, Chen SH, Heeger PS, Zhang W. LILRB3 genetic variation is associated with kidney transplant failure in African American recipients. *Nat Med.* 2025 Mar 10. doi: 10.1038/s41591-025-03568-z. Epub ahead of print. Erratum in: *Nat Med.* 2025 Apr 15. doi: 10.1038/s41591-025-03706-7. PMID: 40065170.
6. Vidović D, Shamsaei B, Schürer SC, Kogan P, Chojnacki S, Kouril M, Medvedovic M, Niu W, Azeloglu EU, Birtwistle MR, Chen Y, Chen T, Hansen J, Hu B, Iyengar R, Jayaraman G, **Li H**, Liu T, Sobie EA, Xiong Y, Berberich MJ, Bradshaw G, Chung M, Everley RA, Gaudio B, Hafner M, Kalocsay M, Mills CE, Nariya MK, Sorger PK, Subramanian K, 5

Victor C, Banuelos M, Dardov V, Holewinski R, Manalo DM, Mandefro B, Matlock AD, Ornelas L, Sareen D, Svendsen CN, Vaibhav V, Van Eyk JE, Venkatraman V, Finkbiener S, Fraenkel E, Rothstein J, Thompson L, Asiedu J, Carr SA, Christianson KE, Davison D, Dele-Oni DO, DeRuff KC, Egri SB, Jacome ASV, Jaffe JD, Lam D, Litichevskiy L, Lu X, Mullahoo J, Officer A, Papanastasiou M, Peckner R, Toder C, Blanchard J, Bula M, Ko T, Tsai LH, Young JZ, Sharma V, Pillai A, Meller J, MacCoss MJ. Comprehensive proteomics metadata and integrative web portals facilitate sharing and integration of LINCS multiomics data. *Mol Cell Proteomics*. 2025 Mar 13:100947. doi: 10.1016/j.mcpro.2025.100947. Epub ahead of print. PMID: 40089066.

7. Yang P, Gao S, Shen J, Liu T, Lu K, Han X, Wang J, Ni HM, Ding WX, Li H, Pan JA, Peng K, Zong WX. TRIM21-mediated ubiquitination of SQSTM1/p62 abolishes its Ser403 phosphorylation and enhances palmitic acid cytotoxicity. *Autophagy*. 2025 Jan;21(1):178-190. doi: 10.1080/15548627.2024.2394308. Epub 2024 Sep 10. PMID: 39172027; PMCID: PMC11702951.
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10. Deng D, Begum H, Liu T, Zhang J, Zhang Q, Chu TY, Li H, Lemenze A, Hoque M, Soteropoulos P, Hou P. NFAT5 governs cellular plasticity-driven resistance to KRAS-targeted therapy in pancreatic cancer. *J Exp Med*. 2024 Nov 4;221(11):e20240766. doi: 10.1084/jem.20240766. Epub 2024 Oct 21. PMID: 39432061; PMCID: PMC11497412.
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13. Cui C, Shu P, Sadeghian T, Younis W, Li H, Beuve A. Inhibitory Peptide of Soluble Guanylyl Cyclase/Trx1 Interface Blunts the Dual Redox Signaling Functions of the Complex. *Antioxidants (Basel)*. 2023 Apr 10;12(4):906. doi: 10.3390/antiox12040906. PMID: 37107281; PMCID: PMC10135718.
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16. Oka SI, Sreedevi K, Shankar TS, Yedla S, Arowa S, James A, Stone KG, Olmpos K, Sabry AD, Horiuchi A, Cawley KM, O'very SA, Tong M, Byun J, Xu X, Kashyap S, Mourad Y,

- Vehra O, Calder D, Lunde T, Liu T, **Li H**, Mashchek JA, Cox J, Sajjoh Y, Drakos SG, Warren JS. PERM1 regulates energy metabolism in the heart via ERR α /PGC-1 α axis. *Front Cardiovasc Med.* 2022 Nov 7;9:1033457. doi: 10.3389/fcvm.2022.1033457. PMID: 36419485; PMCID: PMC9676655.
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 25. Xiaowen Wang, Jun Yang, Justin Wong, Jessie Yanxiang Guo, Holly Van Remmen, **Hong Li**, Eileen White, Chen Liu, Megerditch Kiledjian and X.F. Steven Zheng (2021), SOD1 Is Crucial for Growth and Ribosome Biogenesis in KRAS-p53 Driven Lung Tumors in Mice. *Nature Communications*. Article number: 2259.
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B. Books, Monographs and Chapters

1. Wu, C., Wu, C., Liu, T., Wang, Y., Yan, L., Cui, C., Beuve A., **Li, H.**, (2018). Biotin switch processing and mass spectrometry analysis of S-nitrosated thioredoxin and its transnitrosation targets. *Methods Mol Biol*. 2018;1747:253-266.
2. Liu, T., Chen, W., Pan, S., Cui, C., **Li, H.**, and Zakharian, E. (2016). Determination of polyhydroxybutyrate (PHB) post-translational modifications of proteins using mass spectrometry. In *Analysis of Post-Translational Modifications and Proteolysis in Neuroscience*. Springer, New York. *Methods in Neuroscience*. Springer, New York, Grant, J. and **Li, H.**, (Eds). pp 275-287.
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4. Grant, J. E., **Li, H.**, (2014). Identifying citrullination sites by mass spectrometry. In *Protein Deimination in Human Health and Disease*, Vol XIII, Springer, New York, Nicholas, A., Bhattacharya, S. (Ed).
5. Fu, C., Liu, T., Parrott, A, **Li, H.**, (2013). Identification of thioredoxin target protein networks in cardiac tissues of a transgenic mouse. in *Heart Proteomics*, Methods in Molecular Biology. Springer, New York. Vivanco, Fernando (Ed.). *Methods Mol Biol*. 2013;1005:181-97.
6. Jain, M. Liu, T. Wood, T., **Li, H.**, (2012). iTRAQ Proteomics Profiling of Regulatory Proteins During Oligodendrocyte Differentiation. in *Expression Profiling in Neuroscience*, Neuromethods, Vol. 64. Springer, New York. Karamanos, Yannis (Ed.) p. 119-138.
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C. Patents Held

None

- D. Other Articles (Reviews, Editorials, etc.) In Journals; Chapters; Books; other Professional Communications
1. Grant, J and **Li, H.**, (2016). Post-Translational Modifications and Proteolysis in Neuroscience Studies - Introduction. In *Analysis of Post-Translational Modifications and Proteolysis in Neuroscience*. Springer, New York, Grant, J., Li, H., (Eds).
 2. Wu, C., Parrott, A. M., Fu, C., Liu, T., Marino, S. M., Gladyshev, V. N., Jain, M. R., Baykal, A. T., Li, Q., Oka, S., Sadoshima, J., Beuve A., Simmons, W. J. & **Li, H.** (2011) Thioredoxin-mediated post-translational modifications: Reduction, transnitrosylation, denitrosylation and related proteomics methodologies. *Antioxid Redox Signal*. 15(9):2565-604.
 3. Jain, M., Ge, W., Elkabes, S and **Li, H.** (2008) Amyotrophic lateral sclerosis: Protein Chaperone Dysfunction Revealed by Proteomic Studies of Animal Models. *Proteomics-Clinical App*. 2, 670-84.
 4. Elkabes, S. and **Li, H.** (2007) Proteomic strategies in multiple sclerosis and its animal models. *Proteomics-Clinical App*. 1, 1393-1405.
- E. Abstracts: *None*
- F. Reports: *None*

PRESENTATIONS:

A. Scientific (*Basic Science Seminars*):

International

1. Fu, C, Wu, C, Liu, T, Ago, T, Sadoshima J and **Li, H.** (2009) Proteomic Identification of Thioredoxin Reductive Target Proteins. 11th Int. Congress on Amino Acids, Peptide and Protein. Vienna, Austria.
2. **Li, H.** (2013) Redox regulatory mechanism of transnitrosylation by thioredoxin. Sun Yet-Sun University, Guangzhou, China.
3. **Li, H.** (2017) MS Identification of Redox PTMs Regulated by Nitric Oxide. Institut Pasteur, Paris, France.
4. **Li, H.** (2017) Proteomics Identification of Redox PTMs Regulated by Nitric Oxide. Institut Pasteur, Paris, France.
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6. **Li, H.**, Wang, H., Schegg, K. and Schooley, D. A. (1995) Metabolism of an Insect Diuretic Hormone Studied by On-line Microbore Liquid Chromatography Coupled to Electrospray Ionization Mass Spectrometry, 12th Montreux LC/MS Symposium, Hilton Head Island, South Carolina.
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