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

DATE: September 24, 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 VISITNG 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:

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) ZES1 LWJ K R 1*

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. ZES1 LWJ-J (MI) 1*

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 Nagrajan -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:

Gang Xiao	*2001-2002*
Yan Li	*2002-2004*
Longwen Deng	*2002-2004*
Jin Qian	*2003-2005*
Tong Liu	*2004-present*
Sanqiang Pan	*2004-2005*
Qun Wang	*2004*
KS Latha	*2005*
Oleg Borisov	*2005*
Mohit R. Jain	*2005-2014*
Shengjie Bian	*2005-2008*

Cexiong Fu	*2005-2009*
Yan Wang	*2006*
Ahmet T. Baykal	*2006-2008*
Wei-wen Ge	*2006-2007*
Jennifer E. Grant	*2006-2007*
Changgong Wu	*2007-2014*
Bingjun Jiang	*2009-2010*
Andrew Parrott	*2010-2011*
Qing Li	*2010-2013*
Amit Ketkar	*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***
Protein Structure	*Fall 2000*	*NJMS*	*Wagner*
Core Curriculum	*Fall 2000*	*NJMS*	*Howells*
Molecular Biology of the News	*Spring 2001*	*NJMS*	*Mathews*
Biochemical Techniques	*Spring 2001*	*NJMS*	*Wagner*
Biophysical Chemistry	*Spring, 2001*	*Rutgers-NWK*	*Jordan*
Protein Structure	*Fall 2001*	*NJMS*	*Wagner*
Bioinformatics	*Spring 2002*	*NJMS*	*Byrnes*
Computational Biology	*Spring 2002*	*RWJMS*	*Byrnes*
Molecular Biology of the News	*Spring 2003*	*NJMS*	*Mathews*
Advanced Immunology	*Spring 2003*	*NJMS*	*Raveche*
Protein Structure	*Fall 2003*	*NJMS*	*Wagner*
Analytical Method	*Fall 2004*	*NJMS*	*Wagner*
Protein Structure	*Fall 2004*	*NJMS*	*Wagner*
Molecular Biology of the News	*Spring 2005*	*NJMS*	*Mathews*
Intro to Genomics, Proteomics	*Spring 2005*	*NJMS*	*Mathews*
Adv Genomics, Proteomics	*Fall 2005*	*NJMS*	*Mathews*
Protein Structure	*Fall 2005*	*NJMS*	*Wagner*
Intro to Genomics, Proteomics	*Spring 2006*	*NJMS*	*Mathews*
Fundemental of Biochem	*Spring 2006*	*NJMS*	*Kotenko*
Intro to Genomics, Proteomics	*Fall 2006*	*NJMS*	*Mathews*
Protein Structure	*Fall 2006*	*NJMS*	*Wagner*
Cell Biology	*Fall 2006*	*Rutgers-NWK*	*Kim*
Adv Genomics, Proteomics	*Spring 2007*	*NJMS*	*Tian*
Molecular Biology of the News	*Spring 2007*	*NJMS*	*Rogers*
Intro to Genomics, Proteomics	*Fall 2007*	*NJMS*	*Tian*
Core Course	*Fall 2007*	*NJMS*	*Rogers*
Master Core Course	*Fall 2007*	*NJMS*	*Wagner*
Protein Dynamics in Health	*Spring 2008*	*NJMS*	*Suzuki*
Fundemental of Biochem	*Spring 2008*	*NJMS*	*Kotenko*
Intro to Genomics, Proteomics	*Fall 2008*	*NJMS*	*Tian*
Core Course	*Fall 2008*	*NJMS*	*Rogers*
Master Core Course	*Fall 2008*	*NJMS*	*Wagner*
Protein Dynamics in Health	*Spring 2009*	*NJMS*	*Suzuki*
Molecular Biology of the News	*Spring 2009*	*NJMS*	*Rogers*
Intro to Genomics, Proteomics	*Fall 2009*	*NJMS*	*Tian*
Core Course	*Fall 2009*	*NJMS*	*Rogers*
Protein Dynamics in Health	*Spring 2010*	*NJMS*	*Suzuki*
Fundamental of Biochem	*Spring 2010*	*NJMS*	*Kotenko*
Core Course	*Fall 2010*	*NJMS*	*Rogers*
Intro to Genomics, Proteomics	*Spring 2011*	*NJMS*	*Tian*

Protein Dynamics in Health	*Spring 2011*	*NJMS*	*Suzuki*
Core Course	*Fall 2011*	*NJMS*	*Coffman*
Intro to Genomics, Proteomics	*Spring 2012*	*NJMS*	*Tian*
Protein Dynamics in Health	*Spring 2012*	*NJMS*	*Suzuki*
Fundamental of Biochem	*Spring 2012*	*NJMS*	*Kotenko*
Core Course	*Fall 2012*	*NJMS*	*Coffman*
Seminars in Biomed Sci	*Fall 2012*	*NJMS*	*Birge*
Molecular Biology of the News	*Spring 2013*	*NJMS*	*Pandey*
Intro to Genomics, Proteomics	*Spring 2013*	*NJMS*	*Li*
Protein Dynamics in Health	*Spring 2013*	*NJMS*	*Suzuki*
IBMS	*Fall 2013*	*NJMS*	*Coffman*
Seminars in Biomed Sci	*Fall 2013*	*NJMS*	*Birge*
Fundamental of Biochem	*Spring 2014*	*NJMS*	*Kotenko*
Molecular Biology of the News	*Spring 2014*	*NJMS*	*Pandey*
Intro to Genomics, Proteomics	*Spring 2014*	*NJMS*	*Li*
Protein Dynamics in Health	*Spring 2014*	*NJMS*	*Suzuki*
IBMS	*Fall 2014*	*NJMS*	*Coffman*
Seminars in Biomed Sci	*Fall 2014*	*NJMS*	*Birge*
GMM	*Fall 2014*	*NJMS*	*O'Connor*
Molecular Biology of the News	*Spring 2015*	*NJMS*	*Pandey*
Intro to Genomics, Proteomics	*Spring 2015*	*NJMS*	*Li*
Protein Dynamics in Health	*Spring 2015*	*NJMS*	*Suzuki*
IBMS	*Fall 2015*	*NJMS*	*Coffman*
Medical School MCS	*Fall 2015*	*NJMS*	*Humayun*
IBMS	*Fall 2016*	*NJMS*	*Mathews*
Medical School MCS	*Fall 2016*	*NJMS*	*Humayun*
Intro to Genomics, Proteomics	*Spring 2017*	*NJMS*	*Hasimi*
IBMS	*Fall 2017*	*NJMS*	*Rogers*
Intro to Genomics, Proteomics	*Spring 2018*	*NJMS*	*Hasimi*
Medical School MCS	*Fall 2018*	*NJMS*	*Suzuki*
IBMS	*Fall 2018*	*NJMS*	*Mathews*
Intro to Genomics, Proteomics	*Spring 2019*	*NJMS*	*Hasimi*
Medical Biochemistry & Genetics	*Spring 2019*	*NJMS*	*Humayun*
Ethical Scientific Conduct	*Spring 2019*	*NJMS*	*Lutz*
Medical School MCS	*Fall 2019*	*NJMS*	*Suzuki*
IBMS	*Fall 2019*	*NJMS*	*Mathews*
Intro to Genomics, Proteomics	*Spring 2020*	*NJMS*	*Husain*
Medical Biochemistry & Genetics	*Spring 2020*	*NJMS*	*Humayun*
Medical School MCS	*Fall 2020*	*NJMS*	*Suzuki*
IBMS	*Fall 2020*	*NJMS*	*Mathews*
Intro to Genomics, Proteomics	*Spring 2021*	*NJMS*	*Husain*
Medical Biochemistry & Genetics	*Spring 2021*	*NJMS*	*Humayun*
Medical School MCS	*Fall 2021*	*NJMS*	*Suzuki*
IBMS	*Fall 2021*	*NJMS*	*Mathews*
Medical Biochemistry & Genetics	*Spring 2022*	*NJMS*	*Humayun*
Ethical Scientific Conduct	*Spring 2022*	*NJMS*	*Lutz*
Intro to Genomics, Proteomics	*Spring 2022*	*NJMS*	*Husain*
Medical School MCS	*Fall 2022*	*NJMS*	*Suzuki*
IBMS	*Fall 2022*	*NJMS*	*Mathews*
Intro to Genomics, Proteomics	*Spring 2023*	*NJMS*	*Husain*
Medical Biochemistry & Genetics	*Spring 2023*	*NJMS*	*Humayun*
Medical School MCS	*Fall 2023*	*NJMS*	*Suzuki*
IBMS	*Fall 2023*	*NJMS*	*Mathews*
Intro to Genomics, Proteomics	*Spring 2024*	*NJMS*	*Husain*
IBMS	*Fall 2024*	*NJMS*	*Berlin*
Intro to Genomics, Proteomics	*Spring 2025*	*NJMS*	*Husain*

B. Research Training (other than Primary Mentorship)

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

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

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

Zhengbin Zhang	*2002*
Veera D'mello	*2003*
Kenneth M. Wannemacher	*2005*
Raghavendra, Shammana	*2007*
Raghavendr Sridhar	*2014*
Chuanlong Cui	*2015-present*
Brian Jun (Dental School)	*2018*
Ian Casaren (High School)	*2018*
Johanna Lu (High School)	*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 Fraidenraich 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
NO Signaling by a Soluble Guanylyl Cyclase-Thioredoxin Transnitrosation
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. R01HLl12330 (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. *Funding Organization, title, proposed funding date, proposed award*
2.

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. 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.

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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.

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3. Jain, M., Wu1, Li, Q., Cui, C, Dai, H. and **Li, H.** (2016). Proteomics identification of redox-sensitive nuclear protein targets of Human Thioredoxin 1 from neuroblastoma SHSY-5Y cell line. 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). pp97-110.
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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.

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8. Liu, T., Hu, J., **Li, H.**, (2009). iTRAQ-Based Shotgun Neuroproteomics. in *Neuroproteomics, Methods in Molecular Biology*, (chap. 14), Ottens, A. K., Wang, K. K. W. (Eds.), Humana Press, Totowa, p. 322.

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.

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E. Abstracts*: None*

F. Reports: *None*

PRESENTIONS:

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.
5. **Li, H.** (2018) Functional Regulation of NO-dependent Protein Modifications. Institut de Biologie Physico-Chimque, Paris, France

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13. Shengjie Bian, **Hong Li**, Jade Liu, Andrew L. Harris & Darren Locke. (2008) Posttranslational Modifications of Connexin26 IDENTIFIED by MALDI-TOF/TOF Mass Spectrometry. ASCB.
14. E. Memin, G.R. Moran, P. He2, **H. Li**, H. Remotti, J. Levy, T. Pe'ery, M.B. Mathews, M. Jain, A.M. Popovicz, H.M. Hanauske-Abel. (2008) Medical Treatment of Tyrosinemia I: 4-HPPD Inhibition induces 4-HPPD Expression. PAS Meeting,
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18. Jain M. R., Liu T., Bian, S., Elkabes, S and **Li, H.** (2009) Altered Proteolytic Events in Experimental Autoimmune Encephalomyelitis Discovered by iTRAQ Shotgun Proteomics Analysis of Spinal Cord. ASMS. Philadelphia, PA.
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23. Cui, C, Liu, T, Lima D. B, Carvalho, P. C, Beuve, A and **Li, H.** (2019) Comprehensive Identification of Protein Disulfide Bonds with Pepsin/Trypsin Digestion, Orbitrap HCD and Spectrum Identification Machine. 2019 Keystone Symposia Conference, Stockholm, Sweden
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Regional

20. **Li, H.,** (1999) Identification of peptides from brain and pituitary of Cpe(fat)/Cpe(fat) mice. Rutgers-Newark
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29. **Li, H.,** (2010) Redox regulatory mechanism of transnitrosylation by thioredoxin. Rutgers-New Brunswick-Lipid Center
30. **Li, H.,** (2017) Nitric Oxide-induced Redox Modifications of Soluble Guanylyl Cyclase. Department of Microbiology, Biochemistry and Molecular Genetics. Rutgers- NJMS.
31. **Li, H.,** (2017) Nitric Oxide-induced Redox Modifications of Soluble Guanylyl Cyclase. Rutgers Center for Integrative Proteomics Research.
32. **Li, H.,** (2017) Proteomic Identification of Redox-Dependent Cell Survival Targets of Thioredoxin. CINJ Cancer Pharmacology Research Program.

B. Professional *(Clinical)*: N/A