



Mark R. Chance, PhD
Case Western Reserve University
School of Medicine

Dr. Chance is Distinguished University Professor and Vice Dean for Research and Graduate Education at the School of Medicine of Case Western Reserve University. He holds faculty appointments in the Departments of Nutrition, Genetics and Genome Sciences, and General Medical Sciences. He is also the holder of the Charles W. and Iona A. Mathias Chair in Cancer Research. He is founder and director of the Center for Proteomics and Bioinformatics. The Center for Proteomics and Bioinformatics is an interdisciplinary research center that has attracted over \$120 million in research funding to Case Western Reserve University since 2005. He is the founder and director of the Center for Synchrotron Biosciences (<https://case.edu/medicine/csb/>) established in 1994 at Brookhaven Laboratory, which has been a world leading resource for synchrotron biophysics since that time with over 2500 publications to date. In 2017, the Center for Synchrotron Biosciences was recognized as second place winner in the American Association of Medical Colleges (AAMC) sharing research resources award competition. Dr. Chance is also Associate PI of the Cleveland Center for Translational Science Collaborative (<https://case.edu/medicine/ctsc/>) and serves as Founder and Director of the Systems Biology and Bioinformatics Graduate Program at CWRU, established in 2011 (<https://case.edu/medicine/nutrition/sybb>).

Dr. Chance is an internationally recognized expert in proteomics, structural biology, and systems biology with over 300 publications (H-index of 67 with ~15,500 citations, Google Scholar). Dr. Chance has led dozens of peer-reviewed federally funded research programs from the National Institute of Health, including funding from 15 different Centers and Institutes of the NIH as an individual investigator or leader in interdisciplinary Centers or Program Projects. He has also received peer-reviewed funding from NSF, DOD, and USDA and has had continuous peer-reviewed federal funding since 1990. He is a member of numerous national advisory boards and a frequently invited lecturer at national and international meetings. In 2014 he was awarded the Naomi Kanof Medal for Distinguished Achievement in Clinical Investigation (from the Society of Investigative Dermatology), in 2016 he was elected a Fellow of the American Association for the Advancement of Science (in the field of chemistry). He has multiple inventions and patents and is founder and CSO of a CWRU spinout company in the fields of systems and structural biology, NeoProteomics, Inc.

As Vice Dean for Research he oversees \$350 million in research activity across faculty in the Medical School and in key hospital affiliates spanning hundreds of federal, foundation and industry research awards. He heads the Office of Research Administration, which oversees grants and contracts, space, scientific cores, graduate education, and research support for the School of Medicine. For the Cleveland Center for Translational Science Collaborative, he heads the Office of Translation and Innovation, which supports a wide range of translational research and entrepreneurship programs to accelerate basic science observations towards products.

EDUCATION:

- 1986 Ph.D. (Biophysics), University of Pennsylvania
1980-1984 Graduate courses and qualifying examination in Biochemistry, Massachusetts Institute of Technology
1980 B.A. with Honors in Biology, (cum laude) Wesleyan University

PROFESSIONAL EMPLOYMENT:

- 2017-Present Distinguished University Professor, Case Western Reserve University, Cleveland, OH
2015-Present Professor, Department of Nutrition, School of Medicine
2011-Present Vice Dean for Research and Graduate Education, School of Medicine
2011-Present Charles W. and Iona A. Mathias Professor of Cancer Research
2010-Present Professor, Department of General Medical Sciences,
2010-Present Professor, Department of Genetics and Genome Sciences
2010-2012 Interim Chair, Department of Genetics and Genome Sciences
2005-Present Director, Center for Proteomics and Bioinformatics
2005-2010 Professor, Department of Physiology & Biophysics
1998-2005 Professor, Departments of Physiology & Biophysics and Biochemistry, Albert Einstein College of Medicine, Bronx, NY
1994-Present Director, Center for Synchrotron Biosciences, National Synchrotron Light Source II, Brookhaven National Laboratory, Upton, NY
1993-1998 Associate Professor, Departments of Physiology & Biophysics and Biochemistry, Albert Einstein College of Medicine, Bronx, NY
1992-1993 Assistant Professor, Department of Physiology & Biophysics, Albert Einstein College of Medicine, Bronx, NY
1988-1992 Assistant Professor, Department of Chemistry, Georgetown University, Washington, DC
1987-1988 Research Assistant Professor, Department of Chemistry, New York University, New York, NY
1985-1987 Postdoctoral Research Associate, Institute for Structural and Functional Studies, Philadelphia, PA and AT&T Bell Laboratories
1984-1988 Resident Visitor, AT&T Bell Laboratories, Murray Hill, NJ

COMMITTEE APPOINTMENTS & OTHER PROFESSIONAL ACTIVITIES:

- 2018-Present Case-Coulter Innovation Program, CWRU, Oversight Board Member
2017 Synchrotron Resources Ad-Hoc P30 Review Panel: NIGMS
2016-Present Board member and Chair (2019) of Audit & Finance Committee, Bioenterprise Corp., Cleveland Ohio
2015-Present National Prion Disease Pathology Surveillance Center Advisory Committee, Case Western Reserve University
2014-2015 Member, NIGMS National Centers for Systems Biology Program Evaluation Committee
2014, 2013 Member, NIGMS Systems Biology Center Review Panel (also 2007)
2014 Member, NIAMS Accelerating Medicines Partnership in Rheumatoid Arthritis and Lupus Review Panel
2010-2021 Editorial Board Member, Molecular and Cellular Proteomics
2010-2015 Editorial Board Member, Journal of Clinical Bioinformatics
2009-Present Chief Scientific Officer, NeoProteomics, Inc. Cleveland, OH
2009-2012 Editorial Board Member, Cancer Genomics and Proteomics
2009-Present Member, External Advisory Committee, NIH/NIGMS Mass Spectrometry Resource, Washington University, St. Louis (Chair, 2011 and 2013).
2009-2013 Editorial Board Member, International Journal of Proteomics
2009 Member, NIDDK R24 Systems Biology Review Panel
2006-2009 CEO, NeoProteomics, Inc. Cleveland, OH

Major Federal awards or sub-awards to Case Western Reserve University (and Albert Einstein College of Medicine 1994-2005) that have supported user operations and beamline development at the Center for Synchrotron Biosciences:

<u>Grant</u>	<u>Number</u>	<u>PI</u>
1. NIH-P41-RR-01633 NCRR	1995-2003	Chance
2. NIH-P41-EB-01979 NIBIB	2003-2009	Chance
3. NIH-P30-EB-00998 NIBIB	2009-2020	Chance
4. NSF-DBI-9724531	1998-2000	Chance/Almo
5. NSF-DBI-1228549	2012-2017	Chance
6. NIH-P50-GM-062529 NIGMS	2000-2005	Burley
7. NIH-U54-GM-74945 NIGMS	2005-2010	Burley

Declaration of Potential Conflict of Interest : Dr. Chance is the founder and Chief Scientific Officer of NeoProteomics (www.neoproteomics.net) and a shareholder and Scientific advisory board member of GenNext technologies (<https://gnxtech.com>). Both entities are biotech companies in the structural biology and drug discovery/development field.

Federal grants or contracts related to the hearing's subject matter:

P30-EB-009998

09/01/2009 - 08/31/2020

NIH

Case Center for Synchrotron and Biosciences

Total Award: \$8.46M

DBI-1228549

08/01/2012 - 07/31/2017

NSF

MRI Consortium: Development of a Damping Wiggler Beamline for X-Ray Footprinting at

NSLS II

Total Award: \$2.68M

Collaboration: Taipei Medical University
Taipei, Taiwan

Focus: Drug Development

Trips:

Taipei Medical University 11/14/2015 – 11/18/2015
Taipei, Taiwan

Purpose: Inaugural kickoff of CTSC-TMU pilot programs; review and awarding of 1st round of pilot program applications

Travel: \$5700.00

Taipei Medical University 01/09/2017 – 01/13/2017
Taipei, Taiwan

Purpose: Assess progress of 1st round of pilot projects; review and award 2017 pilot projects'; meet with pilot projects PIs as well as university leadership

Travel: \$6700.00

Taiwan Medical University 02/23/2019 – 02/28/2019
Taipei, Taiwan

Purpose: Assess progress of current pilot projects; Review Year 3 pilot project applications; meet with project PIs and university leadership

Travel: \$5000.00

US-based meetings:

Meeting with Taipei Medical University senior leadership 12/04/2015
visiting CWRU

Meal: \$850.00

Meeting with Taipei Medical University PIs visiting 07/25/2016
CWRU Cancer Center

Meal: \$315.00

Dinner meeting with Taipei Medical University leadership 11/27/2017
to discuss ongoing pilot projects

Meal: \$150.00

CWRU – Taipei Medical University Symposium 05/22/2019 – 05/23/2019
Venue: Case Western Reserve University

Cleveland, OH

Total cost: \$8500.00

Collaborator: Tohoku University
Sendai, Japan

Research Focus: Structural Biology and Data Science

Trips:

Tohoku University 02/16/2015 – 02/20/2015
Purpose: Participation at the Top Global University Kick-off symposium
Travel: \$5600.00

Tohoku University 11/9/2015 – 11/14/2015
Purpose: Meeting with Tohoku University senior leadership to discuss
potential research and educational collaborations
Travel: \$ 2000.00

Tohoku University 08/6/2016 -08/11/2016
Purpose: Welcome Remarks speaker at the
Joint CWRU – Tohoku University Data Science Symposium
Travel: \$6200.00

Tohoku University 02/19/2018 – 02/24/2018
Purpose: Workshop speaker at the
Joint CWRU – Tohoku University Data Science Symposium
Travel: \$7300.00

US-based Meetings:

Inaugural CWRU – Tohoku University Joint Data Science Symposium 07/29/2015 – 07/30/2015
Venue: Case Western Reserve University – Cleveland, OH
Total cost: \$75000.00

CWRU – Tohoku University Joint Data Science Symposium 08/03/2017 – 08/04/2017
Venue: Case Western Reserve University – Cleveland, OH
Total cost: \$7,500

Meeting with : Masahiro Yamaguchi, Mitsuo Umetsu, Shu Ito and
Hafumi Nishi to discuss research developments at Tohoku University 03/18/2019
Venue: Case Western Reserve University School of Medicine
Meal: 250.00

CWRU – Tohoku University Joint Data Science Symposium 08/05/2019 – 08/06/2019
Venue: Case Western Reserve University – Cleveland, OH
Total cost: \$8000.00

Research Collaboration:

J-I Research Scholar: Hafumi Nishi 07/01/2017 – 06/30/2018
Purpose: Carried out bioinformatics research integrating disparate data types and developing software for
data integration in the fields of cancer and heart disease. No papers published
Cost: \$2200/ month – funds from home institution

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