**Michael Ibba**

Schmid College of Science and Technology, Chapman University,

One University Drive, Orange, CA 92866

e-mail: ibba@chapman.edu

#### Positions and Employment

2020 - *Dean*, Schmid College of Science and Technology, Chapman University, Orange, CA

2017 - 2020 *Associate Director*, Infectious Diseases Institute, Ohio State University, Columbus, Ohio

2013 - 2020 *Chair*, Department of Microbiology, Ohio State University, Columbus, Ohio

2011 - 2020 *Co-Director,* NIH Cellular, Molecular, and Biochemical sciences training program

2012 - 2013 *Director*, Biochemistry Graduate Program, Ohio State University, Columbus, Ohio

2010 - 2020 *Professor,* Department of Microbiology, Ohio State University, Columbus, Ohio

2006 – 2010  *Associate Professor,* Department of Microbiology, Ohio State University, Columbus, Ohio

2001 – 2006 *Assistant Professor,* Department of Microbiology, Ohio State University, Columbus, Ohio

1999 – 2001 *Associate Research Professor*,Panum Institute, University of Copenhagen, Denmark

#### Education and training

1995 – 1998 *Associate Research Scientist***,** Department of Molecular Biophysics and Biochemistry, Yale University.Adviser Professor Dieter Söll.

1993 – 1994 *Postdoctoral Research Assistant***,** Microbiology Institute, Swiss Federal Institute of Technology, Switzerland.Adviser Professor Hauke Hennecke.

1990 – 1993 *Postdoctoral Research Fellow***,** Department of Biotechnology, Ciba-Geigy AG, Switzerland. Adviser Dr. Martin Küenzi.

1990 *Doctor of Philosophy*, Department of Biochemistry and Applied Molecular Biology, University of Manchester, United Kingdom. Thesis: “The development of an anaerobic acetogenic continuous fermentation process”. Supervisor Dr. G.H. Fynn.

1986 *Bachelor of Science,* Imperial College, University of London, London, UK. Degree: Biochemistry, B.Sc. (Hons) 2(I), ARCS.

#### Distinctions

2022 - 2024 *Chair*, NSF Federal Advisory Committee for Biological Sciences (BIO-AC)

2022 *Chair*, 28th tRNA Conference. Columbus, OH.

2020 *Faculty Award* for Diversity Enhancement in the College of Arts and Sciences

2019 *Distinguished Scholar Award,* The Ohio State University

2019 - 2022 *Member*, NSF Federal Advisory Committee for Biological Sciences (BIO-AC)

2018 - present *Chair*, American Society for Microbiology Committee on Graduate and Postdoctoral Education

2017 *Faculty Award* for Diversity Enhancement in the College of Arts and Sciences

2015 *Distinguished Lecturer* American Society for Microbiology

2014 *Chair*, 2014 Gordon Research Conference on Microbial Stress Responses*,* Mt. Holyoke, MA

2013 *Fellow*, American Academy of Microbiology

2013 *American Society for Microbiology/NSF-LINK Travel Award*

2012 *Fellow*, American Association for the Advancement of Science

2012 *Chair*, 24th tRNA Conference. Olmué, Chile.

2010 *Honorary* *Professor* in Gene Expression and Translation, Faculty of Health Sciences, University of Copenhagen.

2009 *Chair*, American Society for Microbiology 109th Annual General Meeting colloquial session "Non-canonical Roles of tRNAs: Protein Biosynthesis and Beyond".

2008 *Co-Chair*, AARS2008*,* Grenoble, France.

2007 *Chair*, American Society for Microbiology 107th Annual General Meeting colloquial session "Quality Control in Microbial Protein Synthesis".

2006 Scientific Committee member and session chair, *AARS 2006*, San Diego, CA.

2005 Session co-chair and organizer*, 21st International tRNA Workshop*. Bangalore, India.

2005 Co-Chair of the organizing committee, *40 Years of Exploring tRNA*, New Haven, CT.

2005 *Dean’s Award* for Classroom teaching, College of Biological Sciences.

2003 Co-chair, *American Society for Microbiology 103rd Annual General Meeting* colloquial session "Expanding the Genetic Code".

2001 – 2005 *Adjunct scientist*, The State Serum Institute, Copenhagen, Denmark.

2001 – 2003 Member and contributor, Journal Club Panel, *Trends in Biochemical Sciences*.

2001 – 2005 *Editor* (with C. Francklyn and S. Cusack), “The Aminoacyl-tRNA Synthetases”.

1999 – 2001 *Alfred Benzon Foundation Investigator Award***.** Panum Institute, University of Copenhagen, Denmark. Competitive award (twice renewed) providing full salary support.

1998 Member of the Scientific Committee and Session chair, EMBO Workshop on Aminoacyl-tRNA Synthetases, Mittelwihr, France.

1994 *EMBO Fellow***.** Center for Protein Engineering, MRC Center, Cambridge, UK*.* 3 months stay in the Laboratory of Professor Sir Alan Fersht.

1990 Royal Society Postdoctoral Fellow and a European Commission Postdoctoral Fellow (both declined).

1986 – 1990 *Technology Transfer Fellow*. Graduate student fellowship sponsored by the Water Research Council, United Kingdom.

**Professional service**

*Grant reviewing*

2011 – 2019 **Member,** National Science Foundation MCB Genetic Mechanisms Panel.

2010 - 2014 **Member**, National Institutes of Health Molecular Genetics A Study Section.

2008 – 2009 **Member**, American Heart Association Molecular Biology Peer Review Group (Region 1)

2007 Ad hoc reviewer, NASA Astrobiology Program.

2006 – present Ad hoc member, NIH IDM-H, MIRA, MGA, MGC, PCMB and ZRG1 Study Sections.

2004 – 2010 **Member,** National Science Foundation Prokaryotic Molecular and Cellular Biology Panel.

2003 Ad hoc reviewer,Whitehead Fellowship Committee, New York University.

2003 Ad hoc reviewer,Israel Science Foundation.

2003 – 2004 Ad hoc reviewer, National Institutes of Health.

2001 Ad hoc reviewer,National Research Council, COBASE Program.

2001 Ad hoc reviewer,John Simon Guggenheim Memorial Foundation.

2000 – present Ad hoc reviewer,National Science Foundation.

1999 Ad hoc reviewer,Department of Energy, Division of Energy Biosciences.

1999 – 2003 Ad hoc reviewer,Department of the Army, Biological Sciences Division.

*Editorships and service as a reviewer for journals*

2007 – present Guest editor: *eLife*, *IJMS, Methods, PLoS Genetics, PNAS*.

2005 – Editorial board member:

 *Archaea* (2009 - ); *Biomolecules* (2014 - ); *FEBS Letters* (2008 - ); *Journal of Biological Chemistry* (2009 – 2014; 2017 -);

 *Eurekah Bioscience* (2005 - 2006); *IJMS* (2015 - 2016); *Molecular and Cellular Biology* (2015 - 2017)

**Administrative service - OSU**

*Departmental*

2013 - 2020 **Chair, Department of Microbiology.**

2012 – 2013 **Chair**,Promotion and Tenure Committee.

2006 – 2010 **Chair,** Microbiology Graduate Studies Committee**.**

2005 – 2007 **Founder, Organizer and Chair**. Department of Microbiology Annual Symposium.

2008 Microbiology Chair Search Committee.

2007 Unit Review Committee.

2002, 2009 Faculty Search Committee.

*College and University*

2018 – 2020 Erdos Institute Academic Advisory Team

2018 - 2020 OSU Post-Doctoral Advisory Council, *Member.*

2017 - 2020 **Founder & Co-Director,** *Destination OSU,* research program for community college students.

2016 - 2020 **Advocate and Facilitator,** *Ohio State Advocate FORWARD Program* for gender equity

2015 - 2016 **Facilitator**, *Searching for Excellence* diversity workshops, Office of Diversity and Inclusion.

2015 - 2016 **Co-Director**, *Business Fundamentals for Science* Executive Education Program.

2012 - 2013 **Director**, Biochemistry Graduate Program, Ohio State University, Columbus, Ohio

2011 - 2020 **Co-Director and PI**, NIH Cellular, Molecular, and Biochemical Sciences training program.

2010 – 2012 **Chair,** Joint OSBP/MCDB Seminar Committee

2011 - 2012 NMS Divisional Promotion and Tenure panel, College of Arts and Sciences

2010 - 2015 Program Council, Life Sciences Steering Committee

2009 – 2010 Public Health Preparedness for Infectious Diseases Steering committee.

2008 – 2009 Graduate School Task Force on the Life Sciences.

2007 – 2009 Council on Academic Affairs, Faculty Council member.

2004 – 2018 OSU Center for RNA Biology, Steering committee member.

2004 – 2007 OSBP Recruitment Committee.

2004 – 2005 BioSci Day Participant. Presented the Microbiology program to prospective students.

2002 – 2009 OSBP Seminar Committee. Select and host external speakers for seminar series.

*Other service*

2018 Committee of Visitors, Division of Molecular and Cellular Biosciences, NSF

2013 - present *American Society for Microbiology* Committee on Graduate and Postdoctoral Education.

 Instructor for webinar and in person workshops on grant writing (Chair 2018-).

2013 **Chair**, *RNA Society* Nominating Committee.

2010 - present Scientific Advisory Board, CNRS, Strasbourg, France.

2008 External Review Committee, CNRS, Palaiseau, France.

2004 – 2005 OSU Honors Day and National Merit Scholar Lunches, Faculty participant.

**presentations (since 2001)**

*Invited presentations at scientific meetings*

2024 29th tRNA Conference, Kanazawa, Japan (Plenary lecture, invited)

2024 Gordon Research Conference on Microbial Stress Responses, Mt. Holyoke, MA (speaker)

2023 AARS2023, Ontario, Canada (speaker)

2023 DiscoverBMB, Seattle, WA (speaker)

2022 ASM Microbe, Washington, DC (speaker and facilitator)

2021 Army Research Office Mini Symposium on the significance of rare events in Biology (speaker)

2019 International Symposium on Aminoacyl-tRNA Synthetases, Hangzhou, China (speaker)

2019 ASM Microbe, San Francisco, CA (speaker and facilitator)

2018 tRNA 2018, Strasbourg, France (Keynote speaker)

2018 ASM Microbe, Washington, DC (speaker and facilitator)

2018 4S Forum 2018, Seoul, Korea (Speaker)

2017 IUBMB Symposium on Aminoacyl-tRNA Synthetases, Clearwater, FL (speaker)

2017 Howard University Department of Biology Mini-Symposium, Washington, DC (speaker)

2017 Ohio Branch ASM meeting, Westerville, OH (keynote speaker)

2017 Gordon Research Conference on Translation in Health & Disease, Galveston, TX (speaker)

2016 Virginia Branch ASM meeting, Roanoke, VA (keynote speaker)

2016 North Central Branch ASM meeting in Ames, IA (keynote speaker)

2016 tRNA 2016, South Korea (speaker)

2016 Gordon Research Conference on Microbial Stress Responses, Mt. Holyoke, MA (speaker)

2015 AARS 2015, Barcelona, Spain (speaker and session chair)

2015 2nd Midlands Molecular Microbiology Meeting, Nottingham, UK (Keynote speaker)

2015 ASM Kadner Institute, Washington, DC (speaker and facilitator)

2015 Gordon Research Conference on Translation Machinery in Health & Disease, Ventura, CA (speaker)

2014 35th Chilean Congress of Microbiology, La Serena, Chile (speaker)

2014 25th tRNA Conference, Greece (speaker and session chair)

2014 ASM Kadner Institute, San Jose, CA (speaker and facilitator)

2014 ASM Conference on Undergraduate Education, Danvers, MA (speaker)

2014 Sigma-Aldrich Symposium on RNA Science, Albany, NY (keynote lecturer)

2013 Barcelona BioMed Conference on Gene Translation: fidelity and Quality Control, Spain (speaker)

2013 Annual Biomedical Research Conference for Minority Students, Nashville, TN (speaker)

2012 Gordon Research Conference on Microbial Stress Responses, Mt. Holyoke, MA (speaker)

2012 Cold Spring Harbor Advanced Bacterial Genetics Course (speaker)

2012 Annual Meeting of the RNA Society, Ann Arbor, MI (speaker)

2012 Society for General Microbiology Spring Conference, Dublin, Ireland (speaker)

2011 AARS 2011, Snowbird, UT (speaker)

2011 Cold Spring Harbor Advanced Bacterial Genetics Course (speaker)

2011 111th American Society for Microbiology General Meeting, New Orleans, LA (speaker)

2010 Molecular Genetics of Bacteria and Phages, CSHL, Cold Spring Harbor, NY (speaker)

2010 Annual Meeting of the RNA Society, Seattle, WA (plenary lecturer)

2010 23rd International tRNA Workshop, Aveiro, Portugal (plenary lecturer, session chair)

2009 31st Chilean Congress of Microbiology, Santa Cruz, Chile (plenary lecturer)

2009 Molecular Genetics of Bacteria and Phages, Madison, WI (speaker, session chair)

2009 Conference on Gram Positive Microorganisms, San Diego, CA (speaker, session chair)

2009 109th American Society for Microbiology General Meeting, Philadelphia, PA (speaker, session chair)

2009 Ohio Branch ASM, Annual Meeting, Denison University, OH (speaker)

2008 AARS 2008, Veyrier du Lac, France (meeting co-chair)

2008 Gordon Research Conference on Microbial Stress Responses, Mt. Holyoke, MA (speaker)

2007 22nd International tRNA Workshop, Uppsala, Sweden (speaker, session chair)

2007 Molecular Genetics of Bacteria and Phages, Madison, WI (speaker)

2007 107th American Society for Microbiology General Meeting, Toronto (speaker, session chair)

2006 AARS 2006, San Diego, CA (speaker, session chair)

2005 21st International tRNA Workshop, Bangalore, India, (speaker, session chair)

2005 40 Years of Exploring tRNA, New Haven, CT (speaker, session chair)

2005 XIX Annual Meeting of the Croatian Chemical Society, Opatija, Croatia (plenary lecturer)

2004 International Conference on Aminoacyl-tRNA Synthetases, Seoul, Korea (speaker)

2003 20th International tRNA Workshop, Banz, Germany (speaker)

2003 Ohio Branch ASM, Annual Meeting, Mason, OH (speaker)

2003 103rd American Society for Microbiology General Meeting, Washington, D.C. (session co-chair)

2002 Asilomar Conference on Aminoacyl-tRNA Synthetases, Asilomar, CA (speaker)

2001 Rustbelt RNA Meeting, Deer Creek, OH (speaker)

2001 9th International Conference on Microbial Genomics, Gatlinburg, TN (speaker)

*External invited seminars*

2023 Department of Biochemistry, University of California, Riverside, CA

2022 Department of Chemistry, The Ohio State University, Columbus, OH

2021 University of California, Merced, CA

2021 University of Arkansas School of Medicine, AR

2019 IPCB du CNRS, Strasbourg, France

2019 Maud L. Menten Memorial Lecture, Western University, London, Ontario, Canada

2019 Department of Microbiology, Immunol., & Mol. Genetics, University of California, Los Angeles, CA

2018 Korea Research Institute of Bioscience and Biotechnology, Daejeon, Korea

2018 School of Medicine, Tsinghua University, Beijing, China

2018 Department of Biology, Harvey Mudd College, Claremont, CA

2018 Department of Biology, California Lutheran University, Thousand Oaks, CA

2017 Department of Microbiology and Environmental Toxicology, UC Santa Cruz, CA

2017 Department of Molecular Microbiology and Immunology, OHSU, Portland, OR.

2017 Biomedical Sciences, University of Central Florida College of Medicine, Orlando, FL

2016 Faculty of Sciences, University of Chile, Santiago, Chile

2016 IBMC du CNRS, Strasbourg, France

2016 National Institutes of Health, Bethesda, MD

2016 Department of Cell Biology and Molecular Genetics, University of Maryland, College Park, MD

2016 Department of Biology, University of Copenhagen, Denmark

2016 Ribocore, University of Uppsala, Sweden

2016 Department of Biology, Indiana University, Bloomington, IN

2015 Department of Microbiology, University of Washington, Seattle, WA

2015 Department of Chemistry, Portland State University, Portland, OR

2014 Department of Molecular, Cellular & Developmental Biology, U. California, Santa Barbara, CA

2014 Department of Biochemistry and Biophysics, Texas A&M University, College Station, TX

2014 Department of Microbiology, University of Pennsylvania, Philadelphia, PA

2014 Department of Biochemistry and Molecular Biology, Saint Louis University, St. Louis, MO

2013 Department of Molecular Biophysics and Biochemistry, Yale University, New Haven, CT

2013 RNA Center, Case Western Reserve University, Cleveland, OH

2013 Department of Chemistry, Wayne State University, Detroit, MI

2013 Department of Biochemistry, School of Medicine, University of Patras, Greece

2013 Department of Molecular and Human Genetics, Baylor College of Medicine, TX

2012 Department of Microbiology and Immunology, Thomas Jefferson University, PA

2012 Department of Biochemistry & Biophysics, University of Rochester, NY

2012 Department of Biochemistry, IUPUI, Indianapolis, IN

2011 Department of Bacteriology, University of Wisconsin, Madison, WI

2011 Department of Biochemistry and Molecular Genetics, University of Illinois-Chicago, IL

2011 Department of Biology, University of California, Merced, CA

2011 Department of Molecular Genetics and Microbiology, University of Texas, Austin, TX

2011 Faculty of Health Sciences, University of Copenhagen, Denmark

2010 IBMC du CNRS, Strasbourg, France

2010 Departments of Biochemistry and Microbiology, Emory University, Atlanta, GA

2010 Department of Molecular Genetics, University of Toronto, Canada

2010 Department of Biochemistry and Molecular Biology, LSU HSC, Shreveport, LA

2009 Faculty of Medicine, University of Chile, Santiago, Chile

2009 Department of Biological Sciences, Ohio University, Athens, OH

2009 Department of Microbiology and Cell Science, University of Florida, Gainesville, FL

2009 Department of Biochemistry, University of Vermont, Burlington, VT

2009 Department of Biochemistry, University of Illinois at Urbana Champaign, IL

2009 Department of Microbiology and Molecular Genetics, UMDNJ, Newark, NJ

2009 Structure and Chemistry Affinity Group Seminar, Scripps Research, La Jolla, CA

2009 Department of Biochemistry and Molecular Biophysics, Washington University, St. Louis, MO

2008 IBMC du CNRS, Strasbourg, France

2008 Department of Biophysics and Biophysical Chemistry, Johns Hopkins School of Medicine, Baltimore, MD

2008 Department of Biochemistry, University of Miami School of Medicine, Miami, FL

2008 Department of Microbiology and Molecular Genetics, Michigan State University, MI

2007 Chinese Academy of Sciences, Shanghai, China

2007 Department of Molecular, Cellular & Developmental Biology, U. California, Santa Barbara, CA

2007 Genetics Seminar Series, University of California, Los Angeles, CA

2005 CARB, University of Maryland, Bethesda, MD

2005 Microbiology Institute, ETH Zürich, Zürich, Switzerland

2004 Department of Molecular Biophysics and Biochemistry, Yale University, New Haven, CT

2004 Department of Microbiology, University of Georgia, Athens, GA

2004 Department of Biological Sciences, St. John’s University, New York, NY

2003 Department of Microbiology, Miami University, Oxford, OH

2003 Department of Chemistry and Biochemistry, Colorado University, Boulder, CO

2003 Department of Biology, Indiana University, Bloomington, IN

2002 Department of Chemistry, University of Toledo, Toledo, OH

2002 Department of Chemistry, University of Buffalo, Buffalo, NY

2002 Department of Biochemistry and Microbiology, University of Laval, Canada

2001 Department of Genetics, Trinity College, Dublin, Ireland

*Other presentations*

2019 Ohio State University Voices of Excellence Podcast “*Controlling Your Microbes*”. [Link](https://player.fm/series/voices-of-excellence-from-arts-and-sciences/controlling-your-microbes-michael-ibba).

2020 Mentoring Graduate Students During & Beyond COVID-19. [Link](https://www.asm.org/Articles/2020/May/Mentoring-Graduate-Students-During-Beyond-COVID-19)

2024 Times Higher Education Campus interview: Mike Ibba of Chapman University on mentorship and the future of US science. [Link](https://www.timeshighereducation.com/campus/campus-interview-mike-ibba-chapman-university-mentorship-and-future-us-science)

**Students and Trainees**

**Doctoral Students (dissertation advisor)**

Sandro Ataide 2002 – 2006 Associate Professor, University of Sydney

Jeffrey Levengood 2002 – 2006 Research Scientist, Case Western Reserve

Corinne Hausmann 2004 – 2008 Specialist Leader, Deloitte Consulting

Jiqiang Ling 2004 – 2008 Associate Professor, University of Maryland

Theresa Rogers 2006 – 2010 Associate Professor, Cal. Lutheran University

Noah Reynolds 2006 – 2011 Assistant Professor, Univ. Illinois Springfield

Samhita Yadavalli 2007 – 2012 Assistant Professor, Rutgers University

Kiley Dare 2007 – 2012 ProFile Discovery

Medha Raina 2009 – 2014 Post-doc, NIH

Sara Elgamal 2011 – 2015 Post-doc, University of Cincinnati

Adil Moghal 2012 – 2016 Patent Lawyer, Washington, DC

Andrei Rajkovic 2012 – 2016 Bioinformatics Manager at PhenomeX

Kyle Mohler 2013 – 2017 Post-doc, Yale University

Anne Witzky 2015 – 2019 Assistant Professor, Ohio Dominican Univ.

Rebecca Mann 2016 – 2019 Assistant Professor, Lake Erie College

Rodney Tollerson 2016 – 2019 Assistant Professor, Auburn University

Paul Kelly 2015 – 2020 Scientist - Gene Synthesis at Azenta

Nien-Ching Han 2017 – 2021 Scientist – Hongene Biotech

Arundhati Kavoor 2019 – 2022 Post-doc, Ohio State University

**Masters Students (thesis advisor)**

Amanda Monthan 2000 Scientist, Swedish Dairy Association

Marla Gilreath 2009 – 2011 Regulatory Specialist, Nexeo Solutions

Mengchi Wang 2011 – 2013 Graduate student, UC San Diego

Rachel Simari 2013 – 2014 Clinical microbiologist, Utah

Sarah Tyler 2014 – 2015 Graduate student, Boston College

Mary Cranley 2019 – 2021

**Post-doctoral Fellows**

Nina Mejlhede 2000 – 2001 Scientist, State Serum Institute, Denmark

Mette Prætorius 2001 – 2005 Assistant Professor, Ohio State University

Hervé Roy 2003 – 2011 Associate Professor, Univ of Central Florida

Shiming Wang 2004 – 2006 Assistant Professor, Nanjing University

Rajat Banerjee 2008 – 2010 Assistant Professor, University of Calcutta

Assaf Katz 2011 – 2014 Assistant Professor, University of Chile

Jennifer Shepherd 2011 – 2015 Prime Global Medical Communications

Tammy Bullwinkle 2010 – 2016 Assistant Professor, Ohio State University

Miguel-Angel Rubio Gomez 2017 – 2019

Whitney Wood 2019 – Research Scientist, Chapman University

Rodney Tollerson 2020 Post-doc, California Institute of Technology

Paul Kelly 2020 Post-doc, Elanco

Lorenzo Leiva 2021 - Post-doc, Chapman University

**Senior Honors Theses**

*Completed*

Irnov (2003–2004; post-doc at Yale University)

Roocha Patel (2004-2005; MD student at Ohio State University)

Molly Paras (2004-2006; MD student at the Mayo Clinic)

Caitlin Baiduc (2008-2009; graduate student at the University of Pennsylvania)

Sara Repasky (2008-2010)

Bailey Dyer (2008-2010)

Kayla Humenansky (2009-2010)

Lindsey Solden (2011-2013; graduate student at Ohio State University)

Eleftheria Matsa (2011-2013; MD student at Ohio State University)

Kyle Hopkins (2015-2017; MD student at Ohio University)

Amanda Kyle (2016-2018; research assistant at Ohio State University)

**Teaching**

*Molecular Basis for Microbial Biodiversity* (Micro 720, 4 credit hours), Ohio State University, 2001, lecturer (taught 5% of the class), graduate level.

*Special Topics in Biochemistry* (Biochem 795, 3 credit hours), Ohio State University, 2002 - 2003, supervisor of seminar course (30%), graduate level.

*Seminar in Advanced Biochemistry* (Biochem 796, 1 credit hour), Ohio State University, 2002, supervisor of seminar course (25%), graduate level.

*General Microbiology 2* (Micro 521, 5 credit hours), Ohio State University, 2003 - 2012, lecturer (100%), undergraduate level.

*Seminar in Microbiology* (Micro 880, 1-2 credit hours), Ohio State University, 2003 - 2007, supervisor of seminar course (50%), graduate level.

*The RNA World* (Micro 8050, 3 credit hours), Ohio State University, 2004 - 2019, lecturer (20%), graduate level.

*Current Topics in Molecular Microbiology* (Micro 7060, 2 credit hours), Ohio State University, 2006 - 2018, lecturer (25%), graduate level.

*Principles of Microbiology* (Micro 6010, 2 credit hours), Ohio State University, 2012 - 2019, lecturer (100%), graduate level.

*Scientific Writing* (Micro 6790, 2 credit hours), Ohio State University, 2019 - 2020, lecturer (100%), graduate level.

*Biology Capstone* (Biol 498, 3 credit hours), Chapman University, 2021 - 2022, lecturer (100%), undergraduate level.

*Research: Data Analysis* (Biol 494, 3 credits), Chapman University, 2023, lecturer (100%), undergraduate level.

*Research writing and communication* (SCI 503, 3 credits), Chapman University, 2024, lecturer (50%), graduate level.

**extramural funding**

*Completed*

2000 Danish Natural Science Research Foundation / Novo Nordisk Foundation. Grant. “Development of *in vivo* strategies for site-directed incorporation of non-natural amino acids”. P.I.

2000 Danish Natural Science Research Foundation. Grant. “Automated chromatographic systems for the purification of proteins and nucleic acids”. P.I.

2000 Fifth Framework program of the European Commission. Grant QLG2-1999-00660**.** “A functional genomics study of lysyl-tRNA synthesis as a target for the diagnosis and treatment of microbial infections and mitochondrial myopathies”. P.I. (Co-P.I.s, K. Devine, C. Florentz; C. Marsac, M. Schneider).

2002 **American Heart Association Grant 0265004B.** “*Borrelia burgdorferi* lysyl-tRNA synthetase: a therapeutic target for Lyme disease”. (07/2002 – 06 / 2004). P.I.

2004 **National Science FoundationGrant MCB-0344002.** “The role of aminoacyl-tRNA synthesis in translational quality control”. P.I. (Co-P.I., A. Wolfson).

2005 American Heart Association Pre-doctoral fellowship 0515086B for Sandro Ataide. “Utilization of non-canonical tRNA by lysyl-tRNA synthetases”.

2006 **US-Israel Binational Science Foundation.** “Structural and functional investigation of cytosolic and mitochondrial phenylalanyl-tRNA synthetase”. Co-P.I. (P.I., M. Safro). (09/2006 – 08/2010).

2007 American Heart Association Pre-doctoral fellowship 0715172B for J. Ling. “Pathogenic mechanism and functional rescue of a tRNAPhe mutation causing MERFF”. (07/2007 – 06/2009)

2008 **National Science FoundationGrant MCB-0744791.** “The role of quality control in microbial translation”. P.I. (Joint P.I.s, B. Lazazzera, A. Wolfson). (03/2008 – 02/2011).

2008 **National Science FoundationGrant MCB-0936068.** “Collaborative research: The role of quality control in microbial translation”. P.I. (01/2008 – 03/2012).

2010 **National Science FoundationGrant** **CHE-1040302**. “MRI: Acquisition of a high-resolution time-of-flight mass spectrometer”. Co PI (Green-Church). (10/10 - 09/13)

2011 **Amgen Inc. contract #2011566548.** “Error rates in mammalian protein synthesis”. P.I. (11/11 – 11/12).

2011 **National Science FoundationGrant MCB-1052344.** “Collaborative research: The role of quality control in microbial translation”. P.I. (04/2011 – 09/2014).

2011 **National Institutes of Health Grant T32 GM086252.** “Cellular, Molecular, and Biochemical Sciences Training Grant”. P.I. (Joint P.I., K. Musier Forsyth). (07/2011 – 06/2021).

2014 **National Institutes of Health Grant 1R13 AI111919.** “2014 Microbial Stress Response GRC/GRS”. P.I. (Joint P.I., C. White-Ziegler). (05/2014 – 10/2014).

2014 **National Science FoundationGrant MCB-** **1412611.** “Collaborative Research: The Role of Quality Control in Microbial Translation”. P.I. (09/2014 – 08/2019).

2015 **Army Research Office Grant 66973-LS.** “Increased Translation Error Rates and Long-term Survival”. Co-P.I. (05/2015 – 12/2018).

2016 **National Institutes of Health Grant R21.** “A Systems Biology Approach for Targeted Drug Discovery for Leishmaniasis”. P.I. (12/2016 – 03/2019).

2017 **Ford Motor Company DEPT2017-J044.11 URP.** “Cell culturing project for the development of an anti-microbial technology for vehicle interiors”. P.I. (03/2018 – 06/2020)

2017 **National Science FoundationGrant MCB-** **1715840.** “Collaborative Research: The Role of Quality Control in Microbial Translation”. P.I. (07/2017 – 07/2022).

2019 **Global Health Drug Discovery Institute.** “Investigation of novel antimicrobial compounds targeting aminoacyl-tRNA synthetases”. P.I. (10/2019 – 06/2021).

2003 **National Institutes of Health Grant R01** **GM065183. “**Mechanisms of translational control”. P.I. (01/2003 - 06/2022).

*Current*

2020 **Army Research Office Grant #W911NF-20-1-0152.** “Microbiology: Regulation of Translation Homeostasis as a Driver of Bacterial Persistence”. P.I. (06/2020 – 10/2024).

2020 **National Science FoundationGrant DBI-** **2022070.** “BII-Implementation: The EMERGE Institute: Identifying EMergent Ecosystem Responses through Genes-to-Ecosystems Integration”. Co-P.I. (09/2020 – 08/2025).

2023 **National Institutes of Health Grant 1 UE5 AI172522-01.** “ASM MOSAIC Program. (08/2023-07/2028)*.*

**Publications (h-index 62)**

206. McDonald, M.D., Owusu-Ansah, C., Ellenbogen, J.B., Malone, Z.D., Ricketts, M.P., Frolking, S.E., Ernakovich, J.G., **Ibba, M.,** Bagby, S.C. and Weissman, J.L. (2024) What is microbial dormancy? *Trends Microbiol*. **32**, 142-150.

205. **Ibba, M.** (2023) The Pros of changing tRNA identity. *J. Biol. Chem.* **299**, 104974.

204. Leiva, L.E., Zegarra, V., Bange, G. and **Ibba, M.** (2023) At the crossroad of nucleotide dynamics and protein synthesis in bacteria. *Microbiol. Mol. Biol. Rev.* **87**(1):e0004422.

203. Leiva, L.E., Elgamal, S., Leidel, S.A., Orellana, O., **Ibba, M.**, Katz, A. (2022) Oxidative stress strongly restricts the effect of codon choice on the efficiency of protein synthesis in *Escherichia coli*. *Front. Microbiol.* **13**: 1042675.

202. Lang, S., **Ibba, M.**, Musier-Forsyth K. (2022) New paradigm for teaching scientific writing in STEM. *Trends Biochem. Sci.* **47**, 631-634.

201. Kavoor ,A., Kelly, P. and **Ibba M.** (2022) Escherichia coli alanyl-tRNA synthetase maintains proofreading activity and translational accuracy under oxidative stress. *J. Biol. Chem.* **298**101601

200. Han, N-C., Kavoor, A. and **Ibba, M.** (2022) Characterizing the amino acid activation center of the naturally editing-deficient aminoacyl-tRNA synthetase PheRS in *Mycoplasma mobile*. *FEBS Letts.* **596**, 947-957.

199. Srinivas, P. Steiner, R., Pavelich, I., Guerrero-Ferreira, R., Juneja, P., **Ibba, M.**, Dunham, C. (2021) Oxidation alters the architecture of the phenylalanyl-tRNA synthetase editing domain to confer hyperaccuracy. *Nucl. Acids Res.* **49,** 11800-11809.

198. Santamaría-Gómez, J., Rubio, M.Á., López-Igual, R., Romero-Losada, A.B., Delgado-Chaves, F.M., Bru-Martínez, R., Romero-Campero, F.J., Herrero, A., **Ibba, M.**; Ochoa de Alda, J., Luque, I. (2021) Role of a cryptic tRNA gene operon in survival under translational stress. *Nucl. Acids Res.* **49,** 8757-8776.

197. Wood, W.N., Mohler, K., Rinehart, J. and **Ibba, M.** (2021) Deacylated-tRNA accumulation is a trigger for bacterial antibiotic persistence independent of the stringent response. *mBio*. **12**, e0113221.

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**Patents**

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