

Curriculum Vitae – Gabriele Meloni

Gabriele Meloni, Ph.D.

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Educational History:

- 2002 **M.S. - Biotechnology, University of Milan**, Via Festa del Perdono 7, Milano, Italy.
Thesis Title: "Role of Glutamate 59 in the activity of the amino acid transporter KAAT-1"
Institute of General Physiology and Biochemistry; Advisor: Prof. Vellea F. Sacchi
- 2008 **Ph.D. - Bioinorganic chemistry and Biochemistry, University of Zurich**,
Winterthurerstrasse 190, Zurich, Switzerland.
Thesis Title: "Metalloneurochemistry of Metallothionein-3 in the Central Nervous
System"; Department of Biochemistry; Advisor: Prof. Milan Vašák

Employment History:

- 2021- **Associate Professor**, Department of Chemistry and Biochemistry, **The University of Texas at Dallas**, Richardson, TX, USA
- 2015 - 2021 **Assistant Professor**, Department of Chemistry and Biochemistry, **The University of Texas at Dallas**, Richardson, TX, USA
- 2009 - 2015 **Postdoctoral Scholar (Swiss National Science Foundation and Marie Curie Fellow)**,
Division of Chemistry and Chemical Engineering, **California Institute of Technology**,
Pasadena, CA, USA; Advisor: Prof. Douglas C. Rees
- 2013 - 2014 **Postdoctoral Scholar (Marie Curie Fellow)**, Centre for Membrane Pumps in Cells and
Disease, and Centre for Structural Biology, **Aarhus University**, Aarhus, **Denmark**.
Advisor: Prof. Poul Nissen
- 2008 - 2009 **Postdoctoral Scholar**, Department of Biochemistry, **University of Zurich**, Zurich,
Switzerland; Advisor: Prof. Milan Vašák

Professional recognitions and Honors:

- 2023** Federal Research Innovation and Expenditures Dynamo (FRIEND), ORI, UT Dallas
- 2021 - 2026** CAREER Award, National Science Foundation
- 2021 - 2024** Robert A. Welch Foundation Research Grant Award
- 2020** New talent: Americas; Dalton Transactions, Royal Society of Chemistry
- 2018 - 2023** Maximizing Investigators' Research Award (R35), Outstanding Investigator Grant
Program, National Institute of General Medical Sciences, NIH
- 2017 - 2020** Robert A. Welch Foundation Research Grant Award
- 2011 - 2014** Marie Curie International Outgoing Fellowship award, European Commission
- 2009 - 2011** Fellowship for Prospective Researchers, Swiss National Science Foundation, Switzerland
- 2008** Swiss Chemical Society presentation prize in Medicinal Chemistry, SCS Meeting
- 2007 - 2008** Research grant award, Commission for the Support of Young Scientists, Switzerland
- 2006, 2008** Swiss Society of Biochemistry Travel Awards, Switzerland
- 2003** "Zampese Award" for M.Sc. with honors, CRA Bank, Italy
- 2002** *Summa cum laude*, University of Milan, Italy

Professional memberships

American Chemical Society	2014-
Society of Biological Inorganic Chemistry	2008-
Swiss Chemical Society	2008-

External Funding

- 2021 - 2026** NSF CAREER Award
Granting agency: National Science Foundation
Title: "CAREER: Plasticity, promiscuity and transport mechanism in transmembrane metal pumps"
Role: Principal Investigator;
- 2021 - 2024** Welch Foundation Research Grant
Granting agency: Robert A. Welch Foundation
Project: "Assembly, selectivity, structure, metalloaromaticity and reactivity in protein metal-thiolate clusters"
Role: Principal Investigator;
- 2021 - 2023** Supplement for Purchase of Instrumentation
Maximizing Investigators' Research Award (R35) – Outstanding Investigator Grants
Granting agency: National Institute of General Medical Sciences (NIGMS),
National Institutes of Health
Project: "Principles of selectivity and translocation in transition metal transporters"
Role: Principal Investigator;
- 2018 - 2023** Maximizing Investigators' Research Award (R35) – Outstanding Investigator Grants
Granting agency: National Institute of General Medical Sciences (NIGMS),
National Institutes of Health
Project: "Principles of selectivity and translocation in transition metal transporters"
Role: Principal Investigator;
- 2017 - 2020** Welch Foundation Research Grant
Granting agency: Robert A. Welch Foundation
Project: "Transition metal selectivity and translocation in transmembrane ion pumps"
Role: Principal Investigator
- 2018 - 2020** NSERC Postdoctoral Fellowship
Granting agency: Natural Sciences and Engineering Research Council of Canada
Project: "Selectivity and translocation in primary active transmembrane transition metal pumps"
Role: Advisor for Postdoctoral Fellow Gordon W. Irvine
- 2011 - 2014** Marie Curie International Outgoing Fellowship award
Granting agency: European Commission, 7th Framework program
Project: "Structural and functional characterization of molecular nanomachines"
Role: Fellowship recipient, Principal Investigator;
- 2009 - 2011** Fellowship for Prospective Researchers
Granting agency: Swiss National Science Foundation, Switzerland
Project: "Principles of transition metal selectivity and transport in molecular nanomachines"

Role: Fellowship recipient, Principal Investigator;

2008 - 2009 Research grant award, Commission for the Support of Young Scientists,
Granting agency: Commission for Young scientists, University of Zurich, Switzerland
Project: “Metalloneurochemistry of Prion and Parkinson diseases: Control of abnormal metal-protein interactions by metallothionein-3”
Role: Fellowship recipient, Principal Investigator;
Amount awarded: 57,500 \$

Other grants as Senior Personnel

2020 - 2023 Major Research Instrumentation Grant
Granting agency: National Science Foundation
Title: “MRI: Acquisition of A High-sensitivity Electrospray Ionization Mass Spectrometer for Research and Education at the University of Texas at Dallas”
Role: Senior Personnel;

Invited and Selected talks

1. **G. Meloni**, Invited Lecture, University of Missouri, “The fascinating bioinorganic chemistry of transmembrane metal transporters and “storage” metalloproteins”, November 2022
2. **G. Meloni**, Invited Lecture, 12th International Copper meeting, Sorrento, Italy “Copper Selectivity Bias and Cu(I)₄-thiolate Cluster Assembly in the Human Neuronal Growth Inhibitory Factor (Metallothionein-3)”, September 2022.
3. **G. Meloni**, Invited Lecture, 1st International Conference of Metal Binding Peptides”, Nancy, France, “Copper(I)-thiolate cluster assembly and metal selectivity bias in metallothionein-3”, July 2022
4. **G. Meloni**, Invited Lecture, Texas A&M University, “The fascinating chemistry of transmembrane metal transporters: Substrate selectivity, promiscuity and translocation mechanism”, College Station, TX, April 2022.
5. **G. Meloni, Lecture**, Invite Lecture, “Copper(I) selectivity bias, cluster assembly, and reactivity in metallothionein-3 metal-thiolate clusters”, 262th Meeting of the American Chemical Society, San Diego, CA, USA, March 2022
6. **G. Meloni**, Invited Lecture, “Principles of selectivity and translocation in transmembrane metal pumps and transporters”, PacifiChem 2021, virtual.
7. **G. Meloni**, Invited Lecture, “Transition metal selectivity and transport in primary active P_{1B}-type ATPases” South West Regional Meeting (SWRM), American Chemical Society, Austin, TX, November 2021
8. **G. Meloni**, Invited Lecture, “Selectivity, Promiscuity and Translocation Mechanism Diversity in Bacterial Transmembrane Metal Transporters”, Gordon Research Conference Cell Biology of Metals, Mount Snow, VT, Oct 2021
9. **G. Meloni**, Invited Lecture, “The fascinating chemistry of transmembrane metal transporters”, National Institute of Genomic Medicine of Mexico, Mexico City, February 2021.
10. **G. Meloni**, Invited Plenary Lecture, “Novel insights into the bioinorganic chemistry of transition metal transporters”, XV International Symposium on Inorganic Biochemistry, Wroclaw, Poland, (rescheduled because of COVID-19 pandemic; date: TBD)
11. **G. Meloni**, Invited Lecture, International Conference on Metal-Binding Peptides: Methodologies and Applications, Nancy, France (rescheduled because of COVID-19 pandemic, date July 2022)
12. **G. Meloni**, Invited Lecture, "Discovery and characterization of a novel human copper transmembrane transporter", 12th International Copper Meeting, Sorrento, Italy, September 2022 (rescheduled because of COVID-19 pandemic, September 2022)
13. **G. Meloni**, Invited Lecture, “The fascinating chemistry of transmembrane metal transporters” Colorado School of Mines, Department of Chemistry, Golden, CO, USA, April 2020 (rescheduled because of COVID-19 pandemic; delivered virtually on 09.04.2020)

14. **G. Meloni**, Invited Lecture, “The fascinating chemistry of transmembrane metal transporters” Texas A&M, Department of Chemistry, College Station, TX, USA, March 2020 (rescheduled because of COVID-19 pandemic; Scheduled for April 2022)
15. **G. Meloni**, Invited Lecture, “The fascinating chemistry of transmembrane metal transporters” University of Houston, Department of Chemistry and Biochemistry, Houston, TX, USA, March 2020
16. **G. Meloni**, Invited Lecture, “The fascinating chemistry of transmembrane metal transporters” Indiana University Bloomington, Department of Chemistry, Bloomington, IN, USA February 2020
17. **G. Meloni**, Invited Lecture, “The fascinating chemistry of transmembrane metal transporters” Dartmouth College, Department of Chemistry, Hanover, NH, USA, February 2020
18. **G. Meloni**, Invited Lecture, “In-N-Out”: The fascinating chemistry of transmembrane metal transporters” California State University Chico, Department of Chemistry and Biochemistry, Chico, CA, USA, December 2019
19. **G. Meloni**, Lecture, “Copper-Thiolate Cluster Selectivity and Assembly in Human Metallothionein-3” South East Regional Meeting (SERMACS), American Chemical Society, Augusta, GA, November 2019
20. **G. Meloni**, Invited Lecture, “The fascinating chemistry of metal transporters and “storage” metalloproteins”, Southern Methodist University, Department of Chemistry, Dallas, TX, October 2019
21. **G. Meloni**, Lecture, “Principles of Metal Selectivity Bias and Cluster Assembly in Metallothionein Metal Thiolate Clusters”, 258th Meeting of the American Chemical Society, San Diego, CA, USA, August 2019
22. **G. Meloni**, Invited Lecture, “Coordination plasticity controls metal substrate promiscuity in transmembrane primary-active zinc pumps”, International Conference on Biological Inorganic Chemistry, Interlaken, Switzerland, August 2019
23. **G. Meloni**, Lecture, “Transition metal selectivity and plasticity in primary active transmembrane zinc pumps”, 15th International Symposium on Applied Bioinorganic Chemistry, Nara, Japan, June 2019
24. **G. Meloni**, Lecture, “Principles of Non-coordinative Metal Selectivity Bias in Metallothionein Metal Thiolate Clusters”, Canbic-7, Perry Sound, ON, Canada, May 2019
25. **G. Meloni**, Invited Lecture, “The fascinating bioinorganic chemistry of transmembrane metal transporters and “storage” metalloproteins”, California State University Long Beach, Department of Chemistry and Biochemistry, Long Beach, CA, January 2019
26. **G. Meloni**, Invited Lecture, “The “Inorganic” Side of Life: the Fascinating Chemistry of Metals in Biological Systems”, XIII Conference of Italian Researchers in the World, Richland College, Dallas, TX, December 2018
27. **G. Meloni**, Lecture, “Transition metal selectivity and plasticity in primary active transmembrane zinc pumps”, South East Regional Meeting (SERMACS), American Chemical Society, Augusta, GA, November 2018
28. **G. Meloni**, Lecture, “Principles of Metal Selectivity Bias in Metallothionein Metal Thiolate Clusters” 256th Meeting of the American Chemical Society, Boston, MA, USA, August 2018
29. **G. Meloni**, Invited Lecture, “The metalloneurochemistry of metallothionein-3 in health and disease”, 7th International Conference on Biomedical Engineering, Ho Chi Minh City, Vietnam, June 2018
30. **G. Meloni**, Invited Lecture, “Novel insights into the chemistry of metals in biological systems” 1st UT Dallas – Texas A&M Agrilife Symposium, UT Dallas, April 2018
31. **G. Meloni**, Invited Lecture, “The fascinating bioinorganic chemistry of transmembrane transition metal transporters”, Texas A&M Univ. Kingsville, Department of Chemistry, Kingsville, TX, March 2018
32. **G. Meloni**, Invited Lecture, “The fascinating bioinorganic chemistry of transmembrane transition metal transporters”, University of North Texas, Department of Chemistry, Denton, TX, February 2018
33. **G. Meloni**, Lecture, “Transition metal selectivity and transport in primary active P_{1B}-type ATPases” South West Regional Meeting (SWRM), American Chemical Society, Lubbock, TX, November 2017
34. **G. Meloni**, Invited Lecture, “The inorganic side of life: insights into the chemistry of metals in biological systems”, CalPoly Pomona, Department of Chemistry and Biochemistry, Pomona, CA, October 2017

35. **G. Meloni**, Lecture, “Novel insights into metal selectivity and reactivity in human metallothionein-3” 18th International Conference of Biological Inorganic Chemistry, Florianopolis, Brazil, July 2017
36. **G. Meloni**, Invited Lecture, “Transition metal selectivity and transport in transmembrane ion pumps” Department of Chemistry, University of Zurich, Switzerland, June 2017
37. **G. Meloni**, Contributed presentation, “Aberrant amyloid pore-metal interactions as novel therapeutic target”, 2017 NIH Annual Mentoring Workshop for New Faculty in Organic and Biological Chemistry, Kansas City, MO, June 2017
38. **G. Meloni**, Invited Lecture, “Understanding transition metal selectivity in ion pumps and “storage” metalloproteins”, Novo Nordisk Prize Symposium, Aarhus, Denmark, May 2017
39. **G. Meloni**, Invited Lecture, “The fascinating bioinorganic chemistry of metal transporters and storage metalloproteins”, University of Nebraska-Lincoln, Department of Biochemistry, October 2016
40. **G. Meloni**, Invited Lecture, “Principles of transition metal selectivity and transport in transmembrane ion pumps”, CINVESTAV, Department of Chemistry, Mexico City, September 2016
41. **G. Meloni**, Lecture, “Principles of transition metal selectivity and transport in transmembrane ion pumps”, SERMACS/SWRM, American Chemical Society, Memphis, TN, November 2015
42. **G. Meloni**, Lecture, “Principles of transition metal selectivity and transport in transmembrane ion pumps”, International Conference of Biological Inorganic Chemistry, Beijing, July 2015
43. **G. Meloni**, Invited Lecture, “Principles of transition metal selectivity and transport in transmembrane ion pumps”, Chinese Academy of Sciences, Institute of Biophysics, July 2015
44. **G. Meloni**, Lecture, “Principles of Transition Metal Selectivity in Transmembrane P-type ATPase Pumps”, Gordon Research Seminar in Bioinorganic Chemistry, Ventura, CA, February 2014
45. **G. Meloni**, Invited Lecture, “Principles of transition metal selectivity in P_{1B}-type ATPases”, Coordination Chemistry Conference (Zing meeting), Xcaret, Mexico, December 2013
46. **G. Meloni**, Invited Lecture, “Principles of transition metal selectivity in P_{1B}-type ATPases”, PUMPKin meeting, Danish National Research Foundation, Univ.of Copenhagen, Denmark, November 2013
47. **G. Meloni**, “Principles of transition metal selectivity and transport in P_{1B}-type ATPases” Invited Lecture CoLuAa 2013, Lund, Sweden, September 2013
48. **G. Meloni**, Invited Lecture, “Principles of transition metal selectivity in P_{1B}-type ATPases”, PUMPKin meeting, Danish National Research Foundation, Greena, Denmark, August 2013
49. **G. Meloni**, Lecture, “Metal selectivity and transport in P_{1B}-type ATPases”, Microbiology Seminar series, California institute of Technology, Pasadena, CA, USA, September 2011
50. **G. Meloni**, Invited Lecture, “Metalloneurochemistry of metallothionein-3 in neurodegenerative disorders”, New York University, New York, USA, February 2009
51. **G. Meloni**, Invited Lecture, “Metalloneurochemistry of metallothionein-3 in neurodegenerative disorders”, University of California Los Angeles, Los Angeles, CA, USA, January 2009
52. **G. Meloni**, Lecture, “Control of abnormal metal-protein interactions in Alzheimer’s disease”, 4th Asian Biological Inorganic Chemistry Conference, Jeju, South Korea, November 2008
53. **G. Meloni**, Invited Lecture, “Metalloneurochemistry of metallothionein-3 in Alzheimer’s Disease” Alicon AG, Switzerland, September 2008
54. **G. Meloni**, Invited Lecture, “Metalloneurochemistry of Alzheimer’s disease: copper, zinc and metallothionein-3 and neurodegenerative disorders”, University of Konstanz, Konstanz, Germany, November 2007
55. **G. Meloni**, Invited Lecture, “Metallothionein-3 in the brain: from metal homeostasis to neurodegeneration”, COST Chemistry “Metalloenzymes and chemical biomimetics”, Leuven, Belgium, May 2006
56. **G. Meloni**, Invited Lecture, “Zinc in the brain: unravelling the role of Zinc-Metallothionein-3”, French National Center for Scientific Research (CNRS), Toulouse, France, July 2005

Scheduled Invited Lectures

1. **G. Meloni**, Invited Lecture, Canadian Bioinorganic Chemistry Conference, Georgian Bay, Ontario, Canada, May 2023

2. **G. Meloni**, Invited Lecture, 16th International Symposium on Applied Bioinorganic Chemistry, Ioannina, Greece, June 2023

Conferences with poster presentations

1. International Copper meeting, 11th International Copper Meeting, Sorrento, Italy, September 2018
2. Gordon Research Seminar in Bioinorganic Chemistry, Ventura, CA, February 2014
3. Gordon Research Conference, Metals in Biology, Ventura, CA, February 2014
4. PUMPKin meeting, Danish National Research Foundation, Greena, Denmark, August 2013
5. 13th International Conference “Na⁺,K⁺-ATPase and Related P-ATPases: Structure, Biology and Medicine”, Pacific Grove, CA, USA, October 2011
6. 15th International Conference on Biological Inorganic Chemistry, Vancouver, Canada, August 2011
7. 60th Fujihara Seminar, “Zinc Signals and cellular functions”, Osaka, Japan, November 2010.
8. 14th International Conference on Biological Inorganic Chemistry, Nagoya, Japan, July 2009
9. “Bioinorganic chemistry of metallothionein-3 in neurodegenerative disorders” Gordon Research Conference, Metals in Biology, Ventura, CA, USA, January 2009
10. Swiss Chemical Society Meeting 2008, Zurich, Switzerland, September 2008
11. Gordon Research Conference, Metals in Medicine, Andover, NH, USA, July 2008
12. 5th International Copper Meeting, Alghero, Italy, October 2006
13. 6th International conference on Zinc Signals, Monteoliveto, Italy, September 2006
14. 12th International Conference on Biological Inorganic Chemistry, Ann Arbor, MI, USA, August 2005
15. International Union of Biochemistry and Molecular Biology, 50th Symposium, Budapest, Hungary, July 2005
16. Molecules to mind, USGEB/SSN/SBP joint meeting, Zurich, Switzerland, February 2005

List of publications

Preprints

47. S.S. Abeyrathna, N.S. Abeyrathna, P. Basak, G.W. Irvine, L. Zhang, **G. Meloni*** “Plastic recognition and electrogenic uniport translocation of 1st-, 2nd- and 3rd-row transition and post transition metals by transmembrane P_{1B}-2-type ATPase pumps”, *ChemRxiv*, (2022). DOI: 10.26434/chemrxiv-2022-q7rcn (submitted to *Chemical Science*, revised version pending).

Articles in refereed Journals (*denotes corresponding author):

46. W.S.Y. Ong, K. Ji, V. Pathiranaige, C. Maydew, K. Baek, R.L.E. Villones, **G. Meloni**, A. Walker, S.C. Dodani “Rational design of the β-bulge gate in a green fluorescent protein accelerates the kinetics of sulfate sensing.” *ChemRxiv*, (2023) Apr 14;e202302304. doi: 10.1002/anie.202302304
45. A. W. Bulathge, R. L. E. Villones, F. C. Herbert, J. J. Gassensmith, **G. Meloni*** “Comparative cisplatin reactivity towards human Zn₇-Metallothionein-2 and MTF-1 zinc fingers: potential implications in anticancer drug resistance”, *Metallomics*, 14(9):mfac061 (2022). PMCID: PMC9477119, PMID: 36026541
44. W. Peng, C. Maydew, H. Kam, J. Lynd, J.N. Tutol, S.M. Phelps, S. Abeyrathna, **G. Meloni**, S. C. Dodani “Discovery of a monomeric green fluorescent protein sensor for chloride by structure-guided bioinformatics”, *Chemical Science*, 13, 12659-12672 (2022).
43. N. Salustros, C. Grønberg, N. Abeyrathna, K. Wang, M. Andersson, **G. Meloni**, P. Gourdon, “Structural basis of ion uptake in copper-transporting P_{1B}-type ATPases” *Nature Communications*, 13, 5121, (2022). PMCID: PMID: 35762724, PMID: 36045128
42. P. Li, A.L. Hendricks, Y. Wang, R.L.E. Villones, K. Lindkvist-Petersson, **G. Meloni**, J.A. Cowan, K. Wang, P. Gourdon "Structures of Atm1 provide insight into [2Fe-2S] cluster export from mitochondria" *Nature Communications*, 13, 4339, (2022). PMCID: PMC9329353 PMID: 35762724

41. P. Li, N. Nayeri, K. Gorecki, E. Ramos Becares, K. Wang, D. Ram Mahato, M. Andersson, S. Abeyrathna, K. Lindkvist-Petersson, **G. Meloni**, J. W. Missel, P. Gourdon “PcoB is a defense outer membrane protein that facilitates cellular uptake of copper” *Protein Science*, 31(7):e4364., (2022), PMID: PMC9210255, PMID: 35762724
40. J. R. Mehlenbacher, R. Esiesy, R. Lakha, R.L.E. Villones, M. Orman, C.L. Vizcarra, **G. Meloni***, D.E.Wilcox*,R.N. Austin*, “Metal binding and interdomain thermodynamics of mammalian metallothionein-3: enthalpically favoured Cu⁺ supplants entropically favoured Zn²⁺ to form Cu⁴⁺ clusters under physiological conditions” *Chemical Science*, 13, 5289-5304 (2022)
39. J. Calvo, R.L. Villones, N. York, E. Stefaniak, G. Hamilton, A. Stelling, W. Bal, B. Pierce, **G. Meloni*** “Evidence for a long-lived, Cu-coupled and oxygen-inert disulfide radical anion in the assembly of metallothionein-3 Cu(I)₄-thiolate cluster” *Journal of the American Chemical Society*, 144(2), 709–722 (2022), PMID: 34985880 (*Highlighted in JACS Spotlight: J. Am. Chem. Soc.* 2022, 144, 2, 625)
38. C. Grønberg, Q. Hu, D.R. Mahato, E. Longhin, N. Salustros, A. Duelli, P. Lyu, V. Bågenholm, J. Eriksson, K.U. Rao, D.I. Henderson, **G. Meloni**, M. Andersson, T. Croll, G. Godaly, K. Wang, P. Gourdon “Structure and ion-release mechanism of P_{1B-4}-type ATPases” *eLife*, 10, e73124 (2021), PMID: 34951590
37. F.C Herbert, S.S. Abeyrathna, N.S. Abeyrathna, Y.H. Wijesundara, O.R. Brohlin, F. Carraro, H. Amenitsch, P. Falcaro, M.A. Luzuriaga, A. Durand-Silva, S.D. Diwakara, R.A. Smaldone, **G. Meloni***, J.J. Gassensmith* “Stabilization of supramolecular membrane protein-lipid bilayer assemblies through immobilization in a crystalline exoskeleton.” *Nature Communications*, 12, 2202 (2021). PMID: 33850135. (Featured on: Nature Bioengineering Community, UT Dallas News, PhysOrg, and other web outlets)
36. J. N. Tutol, J. Lee, H. Chi, F. Faizuddin, S.S. Abeyrathna, Q. Zhou, F. Morcos, **G. Meloni**, G.; S.C. Dodani, “A single point mutation converts a proton-pumping rhodopsin into a red-shifted, turn-on fluorescent sensor for chloride.” *Chemical Science*, 12(15):5655-5663 (2021), PMID: 34163777
35. M.J. Gallenito, T.S. Qasim, J.N. Tutol, V. Prakash, S.C. Dodani, **G. Meloni*** “A recombinant platform to characterize the role of transmembrane protein hTMEM205 in Pt(II)-drug resistance and extrusion”, *Metalomics*, 12, 1542-1554, (2020). PMID: 32789331
34. J.S. Calvo, N. Mulpuri, A. Dao, N. Qazi, **G. Meloni*** “Membrane insertion exacerbates the α -Synuclein-Cu(II) dopamine oxidase activity: metallothionein-3 targets and silences all α -Synuclein-Cu(II) complexes”, *Free Radical Biology & Medicine*, 158, 149-161, (2020). PMID: 32712192
33. N.S. Abeyrathna, S.S. Abeyrathna, M.T. Morgan, C.J. Fahrni, **G. Meloni*** “Transmembrane Cu(I) P-type ATPase Pumps Are Electrogenic Uniporters”, *Dalton Transactions*, 49, 16082-16094 (2020) (featured on Journal cover, New Talent: America Issue; selected as Hot Article by Dalton Trans.). PMID: 32469032
32. F. Arnold, M. Weber, I. Gonda, M.J. Gallenito, S. Adenau, P. Egloff, I. Zimmermann, C. Hutter, Eike Peters, Jörn Piel, L. Hürlimann, **G. Meloni**, O. Medalia, M. Seeger “The ABC exporter IrtAB imports and reduces mycobacterial siderophores”, *Nature*, 580, 413-417 (2020) (Featured on Nature Microbiol. Reviews Commentary, Science Daily, Phys.org, Innovation reports, Bioengineer, GIT Laborportal, VBIO, Jura Forum, UZH News). PMID: 32469032
31. A. Santoro, J.S. Calvo, M.D. Paris-Diaz, A. Krezel, **G. Meloni**, P. Faller “The glutathione/metallothionein system challenges the design of efficient O₂-activating Cu-complexes”, *Angewandte Chemie International Edition*, 59, 7830-7835 (2020). PMID: 32469032

30. S.D. Boyd, M.S. Ullrich, J.S. Calvo, F. Behnia, **G. Meloni**, D.D. Winkler “Mutations in Superoxide Dismutase 1 (Sod1) Linked to Familial Amyotrophic Lateral Sclerosis Can Disrupt High-Affinity Zinc-Binding Promoted by the Copper Chaperone for Sod1 (Ccs)”, *Molecules*, 25, 1086 (2020). PMID: 32121118
29. S.S. Abeyrathna, N.S. Abeyrathna, N.K. Thai, P. Sarkar, S. D'Arcy, **G. Meloni*** “IroT/MavN Is a Legionella Transmembrane Fe(II) Transporter: Metal Selectivity and Translocation Kinetics Revealed by in Vitro Real-Time Transport”, *Biochemistry*, 58, 4337-4342, (2019). PMID: 31589416
28. M.J. Gallenito, G.W. Irvine, L. Zhang, **G. Meloni*** “Coordination promiscuity guarantees metal substrate selection in transmembrane primary-active Zn²⁺ pumps”, *Chemical Communications*, 55, 10844-10847 (2019) (featured on Journal Issue Cover). PMID: 31589416
27. N. Paranawithana, A. Martins, V. Clavijo-Jordan, P. Zhao, S. Chirayil, **G. Meloni**, A.D. Sherry “A responsive MRI contrast agent for detection of excess copper(II) in the liver in vivo”, *Journal of the American Chemical Society*, 141, 11009-11018 (2019). PMID: 31268706
26. M.T. Morgan, D. Bourassa, S. Harankhedkar, A.M. McCallum, S. Zlatić, J. Calvo, **G. Meloni**, V. Faundez, C. Fahrni, “Ratiometric two-photon microscopy reveals attomolar copper buffering in normal and Menkes mutant cells”, *Proceedings of The National Academy of Sciences*, 116, 12167-12172 (2019). PMID: 31160463
25. S.D. Boyd, J.S. Calvo, L. Liu, M.S. Ullrich, A. Skopp, **G. Meloni**, D.D. Winkler, “The yeast copper chaperone for copper-zinc superoxide dismutase (CCS1) is a multifunctional chaperone promoting all levels of SOD1 maturation”, *Journal of Biological Chemistry*, 294, 1956-1966 (2019). PMID: 30530491
24. J. Calvo, Lopez V. and **G. Meloni***, “Non-coordinative metal selectivity bias in human metallothioneins metal- thiolate clusters”, *Metallomics*, 10, 1777-1791 (2018) (featured on Journal Issue back Cover). PMID: 30420986
23. E. Atrian-Blasco, A Santoro, D.L. Pountney, **G. Meloni**, C. Hureau and P. Faller, “Chemistry of mammalian metallothioneins and their interaction with amyloidogenic peptides and proteins”, *Chemical Society Reviews*, 46, 7683-7693 (2017). PMID: 29114657
22. Z. Chen, S. Boyd, J. Calvo, K. Murray, G. Mejia, C. Benjamin, R. Welch, D. Winkler, **G. Meloni**, S. D'Arcy, J. Gassensmith, "Fluorescent Functionalization Across Quaternary Structure in a Virus-Like Particle", *ACS Bioconjugate Chemistry*, 20, 2277-2283 (2017). PMID: 28787574
21. X. Zhen, B. Li, F. Hu, S. Yan, **G. Meloni**, H. Li, N. Shi "Crystal structure of the DNA-binding domain of Myelin-gene Regulatory Factor", *Scientific Reports*, 7, 6396 (2017). PMID: 28623291
20. M. Vasak*, **G. Meloni*** "Mammalian Metallothionein-3: New Functional and Structural Insights", *International Journal of Molecular Sciences*, 18, 1117-1131 (2017). PMID: 28538697
19. J. Calvo, H. Jung, **G. Meloni*** "Copper metallothioneins", *IUBMB Life*, 69, 236-245 (2017). PMID: 28296007
18. D. Mattle, L. Zhang, O. Sitsel, L.T. Pedersen, M.R. Monicelli, F. Tadini-Buoninsegni, P. Gourdon, D.C. Rees, P. Nissen, **G. Meloni*** “A sulfur-based transport pathway in Cu⁺-ATPases”, *EMBO Reports*, 16, 728-740 (2015) (*Corresponding Author). PMID: 25956886
17. O. Sitsel, C. Gronberg, H. Autzen, K. Wang, **G. Meloni**, P. Nissen, P. Gourdon. "Structure and function of Cu(I)- and Zn(II)-ATPases", *Biochemistry*, 54, 5673-5683 (2015). PMID: 26132333
16. K.T. Wang^o, O. Sitsel^o, **G. Meloni**, H. E. Autzen, M. Andersson, T. Klymchuk, M. Nielsen, D.C. Rees, P. Nissen, P. Gourdon, “Crystal structure and release mechanism of Zn²⁺-transporting P-Type ATPases”, *Nature*, 514, 518-522 (2014) (^ocontributed equally). PMID: 25132545

15. **G. Meloni***, L. Zhang*, D.C. Rees* “A transmembrane Type-2-like Cu(II) site in the P_{1B-3}-type ATPase CopB: implications for metal selectivity”, *ACS Chemical Biology*, 17, 116-121 (2014) (*Corresponding Author). PMID: 24144006
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13. D. Mattle, O. Sitsel, H.E. Autzen, **G. Meloni**, P. Gourdon, P. Nissen, “On allosteric modulation of P-type Cu⁺-ATPases”, *Journal of Molecular Biology*, 425, 2299-2308 (2013). PMID: 23500486
12. **G. Meloni***, A. Crameri, G. Fritz, P. Davies, D.R. Brown, P.M.H. Kroneck, M. Vašák*, “The Catalytic Redox Activity of Prion Protein–Cu(II) is Controlled by Metal Exchange with the Zn(II)–thiolate Clusters of Zn₇Metallothionein-3”, *ChemBioChem*, 13, 1261-1265 (2012) (*Corresponding Author). PMID: 22615124
11. Y. Manso, J. Carrasco, G. Comes, **G. Meloni**, P. Adlard, A. I. Bush, M. Vašák, J. Hidalgo, “Characterization of the role of metallothionein-3 in an animal model of Alzheimer’s disease”, *Cellular and Molecular Life Sciences*, 69, 368-3700 (2012). PMID: 22722772
10. M. Vašák, **G. Meloni**, “Chemistry and Biology of mammalian metallothioneins”, *Journal of Biological Inorganic Chemistry*, 16, 1067-1078 (2011). PMID: 21647776
9. **G. Meloni***, M. Vašák*, “Redox Activity of α -Synuclein-Cu is Silenced by Metallothionein-3”, *Free Radicals Biology & Medicine*, 50, 1471-1479 (2011) (*Corresponding Author). PMID: 21320589
8. J. Durand, **G. Meloni**, C. Talmard, M. Vašák, P. Faller, “Zinc release of Zn₇metallothionein-3 induces fibrillar type amyloid- β aggregates”, *Metallomics*, 1, 741-744, (2010). PMID: 21072365
7. **G. Meloni***, M. Vašák*, “Control of abnormal metal-protein interactions in neurodegenerative disorders by metallothionein-3”, *CHIMIA*, 63, 211-213 (2009) (*Corresponding Author). DOI: 10.2533/chimia.2009.211
6. **G. Meloni**^o, T. Polanski^o, O. Braun, and M. Vašák, “Effects of Zn²⁺, Ca²⁺, and Mg²⁺ on the Structure of Zn₇Metallothionein-3: Evidence for an Additional Zinc Binding Site”, *Biochemistry*, 48, 5700-5707 (2009) (^ocontributed equally). PMID: 19425569
5. **G. Meloni**, V. Sonois, T. Delaine, L. Guilloreau, A. Gillet, J., Teissie, P. Faller, M. Vašák, “Metal swap between Zn₇metallothionein-3 and amyloid- β -Cu protects against amyloid- β toxicity”, *Nature Chemical Biology*, 4, 366-372 (2008). PMID: 18454142
4. **G. Meloni**, P. Faller, M. Vašák, “Redox silencing of copper in neurodegenerative disorders: Reaction of Zn₇metallothionein-3 with Cu(II) ions”, *Journal of Biological Chemistry*, 282, 16068-16078 (2007). PMID: 17389590
3. **G. Meloni**, K. Zovo, J. Kazantseva, P. Palumaa, M. Vašák, “Organization and assembly of metal-thiolate clusters in epithelium-specific metallothionein-4”, *Journal of Biological Chemistry*, 281, 14588-14595 (2006). PMID: 16556599
2. **G. Meloni**, M. Knipp, M. Vašák, “Detection of neuronal growth inhibitory factor (metallothionein-3) in polyacrylamide gels and by Western blot analysis”, *Journal of Biochemical and Biophysical Methods*, 29, 76-81 (2005). PMID: 15982745
1. M. Knipp^o, **G. Meloni**^o, B. Roschitzki, M. Vašák, “Zn₇metallothionein-3 and the synaptic vesicle cycle: interaction of metallothionein-3 with the small GTPase Rab3A”, *Biochemistry*, 44, 3159-3165 (2005). (^ocontributed equally). PMID: 15736926

Book Contributions:

1. M. Vašák*, **G. Meloni*** “Zinc Metallothionein-3 (Neuronal growth inhibitory factor)” Encyclopedia of Metalloproteins, (Ed. V. Uversky, R. H. Kretsinger, E. A. Permyakov), Springer, New York, USA, pp. 2486-2491, (2013).
2. M. Vašák, **G. Meloni**, “Metallothionein-3, Zinc, and Copper in the Central Nervous System”, in Metal Ions in Life Science Vol. 5, Metallothioneins and Related chelators, (Ed. A. Sigel, H. Sigel, and R. K. O. Sigel), The Royal Society of Chemistry, Cambridge, UK, pp. 319-351, (2009).
3. M. Vašák*, **G. Meloni***, “Metallothionein Structure and Reactivity”, in Metallothioneins in Biochemistry and Pathology, (Ed. P. Zatta), World Scientific Publishing, Singapore, pp. 1-24 (2008).

Fellowships and Awards – Supervised postdoctoral scholars and Ph.D. students

2022	Rhiza Villones	The University of Texas at Dallas PhD Research Small Grant F22
2022	Rhiza Villones	GSA Travel Grant F22
2022	Rhiza Villones	Mei Lein Fellowship, School of Natural Sciences and Mathematics, UTD
2021	Nisansala Abeyrathna	ASBMB Graduate student doctoral fellow travel award
2021	Sameera Abeyrathna	ASBMB Conference student award
2021	Nisansala Abeyrathna	ASBMB Conference Student award
2020	Jenifer Calvo	Bioinorganic Chemistry Gordon Research Seminar Registration Grant
2020	Sameera Abeyrathna	ASBMB Graduate student doctoral fellow travel award
2019	Jenifer Calvo	The University of Texas at Dallas PhD Research Small Grant F19
2019	Jenifer Calvo	The University of Texas at Dallas PhD Research Small Grant Su19
2019	Jenifer Calvo	UTD Phi Kappa Phi Cyrus Cantrell III Travel Grant
2019	Jenifer Calvo	Society of Biological Inorganic Chemistry Student Travel Grant
2019	Marc Gallenito	Selden Leavell Endowed Scholarship, UTD
2019	Marc Gallenito	Cyrus D. Cantrell III UTD Phi Kappa Phi Travel Grant,
2019	Marc Gallenito	PhD Research Small Grant, Office of Graduate Education, UTD
2019	Marc Gallenito	Best talks 2 nd Place, ACS-DFW Meeting-in-Miniature, UNT, Denton, TX
2018	Gordon W. Irvine	NSERC Postdoctoral Fellowship award
2018	Jenifer Calvo	The University of Texas at Dallas Mei Lein Fellowship
2017	Marc Gallenito	Mei Lein Fellowship, School of Natural Sciences and Mathematics, UTD
2017	Marc Gallenito	UT Dallas Recycling Scholarship, UTD
2017	Marc Gallenito	The Honor Society of Phi Kappa Phi, UTD
2015	Jenifer Calvo	The University of Texas at Dallas Graduate Studies Scholarship
2015	Marc Gallenito	UT Dallas Graduate Studies Scholarship, UTD

Other grant proposals (as collaborator)

- 1) Title Unzipping ZIPs - an enigmatic family of zinc-transporting membrane proteins
Principal investigator Pontus Gourdon (University of Copenhagen, Denmark)
Role Collaborator
Funding source Danish National Science Foundation
Status Funded (covers the stipend and research costs for a Ph.D. student from Denmark to conduct research at UT Dallas as part of his Ph.D.)
- 2) Title Unzipping human zinc-transport
Principal investigator Pontus Gourdon (University of Copenhagen, Denmark)
Role on the grant Collaborator
Funding source Swedish Research Council

Status

Funded (funding student visits from the University of Lund, Sweden, to conduct research at UT Dallas)

Postdoctoral Scholars supervised

- 1) Hunmin Jung, University of Texas at Dallas 2016-2017
- 2) Gordon W. Irvine University of Texas at Dallas 2018-2020
Current position: Metabolon., USA
- 3) Priyanka Basak University of Texas at Dallas 2020-2022
Current position: Bio-Techne Diagnostics., USA

Doctoral Students Supervised, current

- 1) Jenifer S. Calvo University of Texas at Dallas 2015-2020
Current position: Postdoc, Johns Hopkins University
- 2) Marc J. Gallenito University of Texas at Dallas 2015-2020
Current position: Postdoc, Howard Hughes Medical Institute and UCLA
- 3) Sameera S. Abeyrathna University of Texas at Dallas 2016-2021
Current position: Postdoc, Howard Hughes Medical Institute and UT Southwestern
- 4) Nisansala S. Abeyrathna University of Texas at Dallas 2017-2022
Current Position: Postdoc, UT Southwestern
- 5) Anjala Bulathge University of Texas at Dallas 2016-2023
Current position: Research Scientist, Proteios Technology, Inc.
- 6) Mitchell Pope (RA) University of Texas at Dallas 2018-
- 7) Jayoh Hernandez (RA) University of Texas at Dallas 2018-
- 8) Rhiza Villones (RA) University of Texas at Dallas 2018-
- 9) Luciano Perez-Medina (RA) University of Texas at Dallas 2019-
- 10) Rose Curtis (RA) University of Texas at Dallas 2019-
- 11) Humera Gull (RA) University of Texas at Dallas 2020-
- 12) Madujika H. Gamage (RA) University of Texas at Dallas 2020-
- 13) Jonathan Garcia Martinez (TA) University of Texas at Dallas 2021-
- 14) Fernando Montalvillo (TA) University of Texas at Dallas 2021-
- 15) Sean Sunga (TA) University of Texas at Dallas 2022-
- 16) Hossain Qasimi (TA) University of Texas at Dallas 2022-

Master Students Supervised

- 1) Alex Dao University of Texas at Dallas 2019-2021
- 2) Dileepa Paliaththa Kumaraige University of Texas at Dallas (ND) 2015-2016

Undergraduate and Students Supervised

- 1) Neha Mulpuri Vahrdani University of Texas at Dallas 2015-2017
Current position: MD student, UT Southwestern
- 2) Jason Matthew University of Texas at Dallas 2015-2018
Current position: MS student, Tulane University
- 3) Razaq Olumide Durodoye University of Texas at Dallas 2015-2018
Current position: MD/Ph.D Program, Case Western University
- 4) Victor Lopez University of Texas at Dallas 2016-2018
Current position: Employed in family business
- 5) Eduardo Cervantes University of Texas at Dallas 2017-2018
Current position: Medical School, UT Southwestern
- 6) Nathan Thai University of Texas at Dallas 2018-2020
Current position: Research Scientist, University of Florida

7)	Tahir Qasim	University of Texas at Dallas	2018-2022
8)	Nabeeha Qazi	University of Texas at Dallas	2019-2022
	<i>Current position:</i>	<i>Senior student, University of Texas at Dallas</i>	
9)	Francis Thuong	University of Texas at Dallas	2021-2022
	<i>Current position:</i>	<i>Green Fellow, UT Southwestern</i>	
10)	Paul Micus	University of Texas at Dallas	2022-present
11)	Preston Khetsavanh	University of Texas at Dallas	2022-present
12)	Ahad Ullah	University of Texas at Dallas	2022-present
13)	Alex Dao	University of Texas at Dallas	2018-2019
	<i>Current position:</i>	<i>PhD. Student, UT Dallas</i>	
14)	Jonathan Garcia	UTD-Mexico Summer Research Program	2019
	<i>Current position:</i>	<i>PhD. Student, UT Dallas</i>	
15)	Luciano Perez Medina	UTD-Mexico Summer Research Program	2018
	<i>Current position:</i>	<i>PhD. Student, UT Dallas</i>	
16)	Joshua Baker	Summer Student, Baylor University	2018

Guest Graduate Students

1)	Elena Longhin	University of Copenhagen, DK	2019
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High School students Supervised

17)	Russell Ku	High-school student, Welch Summer Scholar Program	2017
18)	Sophia Kontos	High-school student, Welch Summer Scholar Program	2018
19)	Sreya Gandra	High-school student, Welch Summer Scholar Program	2019
20)	Yasash Gorusu	NanoExplorer Summer Program	2019
21)	Manav Lund	High-school student, Welch Summer Scholar Program	2022

Students Supervised – prior to UT Dallas

1)	Louise Baltser Rasmussen	Aarhus University, DK	2013-2014
2)	Daniel Mattle (Ph.D. Student),	California Institute of Technology, USA	2012-2013
3)	Kathryn Perez (Ph.D student),	California Institute of Technology, USA	2011
4)	Jessica Hsu (B.S. student)	California Institute of Technology, USA	2011
5)	Andrew Davenport (Ph.D. student)	California Institute of Technology, USA	2011
6)	Ee Jane Lim (B.S. student)	California Institute of Technology, USA	2010
7)	Andrea Crameri, (M.S. student),	University of Zurich, CH	2007-2008
8)	Christian Seelandt, (M.S. student)	University of Zurich, CH	2006-2007
9)	Thomas Polanski, (M.S. student)	University of Zurich, CH	2006-2007

Graduate students upon whose Dissertation Committees I served (Thesis defense)

	<i>Name</i>	<i>Advisor</i>	<i>Department</i>	<i>Year</i>
1)	Madison Berger	Dr. A. Cisneros	Chemistry and Biochemistry	2023
2)	Teri Douglas	Dr. A. Stelling	Chemistry and Biochemistry	2023
3)	Darby Ball	Dr. S. D’Arcy	Chemistry and Biochemistry	2022
4)	Hanghang Wang	Dr. M. Stefan	Chemistry and Biochemistry	2022
5)	Juan Luis Ortega	Dr. S. Nielsen	Chemistry and Biochemistry	2022
6)	Fabian Castro	Dr. J. Gassesmith	Chemistry and Biochemistry	2022
7)	Kiran, Tripathi	Dr. S. D’Arcy	Chemistry and Biochemistry	2022
8)	Jasmine Tutol	Dr. S. Dodani	Chemistry and Biochemistry	2021
9)	Noushin Akhavantabib	Dr. S. D’Arcy	Chemistry and Biochemistry	2021
10)	Naifu Zhang	Dr. S. D’Arcy	Chemistry and Biochemistry	2021
11)	John Michael Cue	Dr. M. Stefan	Chemistry and Biochemistry	2021
12)	Erika Calubaquib	Dr. M. Stefan	Chemistry and Biochemistry	2021

13)	Qinhan Zhou	Dr. J. Zheng	Chemistry and Biochemistry	2021
14)	Olivia Brohlin	Dr. J. Gassensmith	Chemistry and Biochemistry	2021
15)	Siqing Li	Dr. J. Zheng	Chemistry and Biochemistry	2021
16)	Qinhan Zhou	Dr. J. Zheng	Chemistry and Biochemistry	2021
17)	Muktadir Md Talukder	Dr. Stefan	Chemistry and Biochemistry	2020
18)	Matthew Franciscovich	Dr. S. D’Arcy	Chemistry and Biochemistry	2020
19)	Yingyu Huang	Dr. J. Zheng	Chemistry and Biochemistry	2020
20)	Candace Benjamin	Dr. J. Gassensmith	Chemistry and Biochemistry	2020
21)	Kierstin Page	Dr. S. Dodani	Chemistry and Biochemistry	2020
22)	Kyle Murray	Dr. S. D’Arcy	Chemistry and Biochemistry	2020
23)	Hiu Kam	Dr. S. Dodani	Chemistry and Biochemistry	2019
24)	Jonghae Youn	Dr. J. Lee	Chemistry and Biochemistry	2019
25)	Maria Castaneda	Dr. J. Lee	Chemistry and Biochemistry	2019
26)	Xingya Jiang	Dr. J. Zheng	Chemistry and Biochemistry	2019
27)	Chanqi Peng	Dr. J. Zheng	Chemistry and Biochemistry	2019
28)	Bujie Du	Dr. J. Zheng	Chemistry and Biochemistry	2019
29)	Xhuiui Ning	Dr. J. Zheng	Chemistry and Biochemistry	2019
30)	Samitha D. Panangala	Dr. J. Ferraris	Chemistry and Biochemistry	2019
31)	Sarah Karimi	Dr. P. Pantano	Chemistry and Biochemistry	2018
32)	Namini Paranawithana	Dr. D. Sherry	Chemistry and Biochemistry	2018
33)	Yi Xin Ren	Dr. M. Stefan	Chemistry and Biochemistry	2018
34)	Vasanthi Karmegam	Dr. Stefan/ Dr. Biewer	Chemistry and Biochemistry	2018
35)	Rishma Sharma	Dr. Stefan/ Dr. Biewer	Chemistry and Biochemistry	2018
36)	Chao Long	Dr. J. Lee	Chemistry and Biochemistry	2018
37)	Honda Archchi Jayathilaka	Dr. K, Balkus	Chemistry and Biochemistry	2017
38)	Shasha Sun	Dr. J. Zheng	Chemistry and Biochemistry	2016
39)	Sarah Karimi, MS	Dr. P. Pantano	Chemistry and Biochemistry	2016

Graduate students upon whose I serve as Graduate Committee member

1)	Ly Truc, Tran	Dr. S. Nielsen	Chemistry and Biochemistry	2022 -
2)	Hasna Begam	Dr. Allison Stelling	Chemistry and Biochemistry	2022 -
3)	Godwin Babanyinah	Dr. M. Stefan	Chemistry and Biochemistry	2022 -
4)	Mauricio Martil	Dr. A Cisneros	Chemistry and Biochemistry	2022 -
5)	Trashi Ikeda	Dr. J. Gassensmith	Chemistry and Biochemistry	2022 -
6)	Evan Bonnard	Dr. S. D'Arcy	Chemistry and Biochemistry	2022 -
7)	Elizabeth Pack	Dr. S. Dodani	Chemistry and Biochemistry	2022 -
8)	Yazdan Maghsoud	Dr. A. Cisneros	Chemistry and Biochemistry	2022 -
9)	Upeksha Dissanayake	Dr. A. Cisneros	Chemistry and Biochemistry	2022 -
10)	Abiola Akintayo	Dr. H. Torabifard	Chemistry and Biochemistry	2021 -
11)	Trang Nguyen	Dr. S. D’Arcy	Chemistry and Biochemistry	2021 -
12)	Sneha Kumari	Dr. J. Gassensmith	Chemistry and Biochemistry	2021 -
13)	Teri Douglas	Dr. A. Stelling	Chemistry and Biochemistry	2021 - 2023
14)	Isaiah Odeyemi	Dr. A. Stelling	Chemistry and Biochemistry	2021 -
15)	Hao-Che Peng	Dr. A. Stelling	Chemistry and Biochemistry	2021 -
16)	Mariah Cook	Dr. S. Dodani	Chemistry and Biochemistry	2021 -
17)	Shelby Phelps	Dr. S. Dodani	Chemistry and Biochemistry	2021 -
18)	Himanshu Polara	Dr. M.Stefan	Chemistry and Biochemistry	2021 -
19)	Yalini Wijesundara	Dr. J. Gassensmith	Chemistry and Biochemistry	2020 -
20)	Sureshee Liyanaarachchi	Dr. S. Dodani	Chemistry and Biochemistry	2020 - 2021

21)	Tejas Shah	Dr. M. Stefan	Chemistry and Biochemistry	2020 -
22)	Theepan Thanabalasingam	Dr. J. Chan	Chemistry and Biochemistry	2020 – 2021
23)	Juan Luis Ortega	Dr. J. Chan	Chemistry and Biochemistry	2020 – 2022
24)	Simin Sheybani	Dr. J. Zheng	Chemistry and Biochemistry	2020 -
25)	Fabian Castro Herbert	Dr. J. Gassensmith	Chemistry and Biochemistry	2020 -
26)	Olaluwoye, Sunday	Dr. S. D’Arcy	Chemistry and Biochemistry	2020 -
27)	Tripathi Kiran	Dr. S. D’Arcy	Chemistry and Biochemistry	2020 - 2022
28)	Ji, Ke	Dr. S. Dodani	Chemistry and Biochemistry	2020 -
29)	Jenica Lumata	Dr. J. Gassensmith	Chemistry and Biochemistry	2019 -
30)	Ahrari Samira	Dr. J. Zheng	Chemistry and Biochemistry	2019 -
31)	Abhi Bhadran	Dr. M. Stefan	Chemistry and Biochemistry	2019 -
32)	Kierstin Page	Dr. S. Dodani	Chemistry and Biochemistry	2019 - 2020
33)	Kara Kasses	Dr. J. Ahn	Chemistry and Biochemistry	2018 -
34)	Hanghang Wang	Dr. M. Stefan	Chemistry and Biochemistry	2018 - 2022
35)	Darby Ball	Dr. S. D’Arcy	Chemistry and Biochemistry	2018 - 2022
36)	Olivia Brohlin	Dr. J. Gassensmith	Chemistry and Biochemistry	2018 - 2021
37)	Siqing Li	Dr. J. Zheng	Chemistry and Biochemistry	2018 - 2021
38)	Hiu Kam	Dr. S. Dodani	Chemistry and Biochemistry	2018 - 2019
39)	Morgan Ullrich	Dr. D. Winkler	Biological Sciences	2018 - 2019
40)	Noushin Akhavantabib	Dr. S. D’Arcy	Chemistry and Biochemistry	2017 - 2021
41)	Naifu Zhang	Dr. S. D’Arcy	Chemistry and Biochemistry	2017 - 2021
42)	John Michael Cue	Dr. M. Stefan	Chemistry and Biochemistry	2017 - 2021
43)	Erika Calubaquib	Dr. M. Stefan	Chemistry and Biochemistry	2017 - 2021
44)	Qinhan Zhou	Dr. J. Zheng	Chemistry and Biochemistry	2017 - 2021
45)	Jasmine Tutol	Dr. S. Dodani	Chemistry and Biochemistry	2017 - 2021
46)	Rishma Sharma	Dr. M. Biewer	Chemistry and Biochemistry	2017 - 2018
47)	Chanqi Peng	Dr. J. Zheng	Chemistry and Biochemistry	2016 - 2019
48)	Alexander Brown	Dr. J. Chan	Chemistry and Biochemistry	2016 - 2017
49)	Muktadir Md Talukder	Dr. M. Stefan	Chemistry and Biochemistry	2016 - 2020
50)	Kyle Murray	Dr. S. D’Arcy	Chemistry and Biochemistry	2016 - 2020
51)	Candace Benjamin	Dr. J. Gassensmith	Chemistry and Biochemistry	2016 - 2020
52)	Honda Archchi Jayathilaka	Dr. K. Balkus	Chemistry and Biochemistry	2016 - 2017
53)	Yi Xin Ren	Dr. M. Stefan	Chemistry and Biochemistry	2015 - 2018
54)	Jonghae Youn	Dr. J. Lee	Chemistry and Biochemistry	2015 - 2019
55)	Maria Castaneda	Dr. J. Lee	Chemistry and Biochemistry	2015 - 2019
56)	Jason Lin	Dr. K. Balkus	Chemistry and Biochemistry	2015 - 2017
57)	Xingya Jiang	Dr. J. Zheng	Chemistry and Biochemistry	2015 - 2019

Teaching - prior to UT Dallas

- 2008 - 2009** Practical course of Biochemistry for MD Students, University of Zurich
- 2005 - 2008** Practical course of Circular Dichroism spectroscopy for Biochemistry students, University of Zurich
- 2003 - 2007** Practical course of Biochemistry for Biology Students, University of Zurich

Service contributions

University-wide – UT Dallas

- 2022 - present** Chair, Institutional Biosafety and Chemical Safety Committee, University of Texas at Dallas

- 2022 - present** Member, University Safety and Security Council, University of Texas at Dallas
- 2021 - 2022** Member of the Institutional Biosafety and Chemical Safety Committee, University of Texas at Dallas
- 2019 - 2021** Member of the Committee on Educational Policy, UT Dallas Governance
- 2019 - 2021** Co-Director of the Molecular and Protein Analysis Core Facility (MoPAC), Office of Research, University of Texas at Dallas
- 2018 - present** Member of the “Mass Spectrometry Core Facility Faculty Advisory Board”, Office of Research, University of Texas at Dallas
- 2017 - 2019** Member of the “MoPAC Core Facility Faculty Advisory Board”, Office of Research
- 2015 - 2017** Member of the “Core Facilities Committee for the Bioengineering and Sciences Building”, Office of Research
- 2017 - present** Outside Chair appointed by Graduate Studies for doctoral final oral exams
- | | |
|--|------|
| Student: Leanne R. Young, Cognition and Neuroscience Program | 2017 |
| Student: Michael Stuart, Cognition and Neuroscience Program | 2018 |
| Student: Michelle Iris Rodriguez, GeoSciences Program | 2019 |
| Student: Qing Wang, Physics Program | 2020 |
| Student: Christopher Timms, Physics Program | 2021 |
| Student: Jonathan Popa, Mathematics Program | 2022 |

School/Department Committees – UT Dallas

- 2022 - present** Member of Faculty Search Committee, Organic Chemistry, Department of Chemistry and Biochemistry
- 2021 - present** Member of the “Graduate Admissions Committee”, Department of Chemistry and Biochemistry
- 2015 - present** Member of the “Graduate Recruiting Committee”, Department of Chemistry and Biochemistry
- 2021 - present** Member of *ad-hoc* Committee for Professor of Instruction promotion, Department of Chemistry and Biochemistry
- 2017 - 2022** Department Seminar Chair/Co-Chair, Department of Chemistry and Biochemistry
- 2021** Member of Faculty Search Committee, Organic Chemistry, Department of Chemistry and Biochemistry
- 2020** Member of the Academic Appeals Panel, School of Natural Sciences and Mathematics

Other Activities – UT Dallas

- 2016 - present** UT Dallas Hobson Wildenthal Honors College Activities

Service contributions external to UT Dallas

- 2022** Chair, ACS DFW-section Awards Committee
- 2020 - 2025** Member of the ACS DFW-section Awards Committee
- 2022** Co-organizer, ACS Meeting-in-Miniature, UT Dallas
- 2020 - 2021** Member of the Organizing Committee, ACS Meeting-in-Miniature, UT Dallas

- 2021** External Dissertation Graduate Committee Member, Mario Garcia-Risco, Department of Chemistry, Universitat Autònoma de Barcelona, Spain
- 2021** Dissertation Graduate Committee member, Esau' Emmanuel Rodriguez Méndez, CINVESTAV, Department of Chemistry, Mexico City, Mexico
- 2020** External Dissertation Graduate Reviewer, Monica Perinelli, Department of Chemistry, University of Zurich, Switzerland
- 2019** Co-chair for the "Biochemistry: BioInorganic" session, South East Regional Meeting (SERMACS), American Chemical Society, Savannah, GA, USA
- 2017 - 2019** Dissertation Graduate Committee member, Jelena Habjanic, Department of Chemistry, University of Zurich, Switzerland
- 2017** Dissertation Graduate Committee member, Trinidad de la Paz Arcos, CINVESTAV, Department of Chemistry, Mexico City, Mexico
- 2017 - present** Spokesperson for the projects "Structure and Metal Selectivity of a P_{1B-4}-type ATPase in the Substrate-bound E1 State" and "Structure and metal coordination in a Copper-Responsive MRI contrast Agent", Stanford Synchrotron Radiation Lightsource, CA, USA
- 2011 - 2014** Spokesperson for the SSRL project "Principles of transition metal selectivity in prokaryotic P_{1B}-type ATPases revealed by XAS", Stanford Synchrotron Radiation Lightsource, CA, USA
- 2011 - 2013** Co-organizer of Microbiology Seminar series, California Institute of Technology, CA, USA

Grant Reviewer activity

Reviewer for the National Institute of General Medical Sciences (NIGMS, NIH)
 Reviewer for the National Science Foundation (NSF)
 Reviewer for the Swiss National Science Foundation
 Reviewer and evaluator for the Israel Science Foundation
 Reviewer for the Czech National Science Foundation
 Reviewer for the Polish National Science Centre
 Reviewer for the Alzheimer Association
 Reviewer and evaluator for the Neurological foundation of New Zealand

Reviewer activity

ACS Chemical Neurosciences
 ACS Omega
 Biochemical Genetics
 BMC Biochemistry
 Cells
 Cellular and Molecular Life Sciences
 Chemical Reviews
 Comments on Inorganic Chemistry
 Current Opinions in Chemical Biology
 International Journal of Molecular Sciences
 International Journal of Nanomedicine
 Journal of the American Chemical Society
 Journal of Biological Inorganic Chemistry

Journal of Inorganic Biochemistry
Metalomics
PLOS One
Proceeding of the National Academy of Sciences
Science Advances
Scientific Reports