

## **Dr. Jorge Torres, Professor**

2019-present, Professor, Dept. of Chemistry and Biochemistry, University of California, Los Angeles

2016-2019, Associate Professor Dept. of Chem and Biochem, University of California, Los Angeles

2009-2016, Assistant Professor Dept. of Chem and Biochem, University of California, Los Angeles

## **EDUCATION**

2006-2009 **Postdoctoral Fellow, Genentech Inc., South San Francisco, CA**

Department of Tumor Biology and Angiogenesis

2004-2005 **Postdoctoral Fellow, Stanford University, Palo Alto, CA**

Department of Pathology

1998-2004 **Ph.D., Princeton University, Princeton, NJ**

Department of Molecular Biology

1994-1998 **B.S., University of California, Santa Barbara, CA**

Department of Molecular, Cellular and Developmental Biology

## **HONORS & AWARDS**

2021 R35 Maximizing Investigator Research Award (MIRA), National Institutes of Health (NIH)

2020 Hanson-Dow Faculty Award for Excellence in Teaching, UCLA

2020 Named to Cell Press' List of 100 Inspiring Hispanic/Latinx Scientists in America

2019 Prize for Excellence in Inclusivity,

American Society for Cell Biology (ASCB)

2019 Ruth Kirschstein Diversity in Science Award,

American Society for Biochemistry and Molecular Biology (ASBMB)

2019 Gilliam Fellowship for Advanced Study (Advisor-Student pair),

Howard Hughes Medical Institute (HHMI)

2019 Outstanding College/University Mentor Award

Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)

2019 Outstanding Hispanic Student Mentor Award

Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)

2019 Academic Senate Student Development Diversity, Equity and Inclusion Award, UCLA

2016 Glenn T. Seaborg Award, UCLA

2014 American Cancer Society Research Scholar Award

2013 Faculty Career Development Award, UCLA

2013 Cottrell Scholar Award, Research Corporation for Science Advancement

2012 Herbert Newby McCoy Award, UCLA

2012 Faculty Career Development Award, UCLA

2011 Basil O'Connor Award, March of Dimes Foundation

2010 V Scholar Award, The V Foundation for Cancer Research

2009 John McTague Career Development Chair, UCLA

2005 Leukemia and Lymphoma Society Postdoctoral Fellowship

2005 Ruth L. Kirschstein National Research Service Award, NIH (declined)

2004 Stanford University Cancer Biology Postdoctoral Fellowship

2003 Leadership Alliance/Schering-Plough Fellowship

1999 Princeton University Molecular Biology Teaching Award

1998 Ford Baccalaureate Incentive Award for Outstanding Undergraduate Research

1998 Graduation Commencement Speaker, UCSB

## **MEMBERSHIPS**

### National Societies

2016-present American Chemical Society (ACS)

2010-present American Society for Biochemistry and Molecular Biology (ASBMB)

2005-present American Society for Cell Biology (ASCB)

Lifetime Member Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)

### UCLA Research Units

2009-present UCLA Jonsson Comprehensive Cancer Center (JCCC)

2009-present UCLA Molecular Biology Institute (MBI)

### UCLA Graduate and Postdoctoral Fellow Training Programs

2017-present UCLA Tumor Cell Biology Training Program (TCB)

2016-present UCLA Postdocs Longitudinal Investment in Faculty Training (UPLIFT)

2011-2016 UCLA Biomedical Engineering Interdepartmental Program (BME-IDP)

2010-2020 UCLA Chemistry-Biology Interface Training Program (CBI)

2010-present UCLA Cellular and Molecular Biology Training Program (CMB)

2009-present UCLA Graduate Programs BMB, BMSB, ACCESS, and GPB

## RESEARCH TRAINING EXPERIENCE

### 2006-2009 **Postdoctoral Fellow**

Proteomic and functional characterization of the mitotic spindle

Advisor: **Dr. Peter Jackson**, Genentech Inc.

### 2004-2005 **Postdoctoral Fellow**

The ubiquitin proteasome system in cell cycle control

Advisor: **Dr. Peter Jackson**, Stanford University School of Medicine

### 1999-2004 **Ph.D. Thesis**

The Rrm3p DNA helicase promotes genomic stability

Advisor: **Dr. Virginia Zakian**, Princeton University

### 1998-1999 **Predocutorial Training**

*Lab Rotation:* Phenotypic characterization of piebald deficient mice

Advisor: **Dr. Shirley Tilghman**, Princeton University

*Lab Rotation:* *D. melanogaster* deficiency screen for early developmental defects

Advisor: **Dr. Eric Wieschaus**, Princeton University

*Lab Rotation:* Humanizing the yeast telomere

Advisor: **Dr. Virginia Zakian**, Princeton University

### 1995-1998 **Undergraduate Training**

*Undergraduate Research Projects:* Isolation and characterization of Telomere Growth Inhibited Forever (TGIF) mutants in *Tetrahymena thermophila* and the *Tetrahymena* Genome Project.

Advisor: **Dr. Eduardo Orias**, University of California at Santa Barbara

*Undergraduate Summer Research (1997):* Analysis of complete telomerase RNA substitution mutants in *Tetrahymena thermophila*

Advisor: **Dr. Elizabeth Blackburn**, University of California at San Francisco

## PUBLICATIONS

1. Bessler J.B., **Torres J.Z.**, and Zakian V.A. "The Pif1p subfamily of helicases: region-specific DNA helicases?", **Trends in Cell Biology** 2001 Feb;11(2):60-65. PMID:11166213

2. **Torres J.Z.**, Bessler J.B., and Zakian V.A. "Local chromatin structure at the ribosomal DNA causes replication fork pausing and genome instability in the absence of the *S. cerevisiae* DNA helicase Rrm3p", **Genes & Development** 2004 Mar 1;18(5):498-503. PMID:15037547

3. **Torres J.Z.**, Schnakenberg S.L., and Zakian V.A. "The *Saccharomyces cerevisiae* Rrm3p DNA helicase promotes genome integrity by preventing replication fork stalling: viability of rrm3 cells requires the intra S-phase checkpoint and fork restart activities", **Molecular and Cellular Biology** 2004 Apr;24(8):3198-212. PMID:15060144
4. Azvolinsky A, Dunaway S., **Torres J.Z.**, Bessler J.B., and Zakian V.A. "The *S. cerevisiae* Rrm3p DNA helicase moves with the replication fork and affects replication of all yeast chromosomes", **Genes & Development** 2006 Nov 15;20(22):3104-16. PMID:17114583
5. Ban K.H., **Torres J.Z.**, Miller J.J., Mikhailov A., Nachury M.V., Tung J.J., Rieder C.L., and Jackson P.K. "The END network couples spindle pole assembly to inhibition of the Anaphase-Promoting Complex/Cyclosome in early mitosis", **Developmental Cell** 2007 Jul;13(1):29-42. PMID:17609108
6. **Torres J.Z.**, Miller J.J., and Jackson P.K. "High-throughput generation of tagged stable cell lines for proteomic analysis", **Proteomics** 2009 May;9(10):2888-2891. PMID:19405035
7. **Torres J.Z.**, Ban K.H., and Jackson P.K. "A specific form of Phospho Protein Phosphatase 2 regulates Anaphase-promoting Complex/Cyclosome association with spindle poles", **Molecular Biology of the Cell** 2010 March 15;21:897-904. PMID:20089842

#### **PUBLICATIONS SINCE APPOINTMENT AS ASSISTANT PROFESSOR AT UCLA**

8. **Torres J.Z.\***, Summers M.K., Peterson D., Brauer M.J., Lee J., Senese S., Gholkar A.A., Lo Y.C., Lei X., Jung K., Anderson D.C., Davis D.P., Belmont L., and Jackson P.K. "The STARD9/Kif16a Kinesin Associates with Mitotic Microtubules and Regulates Spindle Pole Assembly", **Cell** 2011 Dec;9(6):1309-1323. PMID:22153075. **\*Corresponding Author**  
**Highlighted:** TV interviews: Univision (<https://www.youtube.com/watch?v=MQOts75V8Cs>) and CNN en Espanol; Radio interviews: KFI AM 640 and La Red; Journal highlight: Science-Business Exchange; Newspaper coverage: > 20 US and Latin American, including Health News Digest and Medical Xpress.
9. **Torres, J.Z.** "STARD9/Kif16a is a novel mitotic kinesin and antimitotic target", **Bioarchitecture** 2012 Jan 1;2(1):19-22. PMID:22754624. (Review)
10. Williams KJ, Argus JP, Zhu Y, Wilks MQ, Marbois BN, York AG, Kidani Y, Pourzia AL, Akhavan D, Lisiero DN, Komisopoulou E, Henkin AH, Soto H, Chamberlain BT, Vergnes L, Jung ME, **Torres JZ**, Liao LM, Christofk HR, Prins RM, Mischel PS, Reue K, Graeber TG, and Bensing SJ. "An Essential Requirement for the SCAP/SREBP Signaling Axis to Protect Cancer Cells from Lipotoxicity", **Cancer Research** 2013 Apr 22;73:2850-2862. PMID:23440422.
11. Sakkiah, S., Arooj M., Lee K.W., and **Torres J.Z.** "Theoretical Approaches to Identify the Potent Scaffold for Human Sirtuin1 Activator: Bayesian Modeling and Density Functional Theory", **Medicinal Chemistry Research** 2014 March 09; 23(5) 2161-2700.
12. Sakkiah S., Senese S., Yang Q., Lee K.W., and **Torres J.Z.** "Dynamic and Multi-pharmacophore Modeling for Designing Polo-box Domain Inhibitors", **Plos One** 2014 Jul 18; 9(7):e101405. doi: 10.1371/journal.pone.0101405. eCollection 2014. PMID:25036740.
13. Senese S., Lo Y.C., Huang D., Zangle T.A., Gholkar A.A., Robert L., Homet B., Ribas A., Summers M.K., Teitell M.A., Damoiseaux R., and **Torres J.Z.** "Chemical Dissection of the Cell Cycle: Probes for Cell Biology and Anti-cancer Drug Development", **Cell Death & Disease** 2014 Oct 16;5:e1462. doi: 10.1038/cddis.2014.420. PMID:25321469.
14. Veena M.S., Wilken R., Zheng J.Y., Gholkar A, Venkatesan N, Vira D., Ahmed S., Basak S.K., Dalgard C.L., Ravichandran S, Batra R. K., Kasahara N., Elashoff D., Fishbein M.C., Whitelegge J.P., **Torres J.Z.**, Wang M.B., and Srivatsan E.S. "p16 protein and gigaxonin are associated with the ubiquitination of

NFkB in cisplatin-induced senescence of cancer cells”, **Journal of Biological Chemistry** 2014 Oct 20. 289(50) 34921-34937. PMID:25331947.

15. Senese S., Cheung K., Lo Y.C., Gholkar A.A., Xia X., Wohlschlegel J.A., and **Torres J.Z.** “A Unique Insertion in STARD9’s Motor Domain Regulates Its Stability”, **Molecular Biology of the Cell** 2015 Feb 1;26(3):440-52. Epub 2014 Dec 10.2014. PMID: 25501367.

16. Lo Y.C., Senese S., Li C.M., Hu Q., Huang Y., Damoiseaux R., and **Torres J.Z.** “Large-scale Chemical Similarity Networks for Target Profiling of Compounds Identified in Cell-based Chemical Screens”, **PLOS Computational Biology** 2015 Mar 31;11(3):e1004153. doi: 10.1371/journal.pcbi.1004153. eCollection 2015 Mar. PMID:25826798.

**Highlighted:** Selected for the front cover of the PLOS Computational Biology web page. The CSNAP web server (<http://services.mbi.ucla.edu/CSNAP/>) that was established as part of this publication has been used by research labs around the world. Metrics are available.

17. Gholkar A.A., Senese S., Lo Y.C., Capri J., Deardorff W.J., Dharmarajan H., Contreras E., Hodara E., Whitelegge J.P., Jackson P.K., and **Torres J.Z.** “Tctex1d2 Associates with Short-Rib Polydactyly Syndrome Proteins and is Required for Ciliogenesis”, **Cell Cycle** 2015 Apr 3;14(7):1116-1125. PMID:25830415.

**Highlighted:** Selected for news and views coverage, see review: Mukhopadhyay S. “Tctex1d2 a Potential Link to Skeletal Ciliopathies” *Cell Cycle*. 2015;14(3):293-4. PMID:25590661.

18. Xia X., Gholkar A., Senese S., and **Torres J.Z.** “A LCMT1-PME1 Methylation Equilibrium Controls Mitotic Spindle Size”, **Cell Cycle** 2015 Jun.18;14(12):1938-1947. PMID:25839665.

19. McNamara D.E., Senese S., Yeates T.O., and **Torres J.Z.** “Structures of potent anticancer compounds bound to tubulin”, **Protein Science** 2015 Jul;24(7):1164-1172. doi: 10.1002/pro.2704. Epub 2015 May 27. PMID:25970265.

**Highlighted:** Selected to be highlighted at the front of the issue of Protein Science.

#### **PUBLICATIONS SINCE ADVANCEMENT TO ASSOCIATE PROFESSOR AT UCLA**

20. Gholkar A.A., Senese S., Lo Y.C., Vides E., Contreras E., Hodara E., Capri J., Whitelegge J.P., and **Torres J.Z.** “The X-linked-Intellectual-Disability-Associated Ubiquitin Ligase Mid2 Interacts with Astrin and Regulates Astrin Levels to Promote Cell Division” **Cell Reports** 2016 Jan 12;14(2):180-188. doi: 10.1016/j.celrep.2015.12.035. Epub 2015 Dec 31. PMID:26748699

21. Cheung K., Senese S., Kuang J., Bui N., Ongpipattanakul C., Gholkar A., Cohn W., Capri J., Whitelegge J.P., and **Torres J.Z.** “Proteomic Analysis of the Mammalian Katanin Family of Microtubule-severing Enzymes Defines Katanin p80 subunit B-like 1 (KATNBL1) as a Regulator of Mammalian Katanin Microtubule-severing”, **Molecular & Cellular Proteomics** 2016 May;15(5):1658-69. doi:10.1074/mcp.M115.056465. Epub 2016 Feb 29. PMID:26929214

22. Soh H., Venkatesan N., Veena M.S., Ravichandran S., Zinabadi A., Basak S.K., Parvatiyar K., Srivastava M., Liang L.J., Gjertson D.W., **Torres J. Z.**, Moatamed N.A., and Srivatsan E.S. “Cystatin E/M suppresses tumor cell growth through cytoplasmic retention of NF-κB”, **Molecular and Cellular Biology** 2016 May 31;36(12):1776-92. doi: 10.1128/MCB.00878-15. PMID:27090639

23. Lo Y.C., Senese S., Damoiseaux R., and **Torres J.Z.** “3D Chemical Similarity Networks for Structure-Based Target Prediction and Scaffold Hopping”, **ACS Chemical Biology** 2016 Aug 19;11(8):2244-53. doi: 10.1021/acscchembio.6b00253. PMID:27285961

24. Gholkar A.A., Cheung K., Williams K.J., Lo Y.C., Hamideh S.A., Nnebe C., Khuu C., Bensinger S.J. and **Torres J.Z.** “Fatostatin Inhibits Cancer Cell Proliferation by Affecting Mitotic Microtubule Spindle Assembly and Cell Division”, **Journal of Biological Chemistry** 2016 Aug 12;291(33):17001-8. doi: 10.1074/jbc.C116.737346. PMID:27378817

25. Lo Y.C. and **Torres J.Z.** “Chemical Similarity Networks for Drug Discovery”, **Special Topics in Drug Discovery**, 2016 Nov. 30, Ch.3, pgs. 53-72, doi: 10.5772/65106, ISBN 978-953-51-2800-7, Print ISBN 978-953-51-2799-4. (Book Chapter)

26. Lo Y.C., Gui R., Honda H., and **Torres J.Z.** “Computer-Aided Biosensor Design”, **Computer-aided Technologies –Applications in Engineering and Medicine**, 2016 Dec. 7, Ch.6, pgs. 121-135, doi: 10.5772/65038, ISBN 978-953-51-2788-8, Print ISBN 978-953-51-2787-1. (Book Chapter)

27. Lo Y.C., Gui R., Honda H., and **Torres J.Z.** “Quantitative Methods in System-based Drug Discovery”, **Complex Systems, Sustainability and Innovation**, 2016 Dec. 14, Ch.5, pgs.85-98, doi: 10.5772/65833, ISBN 978-953-51-2842-7, Print ISBN ISBN 978-953-51-2841-0. (Book Chapter)

28. Bradley M., Ramirez I., Cheung K., Gholkar A.A., and **Torres J.Z.** “Inducible LAP-tagged Stable Cell Lines for Investigating Protein Function, Spatiotemporal Localization and Protein Interaction Networks”, **Journal of Visualized Experiments** 2016 Dec. 24, (118):1-9, e54870, doi:10.3791/54870. PMID:28060263

29. Chan A.H., Yi S.W., Weiner E.M., Amer B.R., Sue C.K., Wereszczynski J., Dillen C.A., Senese S., **Torres J.Z.**, McCammon J., Miller L.S., Jung M.E., and Clubb R.T. “NMR Structure-Based Optimization of *Staphylococcus aureus* Sortase A Pyridazinone Inhibitors”, **Chemical Biology & Drug Design** 2017 Feb. 3., doi: 10.1111/cbdd.12962 PMID:28160417

30. Fernández-Del-Río L., Nag A., Gutiérrez Casado, E., Ariza, J., Awad A.M., Joseph A.I., Kwon O., Verdin E., de Cabo R., Schneider C., **Torres J.Z.**, Burón M.I., Clarke C.F., and Villalba J.M., “Kaempferol increases levels of coenzyme Q in kidney cells and serves as a biosynthetic ring precursor”, **Free Radical Biology & Medicine** 2017 Jun 8. pii: S0891-5849(17)30629-9. doi: 10.1016/j.freeradbiomed.2017.06.006. PMID:28603085

31. Lo Y.C., Senese S., France B., Gholkar A.A., Damoiseaux R., and **Torres J.Z.** “Computational Cell Cycle Profiling of Cancer Cells for Prioritizing FDA-Approved Drugs with Repurposing Potential”, **Scientific Reports** 2017 Sep 12;7(1):11261. doi: 10.1038/s41598-017-11508-2. PMID:28900159

32. Senese S., Lo Y.C., Gholkar A.A., Li C.M., Huang Y., Mottahedeh J., Kornblum H.I., Damoiseaux R., and **Torres J.Z.** “Microtubins: a Novel Class of Small Synthetic Microtubule Targeting Drugs that Inhibit Cancer Cell Proliferation”, **Oncotarget** 2017 Oct 19;8(61):104007-104021. doi: 10.18632/oncotarget.21945. eCollection 2017 Nov 28. PMID:29262617

33. Ünal E. and **Torres J.Z.** “Ensuring Fidelity of Chromosome Segregation”, **Molecular Biology of the Cell** 2018 Mar 15;29(6):687. doi: 10.1091/mbc.E17-11-0673. PMID:29535171 (Meeting Review)

34. Lacks D.R., Oses-Prieto J.A., Alvarado A.G., Nakashima J., Chand S., Azzam D.B., Gholkar A.A., Sperry J., Ludwig K., Condro M.C., Nazarian S., Cardenas A., Shih M.Y.S., Damoiseaux R., France B., Orozco N., Visnyei K., Crisman T. J., Gao F., **Torres J.Z.**, Coppola G., Burlingame A.L., and Kornblum H.I., “A Molecular Cascade Modulates MAP1B and Confers Resistance to mTOR Inhibition in Human Glioblastoma”, **Neuro Oncology** 2018 May 18;20(6):764-775. doi: 10.1093/neuonc/nox215. PMID:29136244

#### **PUBLICATIONS SINCE ADVANCEMENT TO FULL PROFESSOR AT UCLA**

35. Lo Y.C. and **Torres J.Z.** “In Silico Repurposing of Cell Cycle Modulators for Cancer Treatment”, **In Silico Drug Design: Repurposing Techniques and Methodologies**, 2019 April. 1, Ch.9, doi: <https://doi.org/10.1016/B978-0-12-816125-8.00009-2>, Print ISBN 9780128161258. (Book Chapter)

36. Ong J.Y. and **Torres J.Z.** "E3 Ubiquitin Ligases in Cancer and Their Pharmacological Targeting", **Ubiquitin Proteasome System - Current Insights into Mechanism Cellular Regulation and Disease**, 2019 Feb. 15, doi: 10.5772/intechopen.82883, Print ISBN 978-1-83880-491-6. (Book Chapter)
37. Xia X., Lo Y.C., Gholkar A.A., Senese S., Ong J.Y., Velasquez E.F., Damoiseaux R., and **Torres J.Z.** "Leukemia Cell Cycle Chemical Profiling Identifies the G2-Phase Leukemia Specific Inhibitor Leusin-1", **ACS Chemical Biology** 2019 May 17;14(5):994-1001. doi: 10.1021/acscchembio.9b00173. Epub 2019 May 8. PMID:31046221
38. Ong J.Y. and **Torres J.Z.** "Dissecting the Mechanisms of Cell Division", **Journal of Biological Chemistry** 2019 Jul 26;294(30):11382-11390. doi: 10.1074/jbc.AW119.008149. Epub 2019 Jun 7. PMID:31175154 (Review)
39. Sawicki M.P., Gholkar A.A., and **Torres J.Z.** "Menin Associates with the Mitotic Spindle and is Important for Cell Division", **Endocrinology** 2019 Aug 1;160(8):1926-1936. doi: 10.1210/en.2019-00274. PMID:31211356
40. **Torres J.Z.** "Fostering Inclusion and Diversity Through Research, Teaching, Mentoring, and Outreach", **Molecular Biology of the Cell** 2019 Nov 1;30(23):2870-2872. doi: 10.1091/mbc.E19-07-0379. PMID: 31671035 (Essay).
41. Gholkar A.A., Schmollinger S., Velasquez E.F., Lo Y.C., Cohn W., Capri J., Dharmarajan H., Dearnoff W.J., Gao L.W., Abdusamad M. Whitelegge J.P., and **Torres J.Z.** "Regulation of Iron Homeostasis Through Parkin-mediated Lactoferrin Ubiquitylation", **Biochemistry** 2020 Aug 18;59(32):2916-2921. PMID: 32786404
42. Ong J.Y. and **Torres J.Z.** "Phase Separation in Cell Division", **Molecular Cell** 2020 Oct 1;80(1):9-20. doi: 10.1016/j.molcel.2020.08.007. PMID: 32860741 (Review).
43. Ong J.Y., Bradley M.C., and **Torres J.Z.** "Phospho-Regulation of Mitotic Spindle Assembly", **Cytoskeleton** 2020 Dec;77(12):558-578. doi: 10.1002/cm.21649. PMID: 33280275 (Review).
44. Ramirez I., Gholkar A.A., Velasquez E.F., Guo X., Tofig B., Damoiseaux R., and **Torres, J.Z.** "The Myosin Regulatory Light Chain Myl5 Localizes to Mitotic Spindle Poles and is Required for Proper Cell Division", **Cytoskeleton** 2021 Feb;78(2):23-35. doi: 10.1002/cm.21654. PMID: 33641240
45. Guo X., Garcia Y.A., Ramirez I., Velasquez E.F., Gao L.W., Gholkar A.A., Whitelegge J.P., Tofig B., Damoiseaux R., and **Torres, J.Z.** "DUSP7 Regulates the Activity of ERK2 to Promote Proper Chromosome Alignment During Cell Division", **Journal of Biological Chemistry** 2021 Jan-Jun;296:100676. doi: 10.1016/j.jbc.2021.100676. Epub 2021 Apr 16. PMID: 33865857
46. Garcia Y.A., Velasquez E.F., Gao L.W., Gholkar A.A., Clutario K.M., Cheung K., Williams-Hamilton T., Whitelegge J.P., and **Torres J.Z.** "Mapping Proximity Associations of Core Spindle Assembly Checkpoint Proteins", **Journal of Proteome Research** 2021 Jul 2;20(7):3414-3427. doi: 10.1021/acs.jproteome.0c00941. PMID: 34087075  
**Highlighted:** \* Selected for July front cover of the Journal of Proteome Research.
47. Lynn N.A., Martinez E., Nguyen H., and **Torres J.Z.** "The Mammalian Katanin Family of Microtubule-Severing Enzymes", **Frontiers in Cell and Developmental Biology** 2021 Aug 3;9:692040 (Review).
48. Velasquez E.F., Garcia Y.A., Ramirez I., Gholkar A.A., and **Torres J.Z.** "CANVS: an easy-to-use application for the analysis and visualization of mass spectrometry-based protein-protein interaction/association data", **Molecular Biology of the Cell** 2021 Aug 25: mbcE21050257, doi: 10.1091/mbc.E21-05-0257. PMID: 34432510

## Complete List of Published Work in MyBibliography:

<http://www.ncbi.nlm.nih.gov/sites/myncbi/jorge.torres.1/bibliography/47198792/public/?sort=date&direction=ascending>

### Patents

**Torres J.Z.**, Damoiseaux R., Yeates T.O., Senese S., McNamara D.E., Senese S., Lo Y.C.  
Tubulin-binding Compounds, Compositions and Uses Related Thereto.  
Patent: US 10,913,750 B2, Feb 9<sup>th</sup> 2021

### TEACHING EXPERIENCE

#### Main Courses

2020-present Chem204D, Research Seminar/Career Development in Cellular and Molecular Biology  
2020-present Chem203D, Responsible Conduct of Research Seminar in Cellular and Molecular Biology  
2019-present Chem150/250, Research Integrity Training in Cellular and Molecular Biology  
2011-2019 Chem165/265, Posttranslational Modifications in Human Disease  
2010-2018 Chem269E, Cellular Assemblies  
2013 MB298, The Cell Cycle: Mechanisms and Implications for Cancer Therapy  
8 yr avg. instructor rating on a 9 point scale: Chem165=8.6/9, Chem265=8.5/9, Chem269E=8.6/9,  
1 yr instructor rating on a 9 point scale: MB298= 9/9,  
2 yr avg. instructor rating on a 9 point scale: Chem150=8.5/9, Chem250=8.75/9  
3 yr avg. instructor rating on a 9 point scale: Chem203D= 8.7/9, Chem204D= 8.5

#### Fiat Lux Courses

2020-present BMD RES-19, Kindness in Science: Diversity, Health Disparities & Greater Advancements  
2020-present BMD RES-19, UCLA Landmark Studies in the Treatment of Cancer  
2 offerings instructor rating on a 5 point scale: Landmark Studies=4.75/5, Kindness in Science=4.7/5

#### Seminars and Research Courses, Listed by Course Number

2015-present MolBio596, Directed Individual Study  
2014-present Chem199, Directed Research  
2012-present BMD RES-199, Directed Biomedical Research  
2011-present Chem375, Teaching Apprenticeship Practicum  
2011-present Bioengineering 596, Directed Individual Study  
2011-present Chem598, Research Master Thesis  
2011-present Chem599, Dissertation Research  
2011-2012 Chem194, Research Group Seminar  
2010-present Chem99, Student Research Projects  
2010-present Chem196A/B, Research Apprenticeship  
2010-present Chem256X, Microtubules and Disease  
2009-present Chem596, Directed Individual Study

#### Guest Lectures

2018 Chem 203D Advanced Topics in Responsible Conduct in CMB Research  
2018 Chem 205B Issues on the Chemistry-Biology Interface  
2017 Chem 204 Student Research Seminar  
2014 & 2017 Chem 400, Safety in Chemical and Biochemical Research  
2012-2013 MIMG-C234, Discussion Leader, Ethics & Accountability in Biomedical Research  
2012 UCLA-MSTP, Introduction to Biomedical Research at UCLA  
2012 BR5HB, Biomedical Research 5HB  
2009-2012 Chem 268, Biochemistry Faculty Research Seminar  
2009 Chem 269B, Molecular Recognition and Bioenergetics  
1999 Assistant in Instruction: Advanced Genetics, Princeton University  
1998 Assistant in Instruction: Introduction to Molecular Biology, Princeton University  
1998 Undergraduate Teaching Fellow: High School Biology, Santa Barbara, CA

**MENTORING EXPERIENCE (in the Torres lab: 42 women, 17 men; 30 from underrepresented groups)**

	<b>Postdoc Fellows</b>	<b>Dates</b>	<b>Awards</b>	<b>Current Position If Graduated</b>
1	Silvia Senese	2010-15	JCCF Fellowship	Clinical Trials Analyst, Cornell Medical School
2	Suguna Sakkiah	2013-14		Staff, FDA/National Center for Toxicology
3	Qianfan Yang	2014-15	CAS Fellowship	Primary investigator, Sichuan University
4	Yenni Garcia	2016-20	T32 TCB Fellowship	
5	Xiao Guo	2017-	JCCF Fellowship	
	<b>Ph.D. Grad Students</b>	<b>Dates</b>	<b>Awards</b>	<b>Current Position If Graduated</b>
1	Xiaoyu Xia	2010-15		Clinical Trials Manager, City of Hope
2	Keith Cheung	2011-16	Whitcome Fellowship	Scientist Actym Therapeutics Inc.
3	Yu-Chen Lo	2011-16	CINF Scholarship	Postdoc, Stanford University
4	Ivan Ramirez	2015-21	NSF-Bridge Fellowship	
5	Kevin Clutario	2016-	T32 TCB Fellowship	
6	Joseph Ong	2017-	NSF-GRFP Fellowship	
7	Erick Velasquez	2017-	HHMI Gilliam Fellowship	
8	Nicole Lynn	2019-	NSF-GRFP Fellowship	
9	Kayla Rich	2021-		
	<b>M.S. Grad Students</b>	<b>Dates</b>	<b>Awards</b>	<b>Current Position If Graduated</b>
1	Melisa Chavez	2010-11	T32 CMB Fellowship	LAUSD K-12 Educator
2	Lisa Cao	2013	Departmental Scholar	UCLA M.D. Practicing Orthopedic Surgery
3	Hanan Baker	2015	Departmental Scholar	Cornell Medical School M.D./Ph.D. Student
4	Thuy Tran	2015-16	NSF Fellowship	In Home Health Care Provider
	<b>Undergrad Students</b>	<b>Dates</b>	<b>Awards</b>	<b>Current Position If Graduated</b>
1	Samuel Asanad	2010		Non-profit Startup
2	Jennifer Chen	2010		Florida Int. Univ. M.D. Practicing Physician
3	Lisa Cao	2010-12	Departmental Scholar	UCLA M.D. Practicing Orthopedic Surgery
4	William Deardorff	2010-13		St. Louis Univ. M.D. Practicing Internal Med
5	Harish Dharmarajan	2010-13		Baylor Univ. M.D. Practicing Otolaryngology
6	Ngoc Bui	2010-13	HHMI EXROP Fellow	Georgetown Univ. M.D. Practicing Oncology
7	Gabriela Gonzalez	2011		UCLA M.D. Residency Urology
8	Sneha Venkatraman	2012		M.S. CSUCI, Stanford University Research Assist.
9	Jing Kuang	2012-13		Thermo Fisher Inc., Industry
10	Thet Pyone	2012-13		Boehringer Ingelheim Inc., Industry
11	Elnaz Kohanbash	2012-13		Chapman Univ. Pharmacy School
12	Elektra K. Robinson	2013	UC LEADS Scholar	UCSC Ph.D. Graduate Student
13	Edmundo Vides	2013	NIH IMSD Scholar	Stanford University Ph.D. Graduate Student
14	Jiaen Kuang	2013-14		B.S. Cal State Univ. East Bay Nursing
15	Ely Contreras	2013-15	NIH IMSD Scholar	Northwestern Univ. Ph.D. Graduate Student
16	Emmanuelle Hodara	2013-15	Regents Scholar	USC/Caltech M.D./Ph.D. Student
17	Hoai-Thu Ho	2013-16		Spectra Laboratories, Industry
18	Ing Ongpipattanakul	2014-16		University of Illinois Ph.D.,
19	Hang (Karen) Wong	2014-16	Dean's Prize	UCSF Ph.D., Scientist Color Inc.
20	Mai Abdusamad	2015-17	NIH IMSD Scholar Dean's Prize	Broad MIT/Harvard Genomics Scholar, UC-Davis M.D./Ph.D. Student
21	Cindy Khuu	2015	UC LEADS Scholar	UCD Ph.D. Graduate Student
22	Chelsea Nnebe	2015	UC-HBCU Fellow	Stanford University M.D./Ph.D. Student
23	Shadia A. Hamideh	2015-16	Dean's Prize, MARC	Clinical Trials Kaiser Permanente
24	Abril Morales	2016-18	NIH IMSD Scholar	UCLA Ph.D. Graduate Student
25	Taylor Williams	2016	UC-HBCU Fellow	Morehouse Medical School M.D. Student
26	Hyein Kil	2016-17		Retina Macula Institute, Industry Clinical Research
27	Nicole Filbert	2017-19	ABRCMS Pres Award	Marist College PA Program Student
28	Quynh Hai Dam	2017		The Ohio State University Pharm.D. Student
29	Carlos Hernandez	2017		
30	Katherine S. Morillo	2017	Amgen Scholar	Princeton University Ph.D. Graduate Student
31	Toyosi Falegan	2017	UC-HBCU Fellow	Howard University Medical School M.D. Student
32	Vivian Yang	2017-19	Dept. Research Fellow	UCLA Ph.D. Graduate Student
33	Joanne Park	2017-19		Medical Assistant Cardiac-Vascular Intervention
34	Liliana Perez	2017-19	Dept. Research Fellow	Curative Inc., Industry Research and Development
35	Ilayda Sekercioglu	2018-19		
36	Hieu Nguyen	2018-21	Beckman Scholar	Genentech Inc., Industry
37	Emily Martinez	2019-	CAMP Scholar	



38	Carlos De La Torre	2019		
39	Ngozi Obuseh	2019	UC-HBCU Fellow	Howard University Undergraduate
40	Daniel Lee	2019		
41	Jeffrey Huynh	2020-		
42	Jenin Alcaraz	2020-	CARE Fellow	
43	Jalie Edgemon	2020-		

### **MENTORING EXPERIENCE CONTINUED**

2018-2021 Director of NIH T32 Training Grant in Cellular and Molecular Biology  
Mentored 48 graduate students, UCLA

2016-2019 Director and Advisor: Biochemistry, Molecular and Structural Biology Graduate Program  
Mentored >50 graduate students, UCLA

2009-present Mentored 1 Staff research associate working on lab projects, UCLA

2009-present Mentored 44 Graduate students as thesis committee member, UCLA

2009-present Mentored 31 Graduate students working on lab rotation projects, UCLA

2008 Mentored Intern graduate student working on summer internship, Genentech Inc.

2003 Mentored Undergraduate student working on thesis research, Princeton University

2003 Mentored Graduate student during lab rotation, Princeton University

2001-2003 Mentored >40 URM undergrads, Freshman Scholars Institute-Science, Princeton Univ.

### **PARTIAL LIST OF PARTICIPATION IN UNDERGRADUATE DIVERSITY IN SCIENCE PROGRAMS**

2009-present: Served in the capacity of undergraduate student research advisor, student mentor, seminar speaker, discussion panelist, science poster judge, program advisory board member, and UCLA representative to numerous UCLA and nation-wide undergraduate diversity in science programs. Including: 1) The Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS). 2) UC California Alliance for Minority Participation (CAMP) and Lois Stokes Alliance for Minority Participation (LSAMP). 3) Minority Access to Research Careers (MARC) Undergraduate Student Training in Research (U\*Star). 4) UC Leadership Excellence through Advanced DegreeS (UC LEADS) program. 5) The CARE Science, Engineering and Math (SEM) Summer Research Program. 6) HHMI Exceptional Research Opportunities Program (EXROP). 7) Amgen Scholars Program. 8) NSF-Louis Stokes California Alliance for Minority Participation (LSAMP/CAMP) Bridge Doctorate Program, 9) PEERS (Program for Excellence in Education and Research in the Sciences). 10) Historically Black Colleges and Universities (HBCU) Initiative. 11) The UCLA Biomedical Science Enrichment Program (BISEP). Appeared on national TV (CNN en Espanol and Univision) to inspire URM's (<https://www.youtube.com/watch?v=MQOts75V8Cs>) and online to highlight the importance of diversity (<https://www.youtube.com/watch?v=qEtSP9fYs4I>) and diversity in the biosciences at UCLA (<http://www.youtube.com/watch?v=0VXUS0nRWns&feature=youtu.be>).

### **PARTIAL LIST OF SERVICE RELATED TO MENTORING STUDENTS AND SCIENCE DIVERSITY**

2021-present NIH T32 Tumor Cell Biology (TCB) Training Program Advisory Board

2020-2021 Chair: ASCB Selection Committee for the 2020 ASCB Prize for Excellence in Inclusivity

2020-Present Member: Howard Hughes Medical Institute (HHMI) Gilliam Fellowship Review Panel

2020 Diversity Fellowships Review Panel, University of California Los Angeles

2019-present Member: Diversity Committee for the Department of Chemistry and Biochemistry

2018-2021 Director: NIH T32 Cellular and Molecular Biology (CMB) Training Program

2017-2019 Chair: Committee on Continuing and Community Education (CCCE)

2017-present Beckman Scholars Program Faculty Committee

2017-present NIH T32 Tumor Cell Biology (TCB) Training Program

2017-present NIH K12 IRACDA UPLIFT Advisory Board

2017-2018 Graduate Council/Graduate Division, Mentoring and Evaluation of Graduate Academic Progress (MEGAP) Workgroup

2016-2019 Director and Advisor: Biochemistry, Molecular and Structural Biology Grad Program

2016-present NIH K12 IRACDA UCLA Postdocs Longitudinal Investment in Faculty Training (UPLIFT)

2016-2018 Undergraduate Council's Honors, Awards & Prizes Committee (HAP)

2016-2017 Committee on Continuing and Community Education (CCCE)

2015-present Diversity Committee for the Division of Physical Sciences

2016 NIH-NIGMS Training, Workforce Development, and Diversity Programs (TWD-D)  
2013-present NIH R25 IMSD Initiative for Maximizing Student Development Program  
2013 NSF-LSAMP Bridge to The Doctorate Steering Committee  
2010-present NIH T32 Chemistry-Biology Interface (CBI) Training Program  
2010-present NIH T32 Cellular and Molecular Biology (CMB) Training Program  
2010-present Recruitment and Interview >250 Diverse Students for Admission to UCLA Grad Programs

### **CAREER DEVELOPMENT AIMED AT IMPROVING MENTORING PRACTICES**

2019-2021 HHMI CIMER Mentor Training  
2018 Advancing Mentoring Practices, NRMN Mentor Training  
2018 Academic Leadership Training, Cottrell Scholars Collaborative  
2017 Enhancing Student Success in Science Workshop  
2010 Career Advancement for Scientists: Becoming Effective Leaders Workshop

### **DIVERSITY OUTREACH**

2021 Unstructured Conversation: UCLA Organization for Cultural Diversity in Science (OCDS). Met with members to discuss life experiences.

2021 Faculty Judge: UC CAMP/LSAMP  
University of California, California Alliance for Minority Participation (CAMP) and Lois Stokes Alliance for Minority Participation (LSAMP) Statewide Symposium. University of California Riverside (online due to Covid-19).

2020 Panelist: American Society for Cell Biology (ASCB) 2020 meeting: "Organizing Inclusive & Effective Science Outreach" session. Discussed how to create effective and inclusive science outreach initiatives.

2020 Panelist: American Chemical Society (ACS) Bridge Project/Genentech Foundation: ACS Career Kick-Start Workshop. Workshop to prepare ACS Bridge Fellows, graduate students, and postdoctoral scholars from underrepresented groups for careers in the chemical sciences. Shared personal career path, career advice, and skills that are critical to succeed in science.

2019 Video: "Fostering Inclusion and Diversity Through Research, Teaching, and Mentoring". Shown at the American Society for Cell Biology/European Molecular Biology Organization (ASCB/EMBO) meeting and online at: <https://www.youtube.com/watch?v=qEtSP9fYs4I> Video highlighted Jorge Torres's efforts to improve inclusion and diversity in science.

2019 Talk: "Graduate School Programs and Fellowships". As part of the UCLA Center for Community College Partnerships (CCCP) and the Academic Advancement Program (AAP), met with 70 community college STEM students (predominantly under-represented students) to discuss undergraduate fellowship opportunities, graduate school admissions, and graduate school fellowships.

2019 Talk: "Targeting the Cell Division Cycle in Cancer"  
Historically Black Colleges and Universities (HBCU) Initiative  
The goal of this initiative is to increase the number of students from Historically Black Colleges and Universities (HBCUs) enrolling in UC doctoral programs. This effort supports UCLA's and UC's diversity goals and values, and contributes to the excellence of the university.

2019 Mentor: Historically Black Colleges and Universities (HBCU) Initiative  
The goal of this initiative is to increase the number of students from Historically Black Colleges and Universities (HBCUs) enrolling in UC doctoral programs. This effort supports UCLA's and UC's diversity goals and values, and contributes to the excellence of the university.  
Mentored URM undergraduate student during Summer of 2019.

2019 Faculty participant: UCLA Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) and UCLA Organization for Cultural Diversity in Science (OCDS) Community College Day. Met with prospective community college transfer students to discuss research, career development, and academics.

2018 Talk: "Chemical and Proteomic Dissection of Cancer Cell Division"  
UCLA Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) national meeting, purpose is to increase the participation of underrepresented minority (URM) groups in the sciences. Research talk and recruitment of students for the UCLA Biochemistry, Molecular, and Structural Biology (BMSB) graduate program and the UCLA NIH T32 Cellular and Molecular Biology (CMB) graduate student training program.

2017 Talk: "Chemical and Proteomic Dissection of Cell Division"  
California State University, Los Angeles Minority Opportunities in Research (MORE)  
Seminar series targets undergraduate and graduate underrepresented minorities in the sciences that are actively conducting research and is a developmental activity that aims to change the role of students from audience into participants as critical listeners.

2017 Talk and Recruitment Outreach: "Chemical and Proteomic Dissection of Cell Division"  
Diversity Recruitment for UCLA's BMSB Program  
Recruitment of underrepresented minorities in the sciences at the University of Texas El Paso (UTEP) for UCLA's Biochemistry, Molecular and Structural Biology (BMSB) Program.

2017 Mentor: Amgen Scholars Program  
The goal of this program is to train students interested in obtaining a Ph.D. in STEM fields. This program benefits students that face social, economic, educational or other obstacles, or have had to overcome them, to complete their education thus far.  
Mentored URM undergraduate student during Summer of 2017.

2017 Talk: "Targeting the Cell Division Cycle in Cancer"  
Historically Black Colleges and Universities (HBCU) Initiative  
The goal of this initiative is to increase the number of students from Historically Black Colleges and Universities (HBCUs) enrolling in UC doctoral programs. This effort supports UCLA's and UC's diversity goals and values, and contributes to the excellence of the university.

2017 Mentor: Historically Black Colleges and Universities (HBCU) Initiative  
The goal of this initiative is to increase the number of students from Historically Black Colleges and Universities (HBCUs) enrolling in UC doctoral programs. This effort supports UCLA's and UC's diversity goals and values, and contributes to the excellence of the university.  
Mentored URM undergraduate student during Summer of 2017.

2017 UCLA representative: UC CAMP/LSAMP  
University of California, California Alliance for Minority Participation (CAMP) and Lois Stokes Alliance for Minority Participation (LSAMP) Symposium. University of California Irvine.

2016 Faculty career panel: Biomedical Science Enrichment Program (BISEP)  
Program is focused on increasing the numbers of underrepresented students pursuing research-based careers.

2016 Radio interview: ESPN Deportes  
National/international interview on Dr. Torres' cancer research program.

2016 Talk: "Chemical and Proteomic Dissection of Cell Division"  
Historically Black Colleges and Universities (HBCU) Initiative

The goal of this initiative is to increase the number of students from Historically Black Colleges and Universities (HBCUs) enrolling in UC doctoral programs. This effort supports UCLA's and UC's diversity goals and values, and contributes to the excellence of the university.

2016 Mentor: Historically Black Colleges and Universities (HBCU) Initiative

The goal of this initiative is to increase the number of students from Historically Black Colleges and Universities (HBCUs) enrolling in UC doctoral programs. This effort supports UCLA's and UC's diversity goals and values, and contributes to the excellence of the university.

Mentored URM undergraduate student during Summer of 2016.

2016 UCLA representative: UC CAMP/LSAMP

University of California, California Alliance for Minority Participation (CAMP) and Lois Stokes Alliance for Minority Participation (LSAMP) Symposium. University of California Irvine.

2016 Speaker: PEERS (Program for Excellence in Education and Research in the Sciences)

Program is focused on promoting the success of underrepresented minority and underserved science students at UCLA.

2015-2016 Mentor: MARC (Minority Access to Research Careers)

Mentored URM undergraduate research student

2015 Mentor: Historically Black Colleges and Universities (HBCU) Initiative

The goal of this initiative is to increase the number of students from Historically Black Colleges and Universities (HBCUs) enrolling in UC doctoral programs. This effort supports UCLA's and UC's diversity goals and values, and contributes to the excellence of the university.

Mentored URM undergraduate student during Summer of 2015.

2015 Mentor: UC LEADS

University of California Leadership Excellence through Advanced Degrees (UC LEADS). Mentored undergraduate student during Summer of 2015.

2015 Mentor: Los Angeles Center for Enriched Studies (LACES)

High school summer intern program. Mentored 2 high school students during Summer of 2015.

2015-present Member: Diversity Committee for the Division of Physical Sciences at UCLA.

2014 Faculty participant: ACS-UCLA Outreach and Diversity Day

Met with students to discuss and provide insight into the application process of applying to the Biochemistry, Molecular, and Structural Biology (BMSB) Ph.D. program. Shared my own trajectory in science and research interests. UCLA Department of Chemistry and Biochemistry.

2014 Video participant: UCLA Promotional Video for SACNAS 2014 National Conference

UCLA Society for the Advancement of Chicanos and Native Americans in Science (SACNAS). The purpose of the video was to promote UCLA as a diverse world leading research and academic institution invested in promoting diversity in the STEM (science, technology, engineering, and mathematics) fields.

Link to Video: <http://www.youtube.com/watch?v=0VXUS0nRWns&feature=youtu.be>

University of California Los Angeles.

2014 UCLA representative: UC CAMP/LSAMP

University of California, California Alliance for Minority Participation (CAMP) and Lois Stokes Alliance for Minority Participation (LSAMP) Symposium. University of California Irvine.

2013-present Steering committee member: NSF-Louis Stokes California Alliance for Minority Participation (LSAMP/CAMP) Bridge to the Doctorate Program at UCLA.

2013 Mentor: UC LEADS

University of California Leadership Excellence through Advanced Degrees (UC LEADS). Mentored undergraduate student during Summer of 2013.

2013 Speaker: Project STEPS/ Los Angeles Unified School District (LAUSD)

Parent Outreach Symposium. STEPS/LAUSD invites students from underrepresented communities who are interested in science to UCLA to perform science experiments.

2013 UCLA representative: UC LEADS

University of California Leadership Excellence through Advanced Degrees (UC LEADS) Research and Leadership Symposium. University of California Santa Cruz.

2013 UCLA representative: UC CAMP/LSAMP

University of California, California Alliance for Minority Participation (CAMP) and Lois Stokes Alliance for Minority Participation (LSAMP) Symposium. University of California Irvine.

2012 TV interview: Univision

National/international interview on Dr. Torres' research program.

Link to interview: <https://www.youtube.com/watch?v=MQOts75V8Cs>

2012 TV interview: CNN en Espanol

National/international interview on Dr. Torres' research program.

2012 Talk: "Novel drugs in the Treatment of Cancer"

UCLA Bridge Program, purpose is to increase underrepresented minorities (URMs) in the biomedical sciences. Pierce College.

2012 Talk: "Small Molecule Inhibitors of Cell Division"

UCLA Summer Program for Undergraduate Research (SPUR), University of California Los Angeles.

2012 Panelist: Discussion with underrepresented minority (URM) groups in the sciences.

UCLA Bridge Program, University of California Los Angeles.

2011 Talk: "Small Molecule Inhibitors of Cell Division"

UCLA Society for the Advancement of Chicanos and Native Americans in Science (SACNAS), University of California Los Angeles.

2010 Talk: "Targeting the Cell Division Machinery in Cancer"

UCLA Minority Access to Research Careers (MARC), University of California Los Angeles.

Prior to UCLA

2008 Minority postdoctoral fellow/summer intern recruitment, Genentech Inc.

2003 Minority student recruitment, Princeton University Graduate School

1998 Minority student recruitment, Educational Opportunity Program,

University of California, Santa Barbara

## **DEPARTMENTAL AND UNIVERSITY SERVICE (Not related to diversity or mentoring)**

### Department of Chemistry and Biochemistry

2019-present Chemistry and Biochemistry Safety Committee  
2019-present Chemistry Division Instrumentation Committee  
2012-present Chemistry and Biochemistry Undergraduate Labs Committee  
2012-2013 Biochemistry Division Faculty Search Committee 2  
2011-2012 Biochemistry Division Faculty Search Committee 1  
2009-2019 Biochemistry Division Instrumentation Committee

### UCLA Campus-wide

2014 COR Faculty Grant Program Reviewer  
2013-2016 Legislative Assembly Representative, Chemistry and Biochemistry

### UCLA Undergraduate, Graduate, and Medical Student Research Programs

2015 UCLA IMSD NIH Grant Renewal Site Review, Young Professor Panel  
2015 UCLA CMB Program NIH Grant Renewal Site Review, Young Professor Panel  
2014 UCLA CBI Program NIH Grant Renewal Site Review, Young Professor Panel  
2013 UCLA MSTP NIH Grant Renewal Site Review, Young Professor Panel

### UCLA Jonsson Comprehensive Cancer Center

2013 UCLA JCCC NIH Renewal Site Review, MSSR User Panel  
2011-2013 UCLA JCCC-TORI Labs Site Review, Interaction Panel  
2013 UCLA JCCF Grant Reviewer

## **EXTERNAL SERVICE (Not related to diversity or mentoring)**

### Societies & Meetings

2021-present Member: American Society for Cell Biology (ASCB)  
Awards Coordination Committee (ACC)  
2020-present Associate Editor, Molecular Biology of the Cell (MBoC)  
2020-Present Co-Chair: American Society for Cell Biology (ASCB/EMBO) Cell Bio 2020 and  
2021 Meeting Symposia in "Cells in Distress and Disease"  
2019-present Program Committee Member: American Society for Cell Biology (ASCB/EMBO)  
Cell Bio 2020 and 2021 Meetings  
2017-present American Society for Cell Biology (ASCB) UCLA Ambassador  
2017 Co-chair: American Society for Cell Biology (ASCB/EMBO) Meeting  
Mini-symposium: "Ensuring Fidelity of Chromosome Segregation"

### Grants, Papers, Promotion Reviewer

2021 NIH- Maximizing Investigators' Research Award – C (MRAC)  
Study Section, Ad Hoc Reviewer  
2021 American Institute of Biological Sciences (AIBS),  
Scientific Peer Advisory and Review Services (SPARS), Ad Hoc Reviewer  
2021 Research Corporation for Science Advancement (RCSA), Ad Hoc Reviewer  
2021 UCSF Faculty Advancement Review, Ad Hoc Reviewer  
2021 NIH- ZRG1 CB-C (02) M SEP Receptors, Cell Cycle, Cytoskeleton and Membranes  
Study Section, Ad Hoc Reviewer  
2020 NIH-ZRG1 OTC-A (80) SEP NIH Research Enhancement Award (R15) in Oncological  
Sciences Study Section, Ad Hoc Reviewer  
2018 NIH-NIGMS Nuclear and Cytoplasmic Structure/Function and Dynamics (NCSD)  
Study Section, Ad Hoc Reviewer  
2017 NIH-NIGMS Cell Biology and Regulatory Systems (CSRS) Study Section,  
Ad Hoc Reviewer  
2016 World Wide Cancer Research, Ad Hoc Reviewer  
2013-2014 Research Corporation for Science Advancement (RCSA), Ad Hoc Reviewer  
2010-present Scientific Journals: PNAS, Nature Chem. Biol., ACS Chem Biol, Med Chem Res, etc.

## TALKS

- 2021 Talk: "Human Cell Division: Implications for the Treatment of Cancer"  
Keynote Speaker: American Cancer Society California Legislative Ambassador Summit
- 2020 Talk: "Dissecting the Mechanisms of Cell Division"  
UCLA Molecular Biology Institute (MBI)
- 2019 Talk: "Dissecting the Mechanisms of Cell Division"  
American Society for Biochemistry and Molecular Biology (ASBMB) Annual Meeting
- 2019 Talk: "Chemical and Proteomic Dissection of Cancer Cell Division"  
Indiana University School of Medicine
- 2018 Talk: "Chemical and Proteomic Dissection of Cancer Cell Division"  
Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) Annual Meeting
- 2017 Talk: "Identification and Characterization of Novel Spindle Assembly Checkpoint Components", American Society for Cell Biology (ASCB) Annual Meeting, Cell Division Symposium Co-chair and Speaker
- 2017 Talk: "Targeting the Cell Division Cycle in Cancer"  
California State University Los Angeles
- 2017 Talk: "Targeting the Cell Division Cycle in Cancer"  
University of Texas El Paso, Border Biomedical Research Center
- 2017 Talk: "Targeting the Cell Division Cycle in Cancer"  
UC Wide Drug Discovery Symposium, UCLA
- 2016 Talk: "Human Cell Division: Implications for the Treatment of Cancer"  
American Cancer Society Cancer Action Network Legislative Ambassador Summit
- 2015 Talk: "Chemical and Proteomic Dissection of Cell Division"  
University of Toronto, Departments of Biochemistry and Molecular Genetics
- 2015 Talk: "Chemical and Proteomic Dissection of The Cell Cycle"  
University of California Santa Cruz, Department of Chemistry and Biochemistry
- 2015 Talk: "Chemical and Proteomic Dissection of The Cell Cycle"  
University of Massachusetts, Department of Molecular, Cell and Cancer Biology
- 2015 Talk: "Chemical and Proteomic Dissection of The Cell Cycle"  
University of California Berkeley, Department of Plant and Microbial Biology
- 2015 Talk: "Chemical and Proteomic Dissection of Cell Division: Implications for Cancer Therapy", UCLA Molecular Biology Institute (MBI)
- 2015 Talk: "Chemical and Proteomic Dissection of Cell Division: Implications for Cancer Therapy", UCLA Department of Chemistry and Biochemistry
- 2014 Talk: "Chemical and Proteomic Dissection of Cell Division"  
Northwestern University, Department of Molecular Biosciences
- 2014 Talk: "Chemical and Proteomic Dissection of The Cell Cycle"  
University of Notre Dame, Department of Chemistry and Biochemistry
- 2014 Talk: "Chemical and Proteomic Dissection of The Cell Cycle"  
Cleveland Clinic Lerner Research Institute, Department of Cancer Biology
- 2014 Talk: "Chemical Dissection of The Cell Cycle"  
Cold Springs Harbor Laboratory Cell Cycle Meeting
- 2014 Talk: "Discovery of New Drugs to Combat Cancer"  
American Cancer Society Survivor Kickoff
- 2013 Talk: "Integrating Chemical Biology into Research-based Discovery Learning"  
Cottrell Scholar Conference, "Connecting Educators, Building Communities"
- 2013 Talk: "Targeting Cancer Cell Division"  
Stanford University School of Medicine, Cancer Cell Biology Program
- 2013 Ambassador/Talk: "New Drugs to Fight Cancer"  
UCLA Bruin Day
- 2013 Talk: "Targeting Cancer Cell Division"

UCLA Jonsson Comprehensive Cancer Center  
 2012 Talk: "Novel Anticancer Agents"  
 UCLA Jonsson Comprehensive Cancer Center/TORI Labs Strategic Meeting  
 2012 Talk: "The STARD9 Kinesin is Required for Mitotic Progression"  
 Cold Springs Harbor Laboratory Cell Cycle Meeting  
 2012 Talk: "Small Molecule Inhibitors of Cell Division"  
 Trinity University, Chemistry Department  
 2012 Talk: "Targeting the Cell Division Machinery in Cancer"  
 UCLA Cancer and Stem Cell Program  
 2011 Talk: "Targeting the Cell Division Machinery in Cancer"  
 UCLA ACCESS Retreat  
 2011 Talk: "Targeting the Cell Division Machinery in Cancer"  
 UCLA Molecular Biology Institute (MBI) Retreat  
 2011 Talk: "Enzymatic Activities in Cell Division and Cancer"  
 California State University Los Angeles, Chemistry Department  
 2010 Talk: "Novel Enzymes Controlling Cell Division"  
 UCLA Molecular Biology Institute (MBI) Faculty Seminar  
 2009 Talk: "Proteomic and Functional Characterization of the Mitotic Spindle"  
 UCLA Jonsson Comprehensive Cancer Center  
 2009 Talk: "PP2A regulates the association of the APC/C with mitotic spindle poles"  
 EMBO Research Conference, Netherlands

Talks and Posters Prior to UCLA

2008 Poster: "Proteomic and functional characterization of the mitotic spindle"  
 ASCB Research Conference  
 2008 Talk: "Identification of KifX, a novel mitotic kinesin necessary for spindle assembly"  
 Genentech Postdoctoral Offsite  
 2008 Poster: "PP2A regulates the association of the APC/C with mitotic spindle poles"  
 Cold Springs Harbor Laboratory Cell Cycle Meeting  
 2007 Poster: "Proteomic and functional characterization of the mitotic spindle"  
 FASEB Summer Research Conference, Mitosis: Spindle Assembly and Function  
 2006 Poster: "Identification of novel proteins involved in mitotic spindle assembly"  
 ASCB Research Conference  
 2006 Poster: "Identification of mitotic microtubule associated proteins"  
 Cold Springs Harbor Laboratory Cell Cycle Meeting  
 2005 Talk: "PP2A regulates the association of the APC/C with mitotic spindle poles"  
 Genentech Postdoctoral Offsite  
 2005 Poster: "Identification of mitotic microtubule associated proteins"  
 ASCB Research Conference  
 2003 Talk: "The Rrm3p DNA helicase promotes genomic stability"  
 Princeton University Molecular Biology Retreat  
 2002 Poster: "Understanding *rrm3 sgs1* synthetic sickness in *Saccharomyces cerevisiae*"  
 Keystone Research Conference, DNA Helicases, Cancer and Aging  
 2001 Poster: "Understanding *rrm3 sgs1* synthetic sickness in *Saccharomyces cerevisiae*"  
 FASEB Research Conference, Helicases: Roles in Human Diseases  
 1998 Talk: "Isolation of Telomere Growth Inhibited Forever (TGIF) mutants in *T. thermophila*"  
 UCSB Undergraduate Research Colloquium  
 1997 Talk: "Analysis of Telomerase RNA substitution mutants in *T. thermophila*"  
 UCSF Summer Research Training Program  
 1997 Talk: "The *Tetrahymena thermophila* genome project"  
 UCSB Undergraduate Research Colloquium  
 1995 Talk: "Anthropogenic effects on the sea anemone *Anthopleura elegantissima*"  
 UCSB Undergraduate Research Colloquium



## **FUNDING**

### **Ongoing Research Support**

Source: National Institutes of Health (NIH R35 GM139539)

Title: Investigating the Cell Division Machinery

Direct Costs: \$1,250,000

Dates: 03/01/2021-02/28/2026

Principle Investigator: Jorge Torres

The major goal of this project is to characterize novel proteins that regulate cell division.

Source: National Science Foundation (NSF MCB1912837)

Title: Mechanisms and Regulation of Cell Division

Direct Costs: \$470,000

Dates: 07/01/2019-06/30/2023

Principle Investigator: Jorge Torres

The major goal of this project is structure-function analysis of novel early spindle assembly enzymes.

Source: UCLA Physical Sciences Innovation and Entrepreneurship Fund

Title: *In vivo* efficacy testing of MI-181 in patient-derived xenograft mouse models of ovarian cancer

Direct Costs: \$75,000

Dates: 10/01/2019- Open

Principle Investigator: Jorge Torres

The major goal of this project is to test the *in vivo* efficacy of the antimetabolic drug MI-181 in patient-derived xenograft mouse models of ovarian cancers.

Source: Howard Hughes Medical Institute (GT11405)

Title: Velasquez, Erick: James H. Gilliam Jr. Fellowship for Advanced Study

Direct Costs: \$150,000

Dates: 09/01/2020-08/31/2023

Principle Investigator: Jorge Torres

The majority of this funding is directed towards the research training of graduate student Erick Velasquez.

### **Recently Completed Research Support**

Source: National Institutes of Health (NIH R01 GM117475)

Title: Novel Regulatory Factors of the Spindle Assembly Checkpoint

Direct Costs: \$1,125,000

Dates: 03/01/2016-02/28/2021

Principle Investigator: Jorge Torres

The major goal of this project is to characterize novel proteins that regulate the mitotic spindle assembly checkpoint.

Source: American Cancer Society (123880-RSG-13-398-01-CCG)

Title: Molecular Analysis of STARD9, a Novel Target for Cancer Therapy

Direct costs: \$600,000

Dates: 01/01/2014-12/31/2018

Principle Investigator: Jorge Torres

Source: Jonsson Cancer Center Foundation

Title: Thermal Proteome Profiling to Define Novel Anticancer Drugs Mechanism of Action

Direct Costs: \$50,000 (\$25,000/Co-PI)

Dates: 08/01/2017-07/31/2018

Co-Principle Investigators: Jorge Torres and James A. Wohlschlegel

Source: National Science Foundation (NSF MCB1243645)

Title: Dissecting the Mechanisms of Cell Division

Direct Costs: \$470,000

Dates: 01/01/2013-12/31/2017

Principle Investigator: Jorge Torres

The major goal of this project is to characterize novel enzymatic activities required for cell division through proteomic and chemical approaches.

**Recently Completed Graduate Student Training Program Support**

Source: National Institutes of Health (NIH T32 GM007185)

Title: Research Training in Cellular and Molecular Biology

Direct Costs: \$4,315,090

Dates: 07/01/2016-6/30/2021

Program Director: Jorge Torres- 07/01/2018-6/30/2021

This award supports a training program for Ph.D. students in the biosciences at UCLA, including research integrity training.

Source: National Institutes of Health (NIH T32 GM007185-46S1)

Title: UCLA NIGMS T32 Program Assessment

Direct Costs: \$79,275

Dates: 07/01/2020-06/30/2021

Program Director: Jorge Torres

This award supports the development of program assessment for the Cellular and Molecular Biology (CMB) T32 graduate student training program and other T32s at UCLA.