

CURRICULUM VITAE

Daniel K. Nomura, Ph.D.

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Education

2008-2011 Postdoctoral Fellow in Chemical Physiology

The Scripps Research Institute (Advisor: Benjamin F. Cravatt)

2004-2008 Ph.D. in Molecular Toxicology

University of California, Berkeley (Advisor: John E. Casida)

1999-2003 B.A. in Molecular and Cell Biology

University of California, Berkeley (Advisor: John E. Casida)

Positions

2017-current Director, Novartis-Berkeley Center for Proteomics and Chemistry Technologies

(NB-CPACT)

2016-current Associate Adjunct Professor

University of California, San Francisco Department of Pharmaceutical Chemistry

2015-current Associate Professor (with tenure)

University of California, Berkeley

Department of Nutritional Sciences and Toxicology

Department of Chemistry

Department of Molecular & Cell Biology

2011-2015 Assistant Professor

University of California, Berkeley

Department of Nutritional Sciences and Toxicology

2008-2011 Postdoctoral Fellow

The Scripps Research Institute, La Jolla, CA

Department of Chemical Physiology Advisor: Professor Benjamin F. Cravatt

2004-2008 Graduate Researcher

University of California, Berkeley

Department of Nutritional Sciences and Toxicology

Advisor: Professor John E. Casida

2003-2004 Research Associate

University of California, Berkeley Advisor: Professor John E. Casida

2000-2003 Undergraduate Research Assistant

University of California, Berkeley Advisor: Professor John E. Casida

Daniel K. Nomura Biography

Dan Nomura is an associate professor in the Departments of Chemistry, Molecular and Cell Biology, and Nutritional Sciences and Toxicology at the University of California, Berkeley. He is also an associate adjunct professor in the Department of Pharmaceutical Chemistry at UCSF. He is the director of the Novartis-Berkeley Center for Proteomics and Chemistry Technologies. He earned his B.A. in Molecular and Cell Biology and Ph.D. in Molecular Toxicology at UC Berkeley with Professor John Casida and was a postdoctoral fellow at The Scripps Research Institute with Professor Ben Cravatt before returning to Berkeley as a faculty member in 2011. He is also the founder of Artris Therapeutics and co-founder of Frontier Medicines. Among his honors are selection as a Searle Scholar, American Cancer Society Research Scholar Award, the Department of Defense Breakthroughs Award, Eicosanoid Research Foundation Young Investigator Award, and Mark Foundation for Cancer Research ASPIRE award.

Major Research Directions

- 1. Chemoproteomics-enabled covalent ligand discovery platforms to map and pharmacologically target druggable hotspots to tackle the undruggable proteome
- 2. Covalent ligand discovery against druggable hotspots targeted by natural products for disease therapy
- 3. Chemoproteomics-enabled covalent ligand discovery platforms to expand the scope of targeted protein degradation for drug discovery
- 4. Using chemoproteomic platforms to map proteome-wide toxicological or therapeutic targets of environmental and pharmaceutical chemicals

The Nomura Research Group is focused on redefining druggability using chemoproteomic platforms to innovative transformative medicines. One of the greatest challenges that we face in discovering new disease therapies is that most proteins are considered "undruggable," in that most proteins do not possess known binding pockets or "druggable hotspots" that small-molecules can bind to modulate protein function. Our research group addresses this challenge by advancing and applying chemoproteomic platforms to discover and pharmacologically target unique and novel druggable hotspots for disease therapy. We currently have four major research directions. Our first major focus is on developing chemoproteomics-enabled covalent ligand discovery approaches to rapidly discover small-molecule therapeutic leads that target unique and novel druggable hotspots for undruggable protein targets and incurable diseases. Our second research area focuses on covalent ligand discovery against druggable hotspots targeted by therapeutic natural products using chemoproteomic platforms to discover new therapeutic targets and synthetically tractable therapies for complex human diseases. Our third research area focuses on using chemoproteomics-enabled covalent ligand discovery platforms to expand the scope of targeted protein degradation to target and degrade undruggable proteins. Our fourth research area focuses on using chemoproteomic platforms to map on and off-targets of environmental and pharmaceutical chemicals towards discovering new toxicological mechanisms. Collectively, our lab is focused on developing next-generation transformative medicines through pioneering innovative chemical technologies to overcome challenges in drug discovery.

Awards and Fellowships

2019	Mark Foundation for Cancer Research ASPIRE award	
2015	ACS Research Scholar Award	
2015	DOD Breakthroughs Award Recipient	
2014	Finalist in DOD Era of Hope Breast Cancer Research Award (top 5 candidates)	
2013	Eicosanoid Research Foundation Young Investigator Award	
2013	Selected US (ACS) Representative for Transatlantic Frontiers of Chemistry	
	Conference	
2013	Hellman Fellows Awardee	
2013	Michael J. Fox Foundation Target Validation Award	
2012	Ellison Foundation for Aging Research Award (declined)	
2012	Searle Scholar Award	
2012	Outstanding Research Achievement Award from Nature Biotechnology/Amgen at	
	SF SciCafe	
2010	NIH Pathway to Independence (PI) Award (K99/R00)	
2009	American Cancer Society Postdoctoral Fellowship	
2009	California Breast Cancer Research Program Postdoctoral Fellowship (declined)	

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2008 Adelle Davis Award for Nutritional Sciences Research **Affiliations** 2018-current Editor of Cell Chemical Biology 2018-current Editor of Current Protocols in Chemical Biology 2018-current Co-Founder, Member of the Scientific Advisory Board, and Consultant for **Frontier Medicines** Director, Novartis-Berkeley Center for Proteomics and Chemistry Technologies 2017-current 2017-current Founder, Member of the Scientific Advisory Board, and Consultant for Artris **Therapeutics** Member, UCSF Helen Diller Family Comprehensive Cancer Center 2016-current 2016-current Member, UCSF Breast Oncology Program Faculty in the Department of Molecular and Cell Biology, Biochemistry, 2016-current Biophysics, and Structural Biology Division (UC Berkeley) Adjunct Professor at UCSF, Department of Pharmaceutical Chemistry 2016-current 2015-current Faculty in the Department of Chemistry (UC Berkeley) Member of the Synthetic Biology Institute (UC Berkeley) 2012-current 2012-2019 Adviser for Abide Therapeutics 2012-current Endocrinology Graduate Group (UC Berkeley) Program in Metabolic Biology (UC Berkeley) 2011-current 2011-current Chemical Biology Graduate Group (UC Berkeley)

Molecular Toxicology Graduate Group (UC Berkeley)

Molecular and Biochemical Nutrition Graduate Group (UC Berkeley)

Faculty in the Department of Nutritional Sciences and Toxicology (UC Berkeley)

Professional Associations

2011-current

2011-current 2011-current

American Chemical Society 2004-current Society of Toxicology 2004-2008

Acade

2012-2017

emic Services	
2018-current	NST space committee
2018	Cal Day NST Speaker
2018-current	Miller Fellow Advisory Committee for the Department of Chemistry
2017-current	Director, Novartis-Berkeley Center for Proteomics and Chemistry Technologies
2017-current	Member, Animal Care and Use Committee
2017-2019	Member, College of Natural Resources Executive Committee
2017	Cal Day NST Speaker
2016-2017	Member, Faculty selection committee for hiring in cancer biology for the Molecular and Cell Biology department
2016-2017	Member, Faculty selection committee for hiring the next chair for the Nutritional
	Sciences and Toxicology department
2016-2017	Faculty adviser for Chemistry-Chemical Biology students
2016-current	Member, Executive/Long Range Planning committee for Nutritional Sciences and Toxicology
2016-2017	Member, working group to advise on academic realignment as it pertains to the College of Natural Resources and the L&S Biological Sciences Division
2016-current	Member, Committee for Laboratory and Environmental Biosafety
2014-current	Chair and Head Graduate Adviser, Molecular Toxicology Graduate Program
2014-current	Member, CNR Student Faculty Relations Committee
2014	Member, Molecular and Cell Biology Cancer Faculty Search Committee
2014	Speaker for CalSO Faculty Showcase
2013-2017	Member, Metabolic Biology Graduate Affairs Committee
2012-current	Regents' and Chancellors' Scholarship Faculty Mentor
2012	Member, Faculty Selection committee for the Nutritional Sciences and Toxicology Department

Member, Seminar Speaker Selection Committee

2011-2018	Member, Undergraduate Affairs Committee for the Nutritional Sciences and	Ľ

Toxicology Department

2011-current Member, Molecular Toxicology Graduate Affairs Committee

Professional Services

2018-current	Editor of Cell Chemical Biology
2018-current	Editor of Current Protocols in Chemical Biology
2018	Discussion Leader at 2018 Bioorganic Chemistry Gordon Research Conference,
	Andover, New Hampshire.
2018	Study section ad hoc member for Enabling Bioanalytical and Imaging
	Technologies (EBIT) study section
2018	Chair and organizer of EMBO meeting "Enzymes, biocatalysis and chemical
	biology: The new frontiers" Pavia, Italy.
2018	Chair and organizer of "Chemoproteomics and Metabolomics" session at 2018
	ASBMB Experimental Biology meeting, San Diego
2017-current	Study section ad hoc member for Cancer Drug Development & Therapeutics
	(CDDT) study section
2017-current	Director, Novartis-Berkeley Center for Proteomics and Chemistry Technologies
2016	Study section ad hoc member for Recurring Special Emphasis Panel NIH ZRG1
0040	BMCT-C(01) Molecular Targets and Cancer Intervention study section
2016	Study section member for Special Emphasis Panel NIH ZRG1 BSTU 50
2015	Editor for "Omics" Issue in Current Opinions in Chemical Biology
2015-current	Adviser for 3-V Biosciences
2012-current	Adviser for Abide Therapeutics
2011	Editor Special Issue for Biochimica Biophysica Acta (Lipids in Cancer)

Reviewer for: Cell, Molecular Cell, Cell Metabolism, Cell Reports, Chemical Neurosciences, Chemical Reviews, Nature, Chemical Sciences, PNAS, Biochimica et Biophysica Acta, Journal of the American Chemical Society, Nature Structural and Molecular Biology, Nature Cell Biology, Journal of Lipid Research, Journal of Clinical Investigation, Cancer and Metabolism, Molecular and Cellular Proteomics, ACS Chemical Biology, ACS Central Science, Journal of Biological Chemistry, Cell Chemical Biology, eLife, Nature Chemistry

Teaching

Fall 2018	UC Berkeley Instructor for Advanced Toxicology (NST110)
Spring 2018	UC Berkeley Instructor for Research in Toxicology (NST193)
Spring 2018	UC Berkeley Instructor for Introduction to Toxicology (NST11)
Fall 2017	UC Berkeley Instructor for Advanced Toxicology (NST110)
Spring 2017	UC Berkeley Instructor for Research in Toxicology (NST193)
Spring 2017	UC Berkeley Instructor for Introduction to Toxicology (NST11)
Fall 2016	UC Berkeley Instructor for Advanced Toxicology (NST110)
Spring 2016	UC Berkeley Instructor for Research in Toxicology (NST193)
Spring 2016	UC Berkeley Instructor for Introduction to Toxicology (NST11)
Fall 2015	UC Berkeley Instructor for Advanced Toxicology (NST110)
Spring 2015	UC Berkeley Instructor for Introduction to Toxicology (NST11)
Spring 2015	UC Berkeley Instructor for Research in Toxicology (NST193)
Fall 2014	UC Berkeley Instructor for Advanced Toxicology (NST110)
Spring 2014	UC Berkeley Instructor for Introduction to Toxicology (NST11)
Fall 2013	UC Berkeley Instructor for Advanced Toxicology (NST110)
Spring 2013	UC Berkeley Instructor for Introduction to Toxicology (NST11)
Spring 2012	UC Berkeley Instructor for Graduate Research Colloquium (NST292)
Spring 2012	UC Berkeley Instructor for Graduate Seminar (NST290): Chemical Approaches
	to Study Metabolism
Fall 2011	UC Berkeley Instructor for Undergraduate Special Seminar (NST190): "-Omic
	Approaches to Study Metabolism"

Spring 2007	UC Berkeley Lecturer for Molecular Toxicology (NST120)
Fall 2006	UC Berkeley Co-Instructor and Graduate Student Instructor for Advanced
	Toxicology (NST110)
Spring 2006	UC Berkeley Guest Lecturer for Pesticide Chemistry and Toxicology (ESPM148)
Spring 2006	UC Berkeley Lecturer for Molecular Toxicology (NST120)

Publications BioRxiv Preprints

- Ahyong V, Berdan CA, Nomura DK, Welch MD (2019) A metabolic dependency for host isoprenoids in the obligate intracellular pathogen Rickettsia parkeri underlies a sensitivity for the statin class of hosttargeted therapeutics. bioRxiv preprint doi:10.1101/528018.
- Camarda R, Williams J, Malkov S, Zimmerman LJ, Manning S, Aran D, Beardsley A, Van de Mark D, Chen Y, Berdan CA, Louie SM, Mahieu C, Winkler J, Willey E, Gagnon JD, Shinoda K, Ansel KM, Werb Z, Nomura DK, Kajimura S, Butte AJ, Sanders ME, Liebler DC, Rugo H, Krings G, Shepherd JA, and Goga A. (2018) Tumor cell-adipocyte gap junctions activate lipolysis and are essential for breast tumorigenesis. bioRxiv preprint doi:10.1101/277939.

2019

- 1. Chung CY-S*, Shin HR*, Berdan CA, Ford B, Ward CC, Olzmann JA, Zoncu R*, **Nomura DK*** (2019) Covalent targeting of the vacuolar H*-ATPase activates autophagy via mTORC1 inhibition. *Nature Chemical Biology* In press. (*co-first authorship; #co-corresponding authorship)
- 2. Spradlin JN, Hu X, Ward CC, Brittain SM, Jones MD, Ou L, To M, Proudfoot A, Ornelas E, Woldegiorgis M, Olzmann JA, Bussiere DE, Thomas JR, Tallarico JA, McKenna JM, Schirle M, Maimone TJ*, Nomura DK* (2019) Harnessing the anti-cancer natural product nimbolide for targeted protein degradation. *Nature Chemical Biology* doi: 10.1038/s41589-019-0304-8. PMID 31209351 (*co-corresponding authors)
- 3. Ward CC, Kleinman JI, Chung CYS, Kim K, Petri Y, Lee PS, Thomas JR, Tallarico JA, McKenna JM, Schirle M, Nomura DK (2019) Covalent ligand screening uncovers a RNF4 E3 ligase recruiter for targeted protein degradation applications. *ACS Chemical Biology* doi: 10.1021/acschembio.8b01083. PMID 31059647
- 4. Berdan CA, Ho R, Lehtola HS, To M, Hu X, Huffman TR, Petri Y, Altobelli CR, Demeulenaere SG, Olzmann JA, Maimone TJ*, Nomura DK* (2019) Parthenolide covalently targets and inhibits focal adhesion kinase in breast cancer cells. Cell Chemical Biology pii: S2451-9456(19)30112-6. Doi: 10/1016/j.chembiol.2019.03.016. (*co-corresponding authorship) PMID 31080076
- 5. Lee K, Yesilkanal AE, Wynne JP, Frakenberger C, Liu J, Yan J, Elbaz M, Rabe DC, Rustandy FD, Tiwari P, Grossman EA, Hart PC, Kang C, Sanderson SM, Andrade J, Nomura DK, Bonini MG, Locasale JW, Rosner MR (2019) Effective breast cancer combination therapy targeting BACH1 and mitochondrial metabolism. *Nature* 568, 254-258. PMID 30842661
- **6.** Watt MJ, Clark AK, Selth LA, Haynes VR, Lister N, Rebello R, Porter LH, Niranjan B, Whitby ST, Lo J, Huang C, Schittenhelm RB, Anderson KE, Furic L, Wijayaratne PR, Matzaris M, Montgomer MK, Parpargiris M, Norden S, Febbraio M, Risbridger GP, Frydenberg M, **Nomura DK**, Taylor RA. (2019) Suppressing fatty acid uptake has therapeutic effects in preclinical models of prostate cancer. *Science Translational Medicine* doi: 10.1126/scitranslmed.aau5758. PMID 3078288
- Herber CB, Krause WC, Wang L, Bayrer JR, Li A, Schmitz M, Fields A, Ford B, Zhang Z, Reid MS, Nomura DK, Nissenson RA, Correa SM, Ingraham HA (2019) Estrogen signaling in arcuate *Kiss1* neurons suppresses a sex-dependent female circuit promoting dense strong bones. *Nature Communications*, 10, 163. PMID 30635563
- 8. Magtanong L, Ko P-J, To M, Cao JY, Tarangelo AN, Ward CC, Cho KY, Patti GJ, **Nomura DK**, Olzmann JA, Dixon SJ (2019) Exogenous monounsaturated fatty acids suppress non-apoptotic cell death. *Cell Chemical Biology* doi: 10.1016/j.chembiol.2018.11.016. PMID 30686757

2018

9. Volkmar N, Thezenas M-L, Louie SM, Juszkiewicz S, **Nomura DK**, Hegde RS, Kessler BM, Christianson JC (2018) The ER membrane protein complex (EMC) promotes biogenesis of sterol-related enzymes maintaining cholesterol homeostasis. *Journal of Cell Science*. Doi: 10.1242/jcs.223453. PMID 30578317

- 10. Stazi G, Battistelli C, Piano V, Mazzone R, Marrocco B, Marchese S, Louie SM, Zwergel C, Antonini L, Patsilinakos A, Ragno R, Viviano M, Sbardella G, Ciogli A, Fabrizi G, Cirilli R, Strippoli R, Marchetti A, Tripodi M, Nomura DK, Mattevi A, Mai A, Valente S (2018) Development of alky glycerone phosphate synthase inhibitors: Structure-activity relationship and effects on ether lipids and epithelial-to-mesechymal transition in cancer cells. European Journal of Medicinal Chemistry 163, 722-735. PMID 30576903
- **11.** Fernandez RF, Kim SQ, Zhao Y, Foguth RM, Weera MM, Counihan JL, **Nomura DK**, Chester JA, Cannon JR, Ellis JM (2018) Acyl-CoA synthetase 6 enriches the neuroprotective omega-3 fatty acid DHA in the brain. *Proceedings of the National Academy of Sciences, U.S.A.* 115, 12525-12530. PMID 30327559
- **12.** Zhou M, Ford B, Lee D, Huen K, Tran Y, Bradman A, Gunier R, Eskenazi B, **Nomura DK**, Holland NT (2018) Metabolomic markers of phthalate exposure in plasma and urine of pregnant women. *Frontiers in Public Health* 6, 298. PMID 30406068
- **13. Nomura DK** (2018) Virtual Issue on the Work of John Casida. *Chemical Research in Toxicology* 31, 637-638. PMID 30080400
- **14. Nomura DK*** and Maimone TJ*. (2018) Target identification of bioactive covalently-acting natural products. *Current Topics in Microbiology and Immunology* 420, 351-374. PMID 30105423 (*co-corresponding authorship)
- **15.** Counihan JL*, Wiggenhorn A*, Anderson KE, **Nomura DK**. (2018) Chemoproteomics-enabled covalent ligand screening reveals ALDH3A1 as a lung cancer target. *ACS Chemical Biology* 13, 1970-1977. (*cofirst authors) PMID 300004670
- 16. Wallace M, Green CR, Roberts LS, Lee YM, McCarville J, Sanchez-Gurmaches J, Meurs N, Gengatharan JM, Hover J, Phillips SA, Ciaraldi TP, Guertin DA, Cabrales P, Ayres JS, Nomura DK, Loomba R, Metallo CM (2018) Enzyme promiscuity drives branched-chain fatty acid synthesis in adipose tissue. *Nature Chemical Biology* 14, 1021-1031. PMID 30327559
- **17.** Counihan JL, Grossman EA, **Nomura DK**. (2018) Cancer metabolism: current understanding and therapies. *Chemical Reviews* 118, 6893-6923. PMID 29939018
- 18. Long JZ, Roche AM, Berdan CA, Louie SM, Roberts AJ, Svensson KJ, Dou FY, Bateman LA, Mina AI, Deng Z, Jedrychowski MP, Lin H, Kamenecka T, Asara JM, Griffin PR, Banks AS, Nomura DK, Spiegelman BM. (2018) Ablation of PM20D1 reveals N-acyl amino acid control of metabolism and nociception. *Proceedings of the National Academy of Sciences, U.S.A.* 115, E6937-E6945. PMID 29967167
- **19.** Van Dalfsen KM, Hodapp S, Keskin A, Otto GM, Berdan CA, Higdon A, Cheunkarndee T, **Nomura DK**, Jovanovic M, Brar GA. (2018) Global proteome remodeling during ER stress involves Hac1-driven expression of long undecoded transcript isoforms. *Developmental Cell* 46, 219-235. PMID 30016623
- **20.** Tam AB, Roberts LS, Chandra V, Rivera IG, **Nomura DK**, Forbes DJ, Niwa M. (2018) The UPR activator ATF6 responds to proteotoxic and lipotoxic stress by distinct mechanisms. *Developmental Cell* 46, 327-343. PMID 30086303
- **21.** Patra KC, Kato Y, Mizukami Y, Widholz S, Boukhali M, Revenco I, Grossman EA, Ji F, Sadreyev RI, Liss AS, Screaton RA, Sakamoto K, Ryan DP, Mino-Kenudson M, Fernandez-del Castillo C, **Nomura DK**, Haas W, Bardeesy N. (2018) Mutant GNAS drives pancreatic tumorigenesis by inducing PKA-mediated SIK suppression and reprogramming lipid metabolism. *Nature Cell Biology* 20, 811-822. PMID 29941929
- **22.** Maier MT, Vilhelmsson A, Louie SM, Vagena E, **Nomura DK**, Koliwad SK, Xu AW. (2018) Regulation of hepatic lipid accumulation and distribution by Agouti-relation protein in male mice. *Endocrinology* 159, 2408-2420. PMID 29750244
- **23.** Lin H, Long JZ, Roche AM, Svensson KJ, Dou F, Chang MR, Srutzenberg T, Ruiz C, Cameron MD, Novick SJ, Berdan CA, Louie SM, **Nomura DK**, Spiegelman BM, Griffin PR, Kamenecka TM. (2018) Discovery of hydrolysis-resistant isoindoline N-acyl amino acid analogs that stimulate mitochondrial respiration. *Journal of Medicinal Chemistry* 61, 3224-3230. PMID 29533650
- 24. Tomin T, Fritz K, Gindlhuber J, Waldherr L, Pucher B, Thallinger GG, Nomura DK, Schittmayer M, Birner-Gruenberger R. (2018) Deletion of adipose triglyceride lipase links triacylglycerol accumulation to a more aggressive phenotype in A549 lung carcinoma cells. *Journal of Proteome Research* 17, 1415-1425. PMID 29457907
- **25.** Prasse C, Ford B, **Nomura DK**, Sedlak DL. (2018) Unexpected transformation of dissolved phenols to toxic dicarbonyls by hydroxyl radicals and UV light. *Proceedings of the National Academy of Sciences, USA*. 115, 2311-2316. PMID 29463747

- **26.** Nnadi CI, Jenkins ML, Gentile DR, Bateman LA, Zaidman D, Ballus TE, **Nomura DK**, Burke JE, Shokat KM, London N. (2018) Novel K-Ras G12C switch-II covalent binders destabilize Ras and accelerate nucleotide exchange. *Journal of Chemical Information and Modeling* 57, 464-471. PMID 29320178
- **27.** Gibeaux R, Acker R, Kitaoka M, Georgiou G, van Kruijsbergen I, Ford B, Marcotte EM, **Nomura DK**, Kwon T, Veenstra GJC, Heald R. (2018) Paternal chromosome loss and metabolic crisis contribute to hybrid inviability in *Xenopus. Nature* 553, 337-341. PMID 29320479
- **28.** Bersuker K, Peterson CWH, To M, Sahl SJ, Savikhin V, Grossman EA, **Nomura DK**, Olzmann JA. (2018) A promixity labeling strategy provides insights into the composition and dynamics of lipid droplet proteomes. *Developmental Cell* 44, 97-112. PMID 29275994

- 29. Lue JW, Podolak J, Kolahi K, Cheng L, Rao S, Garg D, Xue CH, Rantala JK, Tyner JW, Thornburh KL, Martinez-Acevedo A, Liu JJ, Amling CL, Truillet C, Louie SM, Anderson KE, Evans MJ, O'Donnell VB, Nomura DK, Drake JM, Ritz A, Thomas GV. (2017) Metabolic reprogramming ensures cancer cell survival despite oncogenic signaling blockade. *Genes and Development* 31, 2067-2084. PMID 29138276
- 30. De Leon JA, Qiu J, Nicolai CJ, Counihan JL, Barry KC, Xu L, Lawrence RE, Castellano BM, Zoncu R, Nomura DK, Luo Z-Q, Vance RE. (2017) Positive and negative regulation of the master metabolic regulator mTORC1 by two families of *Legionella pneumophila* effectors. *Cell Reports* 21, 2031-2038. PMID 29166595
- **31.** Grossman E*, Ward CC*, Spradlin JN, Bateman LA, Huffman TR, Miyamoto DK, Kleinman JI, **Nomura DK**. (2017) Covalent ligand discovery against druggable hotspots targeted by anti-cancer natural products. *Cell Chemical Biology* 24, 1368-1376. PMID 28919038 (*co-first authorship)
- **32.** Anderson KE, To M, Olzmann JA, **Nomura DK**. (2017) Chemoproteomics-enabled covalent ligand screening reveals a thioredoxin-caspase 3 interaction disruptor that impairs breast cancer pathogenicity. *ACS Chemical Biology* 12, 2522-2528. PMID 28892616
- **33.** Chen T-C, Benjamin DI, Kuo T, Lee RA, Li M-L, Mar D, Costello DE, **Nomura DK**, Wang J-C. (2017) Glucocorticoid-Angiopoietin-like 4-Ceramide Axis induces insulin resistance. *Science Signaling* 10, eaai7905. PMID 28743803
- **34.** Chomvong K, Benjamin DI, **Nomura DK**, Cate JH. Cellobiose consumption uncouples extracellular glucose sensing and glucose metabolism in Saccharomyces cerevisiae. *mBio* 8, e00855-17.
- **35.** Nguyen TB, Louie SM, Daniele J, Tran Q, Dillin A, Zoncu R, **Nomura DK**, Olzmann JA. (2017) DGAT1-dependent lipid droplet biogenesis protects mitochondrial function during starvation-induced autophagy. *Developmental Cell* **42**, 9-21. PMID 28697336
- **36.** Ward CC, Kleinman J, **Nomura DK**. (2017) NHS-esters as versatile reactivity-based probes for mapping proteome-wide ligandable hotspots. *ACS Chemical Biology* 12, 1478-1483. PMID 28445029
- **37.** Bateman LA*, Nguyen TB*, Roberts AM*, Miyamoto DK, Ku W-M, Huffman TR, Petri Y, Heslin MJ, Contreras CM, Skibola CF, Olzmann JA*, **Nomura DK***. (2017) Chemoproteomics-enabled covalent ligand screen reveals a cysteine hotspot in Reticulon 4 that impairs ER morphology and cancer pathogenicity. *Chemical Communications* 53, 7234-7237. PMID 28352901 (#co-first authors; *co-corresponding author)
- **38.** Roberts LS, Yan P, Bateman LA, **Nomura DK.** (2017) Mapping novel metabolic nodes targeted by anticancer drugs that impair triple-negative breast cancer pathogenicity. *ACS Chemical Biology* 12, 1133-1140. PMID 28248089
- **39.** Bateman LA, Ku W-M, Heslin MJ, Contrearas CM, Skibola CF, **Nomura DK**. (2017) ASS1 is an important metabolic regulator of colorectal cancer. *ACS Chemical Biology* 12, 905-911. PMID 28229591
- 40. Castellano, B.M., Thelen, A.M., Moldavski O, Feltes M, van der Welle R, Mydock-McGrane L, Jiang X, van Eijkeren RJ, Davis OB, Louie SM, Perera RM, Covey D, Nomura DK, Ory DS, Zoncu R. (2017) Lysosomal cholesterol activates mTORC1 via an SLC38A9-Niemann Pick C1 signaling complex. Science 355, 1306-1311. PMID 28336668
- **41.** Roberts AM, Miyamoto DK, Huffman TR, Bateman LA, Ives AN, Akopian D, Heslin MJ, Contreras CM, Rape M, Skibola CF, **Nomura DK**. (2017) Chemoproteomic screening of covalent ligands reveals UBA5 as a novel pancreatic cancer target. *ACS Chemical Biology* 12, 899-904. PMID 28186401
- **42.** Counihan JL, Duckering M, Dalvie E, Ku W-m, Bateman LA, Fisher KJ, **Nomura DK**. (2017) Mapping proteome-wide reactivity of the widely used herbicide acetochlor in mice. *ACS Chemical Biology* 12, 635-642. PMID 28094496
- **43.** Whang MI, Taveras RM, Benjamin DI, Kattah MG, Advincula R, **Nomura DK**, Debnath J, Malynn BA, Ma A. (2017) The ubiquitin binding protein TAX1BP mediates autophagasome induction and the metabolic transition of activated T cells. *Immunity* 46, 405-420. PMID 28314591

- **44.** Anderton B, Camarda R, Balkrishnan S, Balakrishnan A, Kohnz RA, Lim L, Evason KJ, Momcilovic O, Kruttwig K, Huang Q, Xu G, **Nomura DK**, Goga A. (2017) MYC-driven inhibition of the glumate-cysteine ligase promotes glutathione depletion in liver cancer. *EMBO Report* 18, 569-585. PMID 28219903
- **45.** Ford B, Bateman LA, Gutierrez-Palominos L, Park R, **Nomura DK.** (2017) Mapping proteome-wide targets of glyphosate in mice. *Cell Chemical Biology* 24, 133-140. PMID 28132892
- **46.** Ruby MA, Massart J, Hunerdosse DM, Schonke M, Correia JC, Louie SM, Ruas JL, Naslund E, **Nomura DK**, Zierath JR. (2017) Human carboxylesterase 2 reverses obesity-induced diacylglycerol accumulation and glucose intolerance. *Cell Reports* 18, 636-646. PMID 28099843
- **47.** Roberts AM, Ward CC, **Nomura DK**. (2017) Activity-based protein profiling for mapping and pharmacologically interrogating proteome-wide ligandable hotspots. *Current Opinion in Biotechnology* 43, 25-33. PMID 27568596
- **48.** To M, Peterson CWH, Roberts MA, Counihan JL, Wu TT, Forster MS, **Nomura DK**, Olzmann JA. (2017) Lipid disequilibrium disrupts ER proteostasis by impairing ERAD substrate glycan trimming and dislocation. *Molecular Biology of the Cell* 28, 270-284. PMID 27881664

- **49.** Kim H-E, Grant AR, Simic MS, Kohnz RA, **Nomura DK**, Durieux J, Riera CE, Sanchez M, Kapernick E, Wolff Suzanne, Dillin A (2016) Lipid biosynthesis coordinates a mitochondrial-to-cytosolic stress response. *Cell* 166, 1539-1552. PMID 27568596
- **50.** Sogi K, Holsclaw C, Fragiadakis G, **Nomura DK**, Leary J, Bertozzi C. (2016) Biosynthesis and regulation of sulfomenaquinone, a metabolite associated with virulence in Mycobacterium tuberculosis. *ACS Infectious Diseases* 2, 800-806. PMID 27933784
- **51.** Braverman J, Sogi KM, Benjamin D, **Nomura DK**, Stanley SA. (2016) HIF-1alpha is an essential mediator of IFA-gamma-dependent immunity to Mycobacterium tuberculosis. Journal of Immunology doi: 10.4049/iimmunol.1600266. PMID 27430718
- **52.** Kohnz RA, Roberts, LS, DeTomaso D, Badyopadhyay S, Yosef N, **Nomura DK**. (2016) Protein sialylation regulates a gene expression signature that promotes breast cancer cell pathogenicity. *ACS Chemical Biology 11*, 2131-2139. PMID 27380425
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Patents

- 1. **Nomura DK**, Zoncu R, Chung YSC, Shin H (2018) mTORC1 inhibitors for Activating autophagy. Provisional Application filed.
- 2. **Nomura DK,** Spradlin J, Ward CC, Schirle M, Tallarico JA, McKenna JM (2018) Covalent targeting of E3 ligases. Provisional Application for Patent filed.
- 3. **Nomura DK**, Zoncu R, Ward C, Fung SK, Fontaine B, Varma C (2018) Methods and compounds for targeted autophagy. PCT Application filed
- 4. Nomura DK, Zoncu R, Roberts AM, Cho, KF (2018) mTORC1 modulators; PCT Application
- 5. **Nomura DK**, Anderson KE (2017) Thioredoxin modulators and uses thereof; PCT application WO2018175958A1.
- 6. Nomura DK, Roberts LS, Ward CC (2017) Compositions for treating breast cancer; PCT application filed.
- 7. **Nomura DK**, Roberts AM, Bateman LA, Miyamoto DK, Huffman TR, Ward CC (2017) Compositions and methods for modulating UBA5. PCT application WO2018144869A1.
- 8. **Nomura DK**, Olzmann JA, Bateman LA, Nguyen TB, Miyamoto DK, Huffman TR (2017) Compositions and methods for inhibiting Reticulon 4. PCT application WO2018144870A1.
- 9. **Nomura DK,** Grossman EA, Ward CC, Bateman LA, Huffman TR, Miyamoto DK (2017) Compositions and methods for modulating PPP2R1A. PCT application WO2018144871A1
- 10. Cravatt BF, **Nomura DK**, Chang JW, Moellering M, Bachovchin, D, Li, W (2011) Anti-cancer serine hydrolase inhibitory carbamates. PCT/US2011/057321.

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Abstracts/meetings/invited talks

- 1. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Targeted Drug Discovery Summit, Boston, MA.
- 2. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. 60th International Conference on the Biosciences of Lipids, Tokyo, Japan.
- 3. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Bioorganic Chemistry Gordon Research Conference, Andover, NH.
- 4. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Novartis Institutes for BioMedical Research, Basel, Switzerland.
- 5. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. European Targeted Protein Degradation meeting, Basel, Switzerland
- 6. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Cayman Chemical Biology Symposium at the University of Michigan, Ann Arbor, Ann Arbor, MI.
- 7. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Yale Chemical Biology symposium, New Haven, CT.
- 8. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. World Molecular Engineering Network meeting, Cabo San Lucas, Mexico.
- 9. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. American Cancer Society meeting, Orlando, FL.
- 10. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Structural Genomics Consortium Targeted Protein Degradation meeting, Toronto, CA.
- 11. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Mark Foundation for Cancer Research Symposium, New York, NY.
- 12. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Medicinal and Bioorganic Chemistry Foundation meeting, Steamboat, CO.
- 13. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. 1st Targeted Protein Degradation Summit meeting, Boston, MA
- 14. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. Merck and Co. Organic Chemistry Seminar Series, Kenilworth, NJ.
- 15. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. Caltech Department of Chemistry, Pasadena, California.
- 16. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. EMBO Enzymes and Catalysis meeting. Pavia. Italy.
- 17. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. City of Hope Research Institute, Los Angeles, CA
- 18. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. Structural Genomics Consortium on Target 2035. Berlin, Germany
- 19. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. BASF Metanomics, Berlin, Germany
- 20. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. Pharmaron, Beijing, China.
- 21. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. BASF-CARA Symposium, Santa Barbara, CA.
- 22. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. Cambridge Healthtech Institute's 17th Annual World Preclinical Congress, Boston, MA.
- 23. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. ACS National Medicinal Chemistry Symposium, Nashville, TN.
- 24. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. Merck, South San Francisco, CA.
- 25. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. 2018 San Antonio Drug Discovery Symposium, San Antonio, TX.
- 26. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. AACR meeting, Chicago, IL.

- 27. Invited Speaker and Session Chair: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. ASBMB meeting, San Diego, CA.
- 28. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. Agios, Cambridge, MA.
- 29. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. Astrazeneca, Waltham, MA.
- 30. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. University of California, Riverside, Riverside, CA.
- 31. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. Tumor Metabolism Keystone meeting, Snowbird, Utah.
- 32. Invited Speaker: **Nomura DK** (2017) Redefining Toxicology and Druggability using Chemoproteomic Platforms. Superfund Research Program meeting, Philadelphia, Pennsylvania.
- 33. Invited Speaker: **Nomura DK** (2017) Redefining Druggability using Chemoproteomic Platforms. Tufts University Medical School, Boston, MA.
- 34. Invited Speaker: **Nomura DK** (2017) Redefining Druggability using Chemoproteomic Platforms. University of Virginia, Charlottesville, VA.
- 35. Invited Speaker and Wendell Griffith Lecturer: **Nomura DK** (2017) Redefining Druggability using Chemoproteomic Platforms. St Louis University, St. Louis, MO.
- 36. Invited Speaker: **Nomura DK** (2017) Redefining Druggability using Chemoproteomic Platforms. AACR Advances in Breast Cancer Meeting, Hollywood, CA.
- 37. Invited Speaker: **Nomura DK** (2017) Redefining Druggability using Chemoproteomic Platforms. Austrian Proteomics Association meeting, Graz, Austria.
- 38. Invited Speaker: **Nomura DK** (2017) Chemoproteomic Platforms for Mapping Druggable Hotspots in Disease. Enzymes, Coenzymes, & Metabolic Pathways Gordon Conference. Waterville Valley, NH.
- 39. Invited Speaker: **Nomura DK** (2017) Chemoproteomic and Metabolomic Platforms for Mapping Drivers of Disease. American Diabetes Association meeting. San Diego, CA.
- 40. Invited Speaker: **Nomura DK** (2017) Chemoproteomic Platforms for Mapping Druggable Hotspots in Disease. Royal Society of Chemistry Chemical Biology Symposium. London, UK.
- 41. Invited Speaker: **Nomura DK** (2017) Chemoproteomic Platforms for Mapping Druggable Hotspots in Disease. World Molecular Engineering Network conference, San Jose Del Cabo, Mexico.
- 42. Invited Speaker: **Nomura DK** (2017) Using Chemoproteomic and Metabolomic Platforms to Map Drivers of Human Disease, UCSF Breast Oncology Program Seminar, San Francisco, CA.
- 43. Invited Speaker: **Nomura DK** (2017) Using Chemoproteomic and Metabolomic Platforms to Map Drivers of Human Disease, Cold Spring Harbor Laboratory, Chemistry and Metabolism Symposium, Cold Spring Harbor. NY.
- 44. Invited Speaker: **Nomura DK** (2017) Using Chemoproteomic and Metabolomic Platforms to Map Drivers of Human Disease, Johns Hopkins Medical School, Department of Biological Chemistry, Baltimore, Maryland.
- 45. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, The University of Syndey Charles Perkin Centre, Syndey, Australia.
- 46. Keynote Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, Third Australian Lipids Meeting, Melbourne, Australia.
- 47. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, University of Georgia, Athens, Georgia.
- 48. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, UCSD Metabolomics Symposium, La Jolla, CA.
- 49. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, Oregon Health State University, Portland, Oregon.
- 50. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, Amgen South San Francisco, CA
- 51. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, Vanderbilt University Chemical Biology Seminar Series, Nashville, Tenessee.
- 52. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Toxicology and Drug Discovery GETA (Genetic and Environmental Toxicology Association) Symposium, Oakland, CA.
- 53. Invited Speaker: **Nomura DK** (2016) Mapping Metabolic Drivers of Cancer using Chemoproteomic and Metabolomic Platforms. Gilead Medicinal Chemistry Seminar Series, Foster City, CA.

- 54. Invited Speaker: **Nomura DK** (2016) Mapping Metabolic Drivers of Cancer using Chemoproteomic and Metabolomic Platforms. Gordon Conference on Bioorganic Chemistry, New Hampshire.
- 55. Invited Speaker: **Nomura DK** (2016) Mapping Metabolic Drivers of Cancer using Chemoproteomic and Metabolomic Platforms. AACR National Meeting, New Orleans, Louisiana.
- 56. Invited Speaker: **Nomura DK** (2016) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. University of Pavia, Italy.
- 57. Invited Speaker: **Nomura DK** (2016) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. Medical University of Graz, Graz, Austria.
- 58. Invited Speaker: **Nomura DK** (2016) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. Keystone Science Lecture Speaker at National Institutes for Environmental Health Sciences, Research Triangle Park, North Carolina.
- 59. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. Cleveland Clinic, Cleveland, Ohio.
- 60. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. Purdue University, Department of Nutrition, Indiana.
- 61. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. UCLA, Los Angeles, California.
- 62. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. University of Wisconsin, Madison Department of Biochemistry, Madison, Wisconsin.
- 63. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. UCSF Cancer Center, San Francisco, CA
- 64. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. UCSF Endocrinology, San Francisco, CA
- 65. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. UCSD Bioengineering Department, La Jolla, CA
- 66. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. Dana Farber Cancer Institute, Boston, Massachusetts.
- 67. Invited Keynote Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Cancer using Chemoproteomic and Metabolomic Platforms. Molecular and Cell Biology of Lipids Gordon Conference, Waterville Valley, New Hampshire.
- 68. Poster Presenter: **Nomura DK** (2015) Mapping Metabolic Drivers of Cancer using Chemoproteomic and Metabolomic Platforms. High Throughput Chemistry and Chemical Biology Gordon Conference, New London, New Hampshire.
- 69. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Cancer using Chemoproteomic and Metabolomic Platforms. AACR Metabolism and Cancer meeting, Bellevue, Washington.
- 70. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. Lipid Maps Meeting 2015, La Jolla, CA.
- 71. Invited Speaker: **Nomura DK** (2015) Mapping Dysregulated Metabolic Pathways in Disease Using Chemoproteomic and Metabolomic Platforms, Dana Farber/Harvard Medical School, Boston, MA.
- 72. Invited Speaker: **Nomura DK** (2015) Mapping Dysregulated Metabolic Pathways in Disease Using Chemoproteomic and Metabolomic Platforms, Searle Meeting, Chicago, IL.
- 73. Invited Speaker: **Nomura DK** (2015) Mapping Dysregulated Metabolic Pathways in Disease Using Chemoproteomic and Metabolomic Platforms, University of Chicago, Chicago, IL.
- 74. Invited Speaker: **Nomura DK** (2015) Mapping Dysregulated Lipid Metabolism in Disease using Chemoproteomic and Metabolomic Platforms, RIKEN, Yokohama, Japan.
- 75. Invited Speaker: **Nomura DK** (2015) Mapping Dysregulated Lipid Metabolism in Disease using Chemoproteomic and Metabolomic Platforms, Phospholipase Meeting, Tokyo, Japan.
- 76. Seminar speaker: **Nomura DK** (2014) Chemoproteomic and Metabolomic Strategies for Drug Discovery and Toxicology, UC Berkeley, Nutritional Sciences and Toxicology Department
- 77. Poster/Talk: **Nomura DK** (2014) Mapping Dysregulated Metabolic Pathways in Cancer Using Functional Proteomic and Metabolomic Platforms, Gordon Conference, Coenzymes, and Metabolic Pathways, Waterville Valley, NH.
- 78. Invited Speaker: **Nomura DK** (2014) Chemoproteomic and Metabolomic Strategies for Drug Discovery and Toxicology, Genentech, South San Francisco, CA Investigative Toxicology Division

- 79. Poster: **Nomura DK** (2014) Mapping Dysregulated Metabolic Pathways in Cancer Using Functional Proteomic and Metabolomic Platforms, Searle Scholars Meeting, Chicago, IL.
- 80. Invited Speaker: **Nomura DK** (2014) Mapping Dysregulated Lipid Metabolism in Cancer using Chemoproteomic and Metabolomic Platforms, ASBMB meeting, San Diego, CA.
- 81. Invited Speaker: **Nomura DK** (2014) Mapping Dysregulated Lipid Metabolism in Cancer using Chemoproteomic and Metabolomic Platforms, Keystone Meeting on Tumor Metabolism, Whistler, Canada.
- 82. Invited Speaker: **Nomura DK** (2014) Validating Monoacylglycerol Lipase Inhibitors in Combatting Parkinson's Disease, Michael J Fox Foundation, New York, NY.
- 83. Invited Seminar Speaker: **Nomura DK** (2014) Mapping Dysregulated Metabolic Pathways in Disease using Chemoproteomic and Metabolomic Platforms, Karolinska Institute, Stockholm, Sweden.
- 84. Invited Seminar Speaker: **Nomura DK** (2014) Mapping Dysregulated Metabolic Pathways in Disease using Chemoproteomic and Metabolomic Platforms, University of Pavia, Pavia, Italy.
- 85. Invited Seminar Speaker: **Nomura DK** (2013) Mapping Dysregulated Metabolic Pathways in Disease using Chemoproteomic and Metabolomic Platforms, Novartis, Cambridge, MA.
- 86. Invited Seminar Speaker: **Nomura DK** (2013) Mapping Dysregulated Metabolic Pathways in Disease using Chemoproteomic and Metabolomic Platforms, UC Merced, Merced, CA.
- 87. Invited Speaker: **Nomura DK** (2013) Endocannabinoid hydrolysis generates eicosanoids that promote inflammation. Bioactive Lipids in Cancer, Inflammation, and Related Diseases meeting, San Juan, Puerto Rico—received Eicosanoids Research Foundation Young Investigator Award.
- 88. Keynote Speaker: **Nomura DK** (2013) Chemoproteomic and Metabolomic Strategies for Drug Discovery and Toxicology. NorCal Society of Toxicology meeting, South San Francisco, CA.
- 89. Invited Speaker: **Nomura DK** (2013) Mapping dysregulated metabolic pathways in disease using functional proteomic and metabolomic platforms. Symposium on Frontier Sciences on New Drug Discovery, Tsinghua University, Beijing, China.
- 90. Invited Speaker: **Nomura DK** (2013) Mapping dysregulated metabolic pathways in disease using functional proteomic and metabolomic platforms. Transatlantic Frontiers of Chemistry (TFOC) meeting, American Chemical Society, Kloster Seon, Germany.
- 91. Invited Speaker: **Nomura DK** (2013) Endocannabinoid hydrolysis generates eicosanoids that promote inflammation. Gordon conference Molecular and Cellular Biology of Lipids, New Hampshire, NJ
- 92. Poster: **Nomura DK** (2013) Mapping dysregulated metabolic pathways in cancer. Gordon conference bioorganic chemistry, New Hampshire, NJ.
- 93. Poster: **Nomura DK** (2013) Mapping Dysregulated Metabolic Pathways in Cancer Using Functional Proteomic and Metabolomic Platforms, Searle Scholars Meeting, Chicago, IL.
- 94. Invited Speaker: **Nomura DK** (2013) Mapping Dysregulated Metabolic Pathways in Disease using Functional Proteomic and Metabolomic Platforms. Seminar speaker at UC Berkeley, Department of Molecular and Cell Biology, Berkeley, CA
- 95. Invited Speaker: **Nomura DK** (2013) Endocannabinoid hydrolysis generates brain prostaglandins that promote neuroinflammation. Seminar speaker at University of Minnesota, Minneapolis, MN.
- 96. Invited Speaker: **Nomura DK** (2012) Mapping dysregulated metabolic pathways in disease using functional proteomic and metabolomic platforms. Seminar speaker at Agilent, Santa Clara, CA.
- 97. Invited Speaker: **Nomura DK** (2012) Endocannabinoid hydrolysis generates brain prostaglandins that promote neuroinflammation. Seminar speaker at Pfizer Neuroscience, Cambridge, MA.
- 98. Invited Speaker: **Nomura DK** (2012) Mapping Dysregulated Metabolic Pathways using Functional Chemoproteomic and Metabolomic Platforms. Seminar Speaker at Children's Hospital Oakland Research Institute. Oakland. CA.
- 99. Keynote Invited Speaker: **Nomura DK** (2012) Mapping dysregulated metabolic pathways in cancer using functional proteomic and metabolomic platforms. Austrian Proteomics Research Symposium, Graz, Austria.
- 100. Invited Speaker: **Nomura DK**. (2012) Endocannabinoid hydrolysis generates brain prostaglandins that promote neuroinflammation. *International Cannabinoid Research Society* meeting, Freiberg, Germany.
- Poster: Nomura DK and Samad TA (2012) Metabolomic profiling for mapping anti-inflammatory pathways in neurodegenerative disease. Genetics and Chemistry Cell Symposium, Cambridge, Massachusetts.
- 102. Invited Speaker: **Nomura DK** (2012) Endocannabinoid hydrolysis generates brain eicosanoids that promote neuroinflammation. *SciCafe* hosted by Nature Biotechnology and Nature Medicine at the Gladstone Institute, San Francisco, CA

- 103. Poster: **Nomura DK** and Cravatt BF (2011) Monoacylglycerol Lipase Exerts Bidirectional Control over Endocannabinoid and Fatty Acid Pathways to Support Prostate Cancer. Cancer Chemical Biology meeting sponsored by Nature Chemical Biology, Cambridge, Massachusetts.
- 104. Invited Speaker: **Nomura DK** (2011) Mapping dysregulated metabolic pathways in cancer using activity-based proteomics. American Chemical Society meeting, Denver, Colorado.
- 105. Invited Speaker: **Nomura DK**, Cravatt BF (2011) Mapping dysregulated metabolic pathways in cancer. American Association for Cancer Research meeting, Orlando, Florida.
- 106. Invited Speaker: **Nomura DK**, Long JZ, Cravatt BF, Casida JE. (2010) Annotating the role of monoacylglycerol lipase in cancer and in the brain. American Chemical Society meeting, San Francisco, California.
- 107. Invited Speaker: **Nomura DK**. (2009) Chemical Approaches to Annotating Toxicological and Biological Systems. University of California Toxic Substances & Teaching Program Symposium, Berkeley, California.
- 108. Poster: **Nomura DK**, Blankman JL, Simon GM, Cravatt BF, Casida JE. (2008) Maximal activation of the endocannabinoid system by organophosphorus nerve agents. University of California Toxic Substances Research & Teaching Program Symposium, Riverside, California.
- 109. Poster: **Nomura DK**, Casida JE. (2007) Acetyl monoalkylglycerol ether deacetylase: an organophosphate detoxifying enzyme and modulator of tumor growth. IXth Meeting on Cholinesterases, Souzhou, China.
- 110. Oral Presentation: **Nomura DK**, Durkin KA, Chiang KP, Quistad GB, Cravatt BF, Casida JE. (2006) Toxicological and Structural Features of KIAA1363: A Novel Detoxifying Enzyme for Organophosphorus Nerve Poisons. American Chemical Society meeting, San Francisco, CA.
- 111. Poster: **Nomura DK**, Leung D, Chiang KP, Quistad GB, Cravatt BF, Casida JE. (2005) A Brain Detoxifying Enzyme for Organophosphorus Nerve Poisons. American Chemical Society meeting, Washington, D.C.

Students/Researchers Supervised (w/ former and current position)

Name	Position in the lab	Current Position
Jennifer Co (2019-current)	Undergraduate Researcher	
Erika Zhang (2019-current)	Undergraduate Researcher	
Lydia Zhang (2019-current)	Graduate Researcher	
Flor (Alicia) Gowans (2019-current)	Graduate Researcher	
Nathaniel Henning (2019-current)	Graduate Researcher	
Derek Garcia (2019-current)	Graduate Researcher	
Deirdre Willgohs (2018-2018)	Research Intern	Student at Northwestern University
Reagan Kennedy (2018-2018)	Undergraduate Researcher	
Benjamin Fontaine (2018-current)	Postdoctoral Fellow	
Lydia Boike (2018-current)	Graduate Researcher	
Chad Altobelli (2018-2019)	Undergraduate Researcher	PhD program at UCSF
Angela Xiong (2018-2019)	Undergraduate Researcher	PhD program at Boston College
Felix Majewski (2018-current)	Undergraduate Researcher	
Ross White (2018-current)	Undergradaute Researcher	
Liam McCarthy (2018-current)	Summer Intern	
Sarah Buzsaki (2018-current)	Undergraduate Researcher	
May Fung (2018-current)	Postdoctoral Fellow	
Sasha Demeulenaere (2018-2018)	Undergraduate Researcher	
Kenneth Kim (2017-current)	Undergraduate Researcher	
Samantha Tang (2017-current)	Administrative and Lab	
	Assistant	
Christine Thatcher (2017-2018)	Undergraduate Researcher	
Kyra Berger (2017-2018)	Undergraduate Researcher	
Yosuke Isobe (2018-current)	Postdoctoral Fellow	
Clive Chung (2017-current)	Postdoctoral Fellow	
Katherine Near (2017-current)	Postdoctoral Fellow	
Alexander Cioffi (2017-current)	Postdoctoral Fellow	
Lisha Ou (2017-2019)	Undergraduate Researcher	PhD program at Stanford University
Linda Waldherr (2017-2017)	Visiting Grad Student	
Raymond Ho (2017-2018)	Undergraduate Researcher	

Sage Geher (2017-2017) Mai Luo (2016-current) Tamara Tomin (2016-2017) Fernando Alvarez (2016-2018) Alex Renn (2016-2017) Jordan Kleinman (2016-2019) Ashley Ives (2016-2017) Sultana Mojadidi (2016-2016) Jessica Spradlin (2016-current) Carl Ward (2016-current) Allison Roberts (2015-2018) Amanda Wiggenhorn (2016-2019) Joseph Hendricks (2016-2017) Anna Flury (2016-2016) Haley Lehtola (2016-2018) Yana Petri (2016-2019) Justin Wang (2016-2017) Ivan Atencio (2016-2017) Andrew Hong (2016-2016) Catherine Schneider (2015-2017) Catherine Cascavita (2015-2016) Elizabeth Grossman (2015-2019) Michelle Luu (2015-2017) Deepika Raghavan (2015-2016) Peter Yan (2015-2017) Kimberly Anderson (2015-2018) Melanie Hubbuck (2015-2017) Megan Duckering (2015-2016) Angela Yang (2015-2015) Charles Berdan (2014-2019)

Wan-Min Ku (2014-2017) Derek Barbas (2014-2015) Leslie Bateman (2014-2016) Breanna Ford (2014-2019) Wallace Lowe (2014-2015) Tucker Huffman (2014-2017)

Olivia Dibenedetto (2014-2014) Jeffrey Coleman (2014-2014) Lara Bideyan (2014-2015) Esha Dalvie (2013-2016) Daniel Li (2013-2015) Jessica Counihan (2013-2018)

Sharon Zhong (2013-2015)
David Miyamoto (2013-2015)
Karl Fisher (2013-2014)
Lauryn Chan (2013-2014)
Lucky Ding (2013-2016)
Nivedita Keshav (2013-2014)
Ann Heslin (2013-2015)
Chynna Tang (2013-2014)

Yoav Azaria (2012-2014) Devon Hunerdosse (2012-2015) Undergraduate Researcher Postdoctoral Fellow Visiting Grad Student Graduate Researcher Undergraduate Researcher Research Associate Undergraduate Researcher Undergraduate Researcher Graduate Researcher Graduate Researcher Graduate Researcher Research Associate Undergraduate Researcher Lab Assistant Undergraduate Researcher Research Associate Undergraduate Researcher Undergraduate Researcher Undergraduate Researcher Graduate Researcher Lab Manager Graduate Researcher Undergraduate Researcher Undergraduate Researcher Undergraduate Researcher Graduate Researcher Graduate Researcher Undergraduate Researcher Undergraduate Researcher Graduate Researcher

Undergraduate Researcher Undergraduate Researcher Postdoctoral Fellow Graduate Researcher Undergraduate Researcher Undergraduate Researcher

Undergraduate Researcher Undergraduate Researcher Undergraduate Researcher Undergraduate Researcher Undergraduate Researcher Graduate Researcher

Undergraduate Researcher Undergraduate Researcher Associate Specialist Undergraduate Researcher Undergraduate Researcher Undergraduate Researcher Undergraduate Researcher Undergraduate Researcher Undergraduate Researcher

Undergraduate Researcher Graduate Researcher

PhD program at UCSF

Scientist at Frontier Medicines
PhD program at Stanford University

PhD program at MIT

Scientist at Frontier Medicines

Associate Consultant with McKinsey and Company

Senior Scientist at Celgene Postdoc at BASF

Graduate Student at TSRI in Ryan Shenvi's lab

PhD program at Vanderbilt University

Consultant for ClearView Healthcare Partners

PhD program at Harvard University Director of Chemistry at Lygos

Graduate student in UC Berkeley Optometry Program Research Assistant at Genentech Senior Research Biologist at 3M Lindsay Roberts (2012-2017)
Ramandeep Dhillon (2012-2015)
Alice Shieh (2012-2013)
Tara Narasimhalu (2012-2014)
Rebecca Kohnz (2012-2016)
Patrick Morris (2012-2014)
Melinda Mulvihill (2012-2014)
Alyssa Cozzo (2012-2013)
Daniel Medina-Cleghorn (2011-2015)
Jay Andrew Cosme Barcelon (2011-2012)
McKenna Green (2012-2014)
Daniel I Benjamin (2011-2015)

Anayo Ohiri (2011-2013) Jae Wong Chang (2009-2011) Anna M. Ward (2004-2008, 2010)

Sharon M Louie (2011-2017)

Roger Issa (2004-2008)

Graduate Researcher
Administrative and Lab Asst.
Undergraduate Researcher
Undergraduate Researcher
Postdoctoral Fellow
Postdoctoral Fellow
Postdoctoral Fellow
Undergraduate Researcher
Graduate Researcher

Undergraduate Researcher

Undergraduate Researcher Graduate Researcher Graduate Researcher

Undergraduate Researcher Graduate Researcher Undergraduate Researcher

Undergraduate Researcher

Senior Scientist, Nuredis Inc.

Undergraduate at Duke University Senior Scientist at Merck Staff Scientist at NCI/NIH Scientist at Genentech Researcher in Mina Bissell Lab, LBNL Postdoc at UCSF in Michelle Arkin Lab

Postdoc at Stanford in Tom Rando Lab Postdoc at Harvard Medical School in Carla Kim's lab Graduate Student at SF State Postdoctoral Fellow at U. Chicago Anesthesiology Resident at Harvard Medical School