



## CURRICULUM VITAE

### **Daniel K. Nomura, Ph.D.**

Professor  
University of California, Berkeley  
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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**

- 2019-current Professor (with tenure)  
University of California, Berkeley  
Department of Nutritional Sciences and Toxicology  
Department of Chemistry  
Department of Molecular & Cell Biology
- 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
- 2015-2019 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 a 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 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 the 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 <i>SciCafe</i>
2010	NIH Pathway to Independence (PI) Award (K99/R00)
2009	American Cancer Society Postdoctoral Fellowship
2009	California Breast Cancer Research Program Postdoctoral Fellowship (declined)

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  
2017-current Director, Novartis-Berkeley Center for Proteomics and Chemistry Technologies  
2017-current Founder, Member of the Scientific Advisory Board, and Consultant for Artris Therapeutics  
2016-current Member, UCSF Helen Diller Family Comprehensive Cancer Center  
2016-current Member, UCSF Breast Oncology Program  
2016-current Faculty in the Department of Molecular and Cell Biology, Biochemistry, Biophysics, and Structural Biology Division (UC Berkeley)  
2016-current Adjunct Professor at UCSF, Department of Pharmaceutical Chemistry  
2015-current Faculty in the Department of Chemistry (UC Berkeley)  
2012-current Member of the Synthetic Biology Institute (UC Berkeley)  
2012-2019 Adviser for Abide Therapeutics  
2012-current Endocrinology Graduate Group (UC Berkeley)  
2011-current Program in Metabolic Biology (UC Berkeley)  
2011-current Chemical Biology Graduate Group (UC Berkeley)  
2011-current Molecular Toxicology Graduate Group (UC Berkeley)  
2011-current Molecular and Biochemical Nutrition Graduate Group (UC Berkeley)  
2011-current Faculty in the Department of Nutritional Sciences and Toxicology (UC Berkeley)

### **Professional Associations**

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

### **Academic Services**

2018-2019 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  
2012-2017 Member, Seminar Speaker Selection Committee

2011-2018	Member, Undergraduate Affairs Committee for the Nutritional Sciences and 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 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 Chemical Biology, Cell Metabolism, Cell Reports, Chemical Neurosciences, Chemical Reviews, Nature, Nature Chemical Biology, Nature Cell Biology, Chemical Sciences, PNAS, Biochimica et Biophysica Acta, Journal of the American Chemical Society, Nature Structural and Molecular 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, eLife, Nature Chemistry

## Teaching

Fall 2019	UC Berkeley Instructor for Advanced Toxicology (NST110)
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

- Ah Yong 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 host-targeted 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<sup>+</sup>-ATPase activates autophagy via mTORC1 inhibition. *Nature Chemical Biology* 15, 776-785. PMID 31285595 (\*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* 15, 747-755. 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/acscchembio.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* 26, 1027-1035. PMID 31080076 (\*co-corresponding authorship)
5. Lee K, Yesilkamal 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, Niranjana B, Whitby ST, Lo J, Huang C, Schittenhelm RB, Anderson KE, Furic L, Wijayarathne 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
7. 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, Juszkievicz 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-mesenchymal 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, Coughlan 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. Coughlan JL\*, Wigganhorn A\*, Anderson KE, **Nomura DK**. (2018) Chemoproteomics-enabled covalent ligand screening reveals ALDH3A1 as a lung cancer target. *ACS Chemical Biology* 13, 1970-1977. (\*co-first 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. Coughlan 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 Daltsen 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, Srean 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-related 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 proximity labeling strategy provides insights into the composition and dynamics of lipid droplet proteomes. *Developmental Cell* 44, 97-112. PMID 29275994

## 2017

29. Lue JW, Podolak J, Kolahi K, Cheng L, Rao S, Garg D, Xue CH, Rantala JK, Tyner JW, Thornburgh 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<sup>#</sup>, Nguyen TB<sup>#</sup>, Roberts AM<sup>#</sup>, 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 anti-cancer drugs that impair triple-negative breast cancer pathogenicity. *ACS Chemical Biology* 12, 1133-1140. PMID 28248089
39. Bateman LA, Ku W-M, Heslin MJ, Contreras 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 autophagosome 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 glutamate-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

## 2016

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/jimmunol.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
53. Long JZ, Svensson KJ, Bateman LA, Lin H, Kamenecka T, Lokurkar IA, Lou J, Rao RR, Chang MT, Jedrychowski MP, Paolo J, Griffin PR, **Nomura DK\***, Spiegelman BM\* (2016) PM20D1 secretion by thermogenic adipose cells regulates lipidated amino acid uncouplers of mitochondrial respiration. *Cell* 166, 424-435. PMID 27374330 (\*co-corresponding authorship)
54. Chomvong K, Bauer S, Benjamin DI, Li X, **Nomura DK**, Cate JHD. (2016) Bypassing the pentose phosphate pathway: Towards modular utilization of xylose. *Plos One* 11, e0158111. PMID 27336308
55. Louie SM, Grossman EA, Crawford LA, Ding L, Camarda R, Huffman TR, Miyamoto DK, Goga A, Weerapana E, **Nomura DK**. (2016) GSTP1 is a driver of triple-negative breast cancer cell metabolism and pathogenicity. *Cell Chemical Biology* 5, 567-578. PMID 27185638
56. Zhang J, Medina-Cleghorn D, Bernal-Mizrachi L, Bracci PM, Hubbard A, Conde L, Riby J, **Nomura DK**, Skibola C (2016) The potential relevance of the endocannabinoid, 2-arachidonoylglycerol, in diffuse large B-cell lymphoma. *Oncoscience* 3, 31-41. PMID 26973858
57. Nikkanen J, Forsstrom S, Euro L, Paetau I, Kohnz RA, Wang L, Chilov D, Viinamaki J, Roivainen A, Marjamaki P, Liljenback H, Ahola S, Buzkova J, Terzioglu M, Khan NA, Pirnes-Karhu S, Paetau A, Lonnqvist T, Sajantila A, Isohanni P, Tyynaismaa H, **Nomura DK**, Battersby B, Velagapudi V, Carroll CJ, Suomalainen A (2016) Mitochondrial DNA replication defects disturb cellular dNTP pools and remodel one-carbon metabolism. *Cell Metabolism* 23, 635-648. PMID 26924217
58. **Nomura DK**, Casida JE (2016) Lipases and their inhibitors in health and disease. *Chemico-Biological Interactions* 259, 211-222. PMID 27067293
59. Camarda R, Zhou AY, Kohnz RA, Balakrishnan S, Mahieu C, Anderton B, Eyob H, Kajimura S, Tward A, Krings G, **Nomura DK**, Goga A. (2016) Inhibition of fatty-acid oxidation as a therapy for MYC-overexpressing triple-negative breast cancer. *Nature Medicine* 22, 427-432. PMID 26950360.
60. Saghatelian A, **Nomura DK**, Weerapana E (2016) Omics: The maturation of chemical biology. *Current Opinions in Chemical Biology* 30: v-vi. PMID 26739665
61. Counihan JC, Ford B, **Nomura DK**. (2016) Mapping Proteome-Wide Interactions of Reactive Chemicals using Chemoproteomic Platforms. *Current Opinions in Chemical Biology* 30, 68-76. PMID 26647369



## 2015

62. Medina-Cleghorn D, Bateman LA, Ford B, Heslin A, Fisher KJ, Dalvie ED, **Nomura DK**. (2015) Mapping proteome-wide targets of environmental chemicals using reactivity-based chemoproteomic platforms. *Chemistry and Biology* 22, 1394-1405. PMID:26496688
63. Piano V<sup>#</sup>, Benjamin DI<sup>#</sup>, Valente S, Nenci S, Mai A, Aliverti A, **Nomura DK\***, Mattevi A\*. (2015) Discovery of inhibitors for the ether lipid-generating enzyme AGPS as anti-cancer agents. *ACS Chemical Biology* 10, 2589-2597. PMID 26322624 (<sup>#</sup>co-first authors; \* co-corresponding authors).
64. Queiroz A, Medina-Cleghorn D, Marjanovic O, **Nomura DK**, Riley LW. (2015) Comparative metabolic profiling of *Mycobacterium tuberculosis*: cell wall lipid reorganization as a virulence factor. *Pathogens and Disease* 73, ftv066. PMID:26319139.
65. Sanchez-Alavez M, Nguyen W, Mori S, Moroncini G, Viader A, **Nomura DK**, Cravatt BF, Conti B. (2015) Monoacylglycerol lipase regulates fever response. *Plos One* 10, e0134437. PMID: 26287872.
66. Kohnz RA, Mulvihill MM, Chang JW, Hsu K-L, Sorrentino A, Cravatt BF, Bandyopadhyay S, Goga A, **Nomura DK**. (2015) Activity-based protein profiling of oncogene-driven changes in metabolism reveals PAFAH1B2 and 1B3 as broad-spectrum cancer therapy targets. *ACS Chemical Biology* 10, 1624-1630. PMID: 25945974.
67. Benjamin DI, Li DS, Lowe, W, Heuer T, Kemble G, **Nomura DK**. (2015) Diacylglycerol metabolism and signaling is a predictive and driving force underlying FASN inhibitor sensitivity in cancer cells. *ACS Chemical Biology* 10, 1616-1623. PMID: 25871544
68. Rashidian J, Le Scolan E, Ji X, Mulvihill MM, **Nomura DK**, Luo K. (2015) Ski regulates Hippo and TAZ signaling to suppress breast cancer progression. *Science Signaling* 10, ra14. PMID: 25670202
69. Anderson CM, Kazantzis M, Wang J, Venkatraman S, Goncalves RLS, Quinlan CL, Ng R, Jastroch, M, Benjamin DI, Nie B, Herber C, Van A-AN, Park MK, Yun D, Chan K, Yu A, Vuong P, Febbraio M, **Nomura DK**, Napoli JL, Brand MD, Stahl A. (2015) Dependence of brown adipose tissue function on CD36-mediated coenzyme Q uptake. *Cell Reports* 10, 505-515. PMID 25620701
70. Chang JW, Zuhl AM, Speers AE, Niessen S, Brown SJ, Mulvihill MM, Fan YC, Spicer TP, Southern M, Scampavia L, Fernandez-Vega V, Dix MM, Cameron MD, Hodder PS, Rosen H, **Nomura DK**, Kwon O, Hsu K-L, Cravatt BF. (2015) A selective inhibitor of platelet-activating factor acetylhydrolases 1b2 and 1b3 that impairs cancer cell survival. *ACS Chemical Biology* 10, 925-932. PMID: 25602368

## 2014

71. Lysenko LV, Kim J, Henry C, Tyrtysnaia A, Kohnz RA, Madamba F, Simon GM, Kleschevnikova NE, **Nomura DK**, Ezekowitz RAB, Kleschevnikov AM. (2014) Monoacylglycerol lipase inhibitor JZL184 improves behavior and neural properties in aged Ts65Dn mice, a model of Down Syndrome. *Plos One* 9, e114521. PMID: 25474204.
72. Valdearcos M, Robblee M, Benjamin DI, **Nomura DK**, Xu AW, Koliwad SK. (2014) Microglia Dictate the Impact of Saturated Fat Consumption on Hypothalamic Inflammation and Neuronal Function. *Cell Reports* 9, 1-15. PMID: 25497089
73. Hunerdosse D, Morris PJ, Miyamoto DK, Fisher KJ, Bateman LA, Ghazaleh J, Zhong S, **Nomura DK**. (2014) Chemical Genetics Screening Reveals KIAA1363 as a Cytokine-Lowering Target. *ACS Chemical Biology* 9, 2905-2913. PMID: 25343321.
74. Medina-Cleghorn D, **Nomura DK**. (2014) Exploring metabolic pathways and regulation through functional chemoproteomic and metabolomic platforms. *Chemistry & Biology* 21, 1171-1184. PMID: 25237861.
75. Mulvihill MM, **Nomura DK**. (2014) Metabolomic Strategies to Map Functions of Metabolic Pathways. *AJP Metabolism and Endocrinology* 307, E237-E244. PMID: 24918200
76. Latimer LN, Lee MR, Medina-Cleghorn D, Kohnz RA, **Nomura DK**, Dueber JE. (2014) Employing a combinatorial expression approach to characterize xylose utilization in *Saccharomyces cerevisiae*. *Metabolic Engineering* 25, 20-29. PMID: 24930894.
77. Mulvihill MM, Benjamin DI, LeScolan E, Ji X, Shieh A, Green M, Narasimhalu T, Morris PJ, Luo K, **Nomura DK**. (2014) Metabolic Profiling Reveals PAFAH1B3 as a critical driver of breast cancer pathogenicity. *Chemistry & Biology* 21, 831-840. PMID: 24954006
78. Benjamin DI, Louie S, Mulvihill MM, Kohnz RA, Li DS, Chan LG, Sorrentino A, Bandyopadhyay S, Cozzo A, Ohiri A, Goga A, Ng-SW, **Nomura DK**. (2014) Inositol phosphate recycling regulates glycolytic and lipid metabolism that drives cancer aggressiveness. *ACS Chemical Biology* 20, 1340-1350. PMID: 24738946

79. Kohnz RK, **Nomura DK**. (2014) Chemical approaches to therapeutically target the metabolism and signaling of the endocannabinoid 2-AG and eicosanoids. *Chemical Society Reviews* 43, 6859-6869. PMID: 24676249
80. Morris PJ\*, Medina-Cleghorn D\*, Heslin A, King S, Orr J, Krauss RM, **Nomura DK**. (2014) Organophosphorus flame retardants inhibit specific liver carboxylesterases and cause serum hypertriglyceridemia. *ACS Chemical Biology* 9, 1097-1103. (\*authors contributed equally to the work) PMID: 24597639
81. Hunerdosse D, **Nomura DK**. (2014) Activity-based proteomic and metabolomic approaches for understanding metabolism. *Current Opinion in Biotechnology* 28C, 116-126. PMID 24594637
82. Poole D, Lee M, Tso P, Bunnnett N, Yo S, Lieu T, Shiu A, Wang J-C, **Nomura DK**, and Aponte GW. (2014) Feeding dependent activation of enteric cells and sensory neurons by lymphatic fluid: evidence for a neurolymphocrine system. *AJP-Gastrointestinal and Liver Physiology* 306, G686-G698. PMID: 24578341
83. Dominguez E, Galmozzi A, Chang JW, Hsu K-L, Pawlak J, Li W, Godio C, Thomas J, Partida D, Niessen S, O'Brien PE, Russell AP, Watt MJ, **Nomura DK**, Cravatt BF, Saez E. (2014) Integrated phenotypic screening and activity-based proteomics defines a role for carboxylesterase 3 in obesity and diabetes. *Nature Chemical Biology* 10, 113-121. PMID: 24362705
84. Medina-Cleghorn D, Heslin A, Morris PJ, Mulvihill MM, **Nomura DK**. (2014) Multidimensional profiling platforms reveal metabolic dysregulation caused by organophosphorus pesticides. *ACS Chemical Biology* 9, 423-432. PMID: 24205821

### 2013

85. **Nomura DK**, Cravatt BF. (2013) Lipid Metabolism in Cancer. *Biochimica et Biophysica Acta—Molecular and Cell Biology of Lipids* 1831, 1497-1498. PMID: 23921253
86. Benjamin DI, Cozzo A, Ji X, Roberts LS, Louie SM, Luo K, **Nomura DK**. (2013) The ether lipid generating enzyme AGPS alters the balance of structural and signaling lipids that fuel cancer pathogenicity. *Proceedings of the National Academy of Sciences, USA* 110, 14912-14917. PMID: 23980144
87. Louie SM\*, Roberts LS\*, Mulvihill MM, Luo K, **Nomura DK**. (2013) Cancer cells incorporate and remodel exogenous fatty acids into structural and oncogenic signaling lipids. *Biochimica et Biophysica Acta—Molecular and Cell Biology of Lipids* 1831, 1566-1572. PMID: 23872477 (\* authors contributed equally to the work)
88. Louie SM, Roberts LS, **Nomura DK**. (2013) Mechanisms linking obesity and cancer. *Biochimica et Biophysica Acta—Molecular and Cell Biology of Lipids* 1831, 1499-1508. PMID: 23470257
89. Medina-Cleghorn D, **Nomura DK**. (2013) Chemical Approaches to Study Metabolic Networks. *Pflugers Archive* 465,427-440. PMID: 23296751
90. Cao Z, Mulvihill MM, Mukhopadhyay P, Xu H, Erdelyi K, Hao E, Holovac E, Hasko G, Cravatt BF, **Nomura DK**<sup>#</sup>, Pal Pacher<sup>#</sup>. (2013) Monoacylglycerol lipase controls endocannabinoid and eicosanoid signaling and hepatic injury in mice. *Gastroenterology* 144, 808-817. PMID: 23295443 (# co-corresponding authors)
91. Mulvihill MM, **Nomura DK**. (2013) Therapeutic Potential of Monoacylglycerol Lipase Inhibitors. *Life Sciences* 92, 492-497. PMID: 23142242

### 2012

92. Morrison BE, Garibaldi Marcondes MC, **Nomura DK**, Sanchez-Alavez M, Saar I, Bartfai T, Maher P, Sugama S, Conti B. (2012) IL-13Ralpha1 expression in dopaminergic neurons contributes to their oxidative stress-mediated loss following chronic systemic treatment with LPS. *Journal of Immunology* 189, 5498-5502. PMID: 23169588
93. Benjamin DI, Cravatt BF, **Nomura DK**. (2012) Global Profiling Strategies towards Mapping Dysregulated Metabolic Pathways in Cancer. *Cell Metabolism* 16, 565-567. PMID: 23063552
94. Piro JR, Benjamin DI, Duerr JM, Pi YQ, Gonzales C, Schwartz JW, **Nomura DK**<sup>#</sup>, Samad TA<sup>#</sup>. (2012) A Dysregulated Endocannabinoid-Eicosanoid Network Supports Pathogenesis in a Mouse Model of Alzheimer's Disease. *Cell Reports* 1, 617-623. PMID: 22813736 (# co-corresponding author)

### 2011

95. **Nomura DK**<sup>#</sup>, Morrison BE, Blankman JL, Long JZ, Kinsey SG, Marcondes MC, Ward AM, Hahn YK, Lichtman AH, Conti B, Cravatt BF<sup>#</sup>. (2011) Endocannabinoid hydrolysis generates brain eicosanoids that promote neuroinflammation. *Science* 334, 809-813. PMID: 22021672 (# co-corresponding author)

96. Ruby MA, **Nomura DK**, Hudak CSS, Barber A, Casida JE, Krauss RM. (2011) Overactive endocannabinoid signaling induces hepatic steatosis, insulin resistance, and global transcriptional changes. *Plos One* 6, e26415. PMID: 22073164

#### Undergraduate/Graduate/Postdoctoral Work (2002-2011)

97. **Nomura DK**<sup>#</sup>, Lombardi DP, Chang JW, Niessen S, Ward AM, Long JZ, Hoover HH, Cravatt BF<sup>#</sup>. (2011) Monoacylglycerol lipase exerts bidirectional control over endocannabinoid and fatty acid pathways to support prostate cancer pathogenesis. *Chemistry & Biology* 18, 848-856. PMID: 21802006 (# co-corresponding author)
98. Ramesh D, Ross GR, Schlosburg JE, Abdullah RA, Kinsey SG, Long JZ, **Nomura DK**, Sim-Selley LJ, Cravatt BF. (2011) Blockade of endocannabinoid hydrolytic enzymes attenuates precipitated withdrawal symptoms in mice. *Journal of Pharmacology and Experimental Therapeutics* 339, 173-185. PMID: 21719468
99. Kinsey SG, **Nomura DK**, O'Neal ST, Long JZ, Cravatt BF, Lichtman AH. (2011) Inhibition of monoacylglycerol lipase (MAGL) attenuates NSAID-induced gastric hemorrhages in mice. *Journal of Pharmacology and Experimental Therapeutics* 338, 795-802. PMID: 21659471
100. Chang JW, **Nomura DK**, Cravatt BF. (2011) A potent and selective inhibitor of KIAA1363/AADACL1 that impairs prostate cancer pathogenesis. *Chemistry & Biology* 18, 476-484. PMID: 21513884
101. Ahn K, Smith SE, Liimata MB, Sadagopan N, Dudley D, Young T, Wren P, Zhang Y, Swaney S, Van Becelaere K, Blankman JL, **Nomura DK**, Bhattachar SN, Stif C, Nomanbhoy TK, Weerapana E, Johnson DS, Cravatt BF. (2011) Mechanistic and pharmacological characterization of PF-04457845: a highly potent and selective FAAH inhibitor that reduces inflammatory and noninflammatory pain. *Journal of Pharmacology and Experimental Therapeutics* 338, 114-124. PMID: 21505060
102. **Nomura DK**<sup>#</sup>, Casida JE<sup>#</sup>. (2011) Activity-based protein profiling of organophosphorus and thiocarbamate pesticides reveals multiple secondary targets in the mammalian nervous system. *Journal of Agricultural and Food Chemistry* 59, 2808-2815. PMID: 21341672 (# co-corresponding author)
103. Nicolaou KC, Sanchini S, Sarlah D, Lu G, Wu R, **Nomura DK**, Cravatt BF, Cubitt B, de la Torre JC, Hessell AJ, Burton DR. (2011) Design, synthesis and biological evaluation of a biyouyanagin compound library. *Proceedings of the National Academy of Sciences, USA* 108, 6715-6720. PMID: 21245351
104. Bachovchin DA, Mohr JT, Speers AE, Wang C, Berlin JM, Spicer TP, Fernandez-Vega V, Chase P, Hodder PS, Schürer, **Nomura DK**, Rosen H, Fu GC, Cravatt BF. (2011) Academic cross-fertilization by public screening yields a remarkable class of protein phosphatase methylesterase-1 inhibitors. *Proceedings of the National Academy of Sciences, USA* 108, 6811-6816. PMID: 21398589
105. Kopp F, Komatsu T, **Nomura DK**, Trauger SA, Thomas JR, Simon GM, Cravatt BF. (2010) The glycerophospho-metabolome and its influence on amino acid homeostasis by brain metabolomics of GDE1(-/-) mice. *Chemistry & Biology* 17, 831-840. PMID: 20797612
106. Schlosburg JE, Blankman JL, Long JZ, **Nomura DK**, Nguyen PT, Ramesh D, Kinsey SG, Booker L, Burston JK, Wise LE, Ghosh S, Selley DE, Sim-Selley LJ, Liu Q, Cravatt BF, Lichtman AH. (2010) Sustained inactivation of monoacylglycerol lipase produces functional antagonism of the brain endocannabinoid system. *Nature Neuroscience* 13, 1113-1119. PMID: 20729846
107. **Nomura DK**, Dix MM, Cravatt BF. (2010) Chemoproteomic Approaches for Biochemical Pathway Discovery in Cancer. *Nature Reviews Cancer* 10, 630-638. PMID: 20703252
108. **Nomura DK**, Long JZ, Niessen S, Hoover HS, Ng S-W, Cravatt BF. (2010) Monoacylglycerol lipase regulates a fatty acid network that promotes cancer pathogenesis. *Cell* 140, 49-61. PMID: 20079333
109. Long JZ, **Nomura DK**, Vann RE, Walentiny DM, Booker L, Jin X, Burston JJ, Sim-Selley LJ, Lichtman AH, Wiley JL, Cravatt BF. (2009) Dual blockade of FAAH and MAGL identifies behavioral processes regulated by endocannabinoid crosstalk in vivo. *Proceedings of the National Academy of Sciences, USA* 106, 20270-20275. PMID: 19918051
110. Long JZ, **Nomura DK**, Cravatt BF. (2009) Mechanistic characterization of selective monoacylglycerol lipase inhibition reveals differences in central and peripheral endocannabinoid metabolism. *Chemistry & Biology* 16, 744-753. PMID: 19635411
111. Ruby M\*, **Nomura DK**\*, Hudak CS, Mangravite LM, Chiu S, Casida JE, Krauss RM. (2008) Overactive endocannabinoid signaling impairs apolipoprotein E-mediated clearance of triglyceride-rich lipoproteins. *Proceedings of the National Academy of Sciences, USA* 105, 14561-14566. PMID: 18794527 (\* co-first author)

112. **Nomura DK**, Ward AM, Hudak CS, Burston JJ, Issa RS, Fisher KJ, Abood ME, Wiley JL, Lichtman A, Casida JE. (2008) Monoacylglycerol lipase regulates 2-arachidonoylglycerol action and arachidonic acid levels. *Bioorganic Medicinal Chemistry Letters* 18, 5875-5878. PMID: 18752948
113. Casida JE, **Nomura DK**, Vose SC, Fujioka K. (2008) Organophosphate-Sensitive Lipases Modulate Brain Lysophospholipids, Ether Lipids and Endocannabinoids. *Chemico-Biological Interactions* 175, 355-64. PMID: 18495101
114. **Nomura DK**, Blankman JL, Simon GM, Fujioka K, Issa RS, Ward AM, Cravatt BF, Casida JE. (2008) Activation of the endocannabinoid system by organophosphorus nerve agents. *Nature Chemical Biology* 4, 373-378. PMID: 18438404
115. **Nomura DK**, Fujioka K, Issa RS, Ward AM, Cravatt BF, Casida JE. (2008) Dual Roles of Brain Serine Hydrolase KIAA1363 in Ether Lipid Metabolism and Organophosphate Detoxification. *Toxicology and Applied Pharmacology* 228, 42-482. PMID: 18154358
116. **Nomura DK**, Durkin KA, Chiang KP, Quistad GB, Cravatt BF, Casida JE. (2006) Serine Hydrolase KIAA1363: Toxicological and Structural Features with Emphasis on Organophosphate Interactions. *Chemical Research in Toxicology* 19, 1142-1150. PMID: 16978018
117. Quistad GB, Liang SN, Fisher KJ, **Nomura DK**, Casida JE. (2006) Each Lipase has a Unique Sensitivity Profile for Organophosphorus Inhibitors. *Toxicological Sciences* 91,166-172. PMID: 16449251
118. **Nomura DK**, Leung D, Chiang KP, Quistad GB, Cravatt BF, Casida JE. (2005) A Brain Detoxifying Enzyme for Organophosphorus Nerve Poisons. *Proceedings of the National Academy of Sciences, USA* 102, 6195-6200. PMID: 15840715
119. Segall Y, Quistad GB, Sparks SE, **Nomura DK**, Casida JE. (2003) Toxicological and Structural Features of Organophosphorus and Organosulfur Cannabinoid CB1 Receptor Ligands. *Toxicological Sciences* 76, 131-137. PMID: 12944568
120. Segall Y, Quistad GB, **Nomura DK**, Casida JE. (2003) Arachidonylsulfonyl Derivatives as Cannabinoid CB1 Receptor and Fatty Acid Amide Hydrolase Inhibitors. *Bioorganic Medicinal Chemistry Letters* 13,3301-3303. PMID: 12951114
121. Quistad GB, **Nomura DK**, Sparks SE, Segall Y, Casida JE. (2002) Cannabinoid CB1 Receptor as a Target for Chlorpyrifos Oxon and Organophosphorus Pesticides. *Toxicology Letters* 135, 89-93. PMID: 12243867
122. Quistad GB, Sparks SE, Segall Y, **Nomura DK**, Casida JE. (2002) Selective Inhibitors of Fatty Acid Amide Hydrolase Relative to Neuropathy Target Esterase and Acetylcholinesterase: Toxicological Implications. *Toxicology and Applied Pharmacology* 179, 57-63. PMID: 11884237

## Patents

1. **Nomura DK**, Zoncu R, Chung YSC, Shin H (2019) 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.

11. Cravatt BF, Long JZ, Li W, **Nomura DK** (2010) Methods and Compositions Related to Targeting Monoacylglycerol Lipase. US Patent 8772318; PCT/US2009/006045.

### **Abstracts/meetings/invited talks**

1. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. MIT/Broad Institute Chemical Biology seminar series, Cambridge, MA
2. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. University of Arizona, Tucson, AZ.
3. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. UT San Antonio, San Antonio, TX.
4. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Harvard University Chemistry and Chemical Biology seminar speaker, Cambridge, MA
5. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Memorial Sloan Kettering Cancer Center, New York, NY.
6. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Bayer Life Science Workshop: Chemical Biology—Jointly Exploring New Frontiers, Berlin, Germany
7. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. 2<sup>nd</sup> Targeted Protein Degradation Summit meeting, Boston, MA
8. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Northwestern University, Chicago, IL.
9. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. American Chemical Society meeting, Targeted Protein Degradation session, San Diego, CA.
10. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Janssen Pharmaceuticals seminar speaker, Springhouse, Pennsylvania.
11. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Targeted Drug Discovery Summit, Boston, MA.
12. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. 60<sup>th</sup> International Conference on the Biosciences of Lipids, Tokyo, Japan.
13. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Bioorganic Chemistry Gordon Research Conference, Andover, NH.
14. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Novartis Institutes for BioMedical Research, Basel, Switzerland.
15. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. European Targeted Protein Degradation meeting, Basel, Switzerland
16. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Cayman Chemical Biology Symposium at the University of Michigan, Ann Arbor, Ann Arbor, MI.
17. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Yale Chemical Biology symposium, New Haven, CT.
18. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. World Molecular Engineering Network meeting, Cabo San Lucas, Mexico.
19. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. American Cancer Society meeting, Orlando, FL.
20. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Structural Genomics Consortium Targeted Protein Degradation meeting, Toronto, CA.
21. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Mark Foundation for Cancer Research Symposium, New York, NY.
22. Invited Speaker: **Nomura DK** (2019) Reimagining Druggability using Chemoproteomic Platforms. Medicinal and Bioorganic Chemistry Foundation meeting, Steamboat, CO.
23. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. 1<sup>st</sup> Targeted Protein Degradation Summit meeting, Boston, MA
24. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. Merck and Co. Organic Chemistry Seminar Series, Kenilworth, NJ.
25. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. Caltech Department of Chemistry, Pasadena, California.
26. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. EMBO Enzymes and Catalysis meeting, Pavia, Italy.

27. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. City of Hope Research Institute, Los Angeles, CA
28. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. Structural Genomics Consortium on Target 2035. Berlin, Germany
29. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. BASF Metanomics, Berlin, Germany
30. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. Pharmaron, Beijing, China.
31. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. BASF-CARA Symposium, Santa Barbara, CA.
32. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. Cambridge Healthtech Institute's 17<sup>th</sup> Annual World Preclinical Congress, Boston, MA.
33. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. ACS National Medicinal Chemistry Symposium, Nashville, TN.
34. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. Merck, South San Francisco, CA.
35. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. 2018 San Antonio Drug Discovery Symposium, San Antonio, TX.
36. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. AACR meeting, Chicago, IL.
37. Invited Speaker and Session Chair: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. ASBMB meeting, San Diego, CA.
38. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. Agios, Cambridge, MA.
39. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. Astrazeneca, Waltham, MA.
40. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. University of California, Riverside, Riverside, CA.
41. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. Tumor Metabolism Keystone meeting, Snowbird, Utah.
42. Invited Speaker: **Nomura DK** (2017) Redefining Toxicology and Druggability using Chemoproteomic Platforms. Superfund Research Program meeting, Philadelphia, Pennsylvania.
43. Invited Speaker: **Nomura DK** (2017) Redefining Druggability using Chemoproteomic Platforms. Tufts University Medical School, Boston, MA.
44. Invited Speaker: **Nomura DK** (2017) Redefining Druggability using Chemoproteomic Platforms. University of Virginia, Charlottesville, VA.
45. Invited Speaker and Wendell Griffith Lecturer: **Nomura DK** (2017) Redefining Druggability using Chemoproteomic Platforms. St Louis University, St. Louis, MO.
46. Invited Speaker: **Nomura DK** (2017) Redefining Druggability using Chemoproteomic Platforms. AACR Advances in Breast Cancer Meeting, Hollywood, CA.
47. Invited Speaker: **Nomura DK** (2017) Redefining Druggability using Chemoproteomic Platforms. Austrian Proteomics Association meeting, Graz, Austria.
48. Invited Speaker: **Nomura DK** (2017) Chemoproteomic Platforms for Mapping Druggable Hotspots in Disease. Enzymes, Coenzymes, & Metabolic Pathways Gordon Conference. Waterville Valley, NH.
49. Invited Speaker: **Nomura DK** (2017) Chemoproteomic and Metabolomic Platforms for Mapping Drivers of Disease. American Diabetes Association meeting. San Diego, CA.
50. Invited Speaker: **Nomura DK** (2017) Chemoproteomic Platforms for Mapping Druggable Hotspots in Disease. Royal Society of Chemistry Chemical Biology Symposium. London, UK.
51. Invited Speaker: **Nomura DK** (2017) Chemoproteomic Platforms for Mapping Druggable Hotspots in Disease. World Molecular Engineering Network conference, San Jose Del Cabo, Mexico.
52. Invited Speaker: **Nomura DK** (2017) Using Chemoproteomic and Metabolomic Platforms to Map Drivers of Human Disease, UCSF Breast Oncology Program Seminar, San Francisco, CA.
53. 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.

54. 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.
55. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, The University of Sydney Charles Perkin Centre, Sydney, Australia.
56. Keynote Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, Third Australian Lipids Meeting, Melbourne, Australia.
57. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, University of Georgia, Athens, Georgia.
58. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, UCSD Metabolomics Symposium, La Jolla, CA.
59. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, Oregon Health State University, Portland, Oregon.
60. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, Amgen South San Francisco, CA
61. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, Vanderbilt University Chemical Biology Seminar Series, Nashville, Tennessee.
62. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Toxicology and Drug Discovery GETA (Genetic and Environmental Toxicology Association) Symposium, Oakland, CA.
63. Invited Speaker: **Nomura DK** (2016) Mapping Metabolic Drivers of Cancer using Chemoproteomic and Metabolomic Platforms. Gilead Medicinal Chemistry Seminar Series, Foster City, CA.
64. Invited Speaker: **Nomura DK** (2016) Mapping Metabolic Drivers of Cancer using Chemoproteomic and Metabolomic Platforms. Gordon Conference on Bioorganic Chemistry, New Hampshire.
65. Invited Speaker: **Nomura DK** (2016) Mapping Metabolic Drivers of Cancer using Chemoproteomic and Metabolomic Platforms. AACR National Meeting, New Orleans, Louisiana.
66. Invited Speaker: **Nomura DK** (2016) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. University of Pavia, Italy.
67. Invited Speaker: **Nomura DK** (2016) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. Medical University of Graz, Graz, Austria.
68. 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.
69. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. Cleveland Clinic, Cleveland, Ohio.
70. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. Purdue University, Department of Nutrition, Indiana.
71. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. UCLA, Los Angeles, California.
72. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. University of Wisconsin, Madison Department of Biochemistry, Madison, Wisconsin.
73. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. UCSF Cancer Center, San Francisco, CA
74. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. UCSF Endocrinology, San Francisco, CA
75. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. UCSD Bioengineering Department, La Jolla, CA
76. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. Dana Farber Cancer Institute, Boston, Massachusetts.
77. 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.
78. 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.
79. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Cancer using Chemoproteomic and Metabolomic Platforms. AACR Metabolism and Cancer meeting, Bellevue, Washington.

80. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. Lipid Maps Meeting 2015, La Jolla, CA.
81. Invited Speaker: **Nomura DK** (2015) Mapping Dysregulated Metabolic Pathways in Disease Using Chemoproteomic and Metabolomic Platforms, Dana Farber/Harvard Medical School, Boston, MA.
82. Invited Speaker: **Nomura DK** (2015) Mapping Dysregulated Metabolic Pathways in Disease Using Chemoproteomic and Metabolomic Platforms, Searle Meeting, Chicago, IL.
83. Invited Speaker: **Nomura DK** (2015) Mapping Dysregulated Metabolic Pathways in Disease Using Chemoproteomic and Metabolomic Platforms, University of Chicago, Chicago, IL.
84. Invited Speaker: **Nomura DK** (2015) Mapping Dysregulated Lipid Metabolism in Disease using Chemoproteomic and Metabolomic Platforms, RIKEN, Yokohama, Japan.
85. Invited Speaker: **Nomura DK** (2015) Mapping Dysregulated Lipid Metabolism in Disease using Chemoproteomic and Metabolomic Platforms, Phospholipase Meeting, Tokyo, Japan.
86. Seminar speaker: **Nomura DK** (2014) Chemoproteomic and Metabolomic Strategies for Drug Discovery and Toxicology, UC Berkeley, Nutritional Sciences and Toxicology Department
87. 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.
88. Invited Speaker: **Nomura DK** (2014) Chemoproteomic and Metabolomic Strategies for Drug Discovery and Toxicology, Genentech, South San Francisco, CA Investigative Toxicology Division
89. Poster: **Nomura DK** (2014) Mapping Dysregulated Metabolic Pathways in Cancer Using Functional Proteomic and Metabolomic Platforms, Searle Scholars Meeting, Chicago, IL.
90. Invited Speaker: **Nomura DK** (2014) Mapping Dysregulated Lipid Metabolism in Cancer using Chemoproteomic and Metabolomic Platforms, ASBMB meeting, San Diego, CA.
91. Invited Speaker: **Nomura DK** (2014) Mapping Dysregulated Lipid Metabolism in Cancer using Chemoproteomic and Metabolomic Platforms, Keystone Meeting on Tumor Metabolism, Whistler, Canada.
92. Invited Speaker: **Nomura DK** (2014) Validating Monoacylglycerol Lipase Inhibitors in Combatting Parkinson's Disease, Michael J Fox Foundation, New York, NY.
93. Invited Seminar Speaker: **Nomura DK** (2014) Mapping Dysregulated Metabolic Pathways in Disease using Chemoproteomic and Metabolomic Platforms, Karolinska Institute, Stockholm, Sweden.
94. Invited Seminar Speaker: **Nomura DK** (2014) Mapping Dysregulated Metabolic Pathways in Disease using Chemoproteomic and Metabolomic Platforms, University of Pavia, Pavia, Italy.
95. Invited Seminar Speaker: **Nomura DK** (2013) Mapping Dysregulated Metabolic Pathways in Disease using Chemoproteomic and Metabolomic Platforms, Novartis, Cambridge, MA.
96. Invited Seminar Speaker: **Nomura DK** (2013) Mapping Dysregulated Metabolic Pathways in Disease using Chemoproteomic and Metabolomic Platforms, UC Merced, Merced, CA.
97. 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.
98. Keynote Speaker: **Nomura DK** (2013) Chemoproteomic and Metabolomic Strategies for Drug Discovery and Toxicology. NorCal Society of Toxicology meeting, South San Francisco, CA.
99. 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.
100. 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.
101. Invited Speaker: **Nomura DK** (2013) Endocannabinoid hydrolysis generates eicosanoids that promote inflammation. Gordon conference Molecular and Cellular Biology of Lipids, New Hampshire, NJ
102. Poster: **Nomura DK** (2013) Mapping dysregulated metabolic pathways in cancer. Gordon conference bioorganic chemistry, New Hampshire, NJ.
103. Poster: **Nomura DK** (2013) Mapping Dysregulated Metabolic Pathways in Cancer Using Functional Proteomic and Metabolomic Platforms, Searle Scholars Meeting, Chicago, IL.
104. 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



105. Invited Speaker: **Nomura DK** (2013) Endocannabinoid hydrolysis generates brain prostaglandins that promote neuroinflammation. Seminar speaker at University of Minnesota, Minneapolis, MN.
106. Invited Speaker: **Nomura DK** (2012) Mapping dysregulated metabolic pathways in disease using functional proteomic and metabolomic platforms. Seminar speaker at Agilent, Santa Clara, CA.
107. Invited Speaker: **Nomura DK** (2012) Endocannabinoid hydrolysis generates brain prostaglandins that promote neuroinflammation. Seminar speaker at Pfizer Neuroscience, Cambridge, MA.
108. 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.
109. Keynote Invited Speaker: **Nomura DK** (2012) Mapping dysregulated metabolic pathways in cancer using functional proteomic and metabolomic platforms. Austrian Proteomics Research Symposium, Graz, Austria.
110. Invited Speaker: **Nomura DK**. (2012) Endocannabinoid hydrolysis generates brain prostaglandins that promote neuroinflammation. *International Cannabinoid Research Society* meeting, Freiberg, Germany.
111. Poster: **Nomura DK** and Samad TA (2012) Metabolomic profiling for mapping anti-inflammatory pathways in neurodegenerative disease. *Genetics and Chemistry Cell Symposium*, Cambridge, Massachusetts.
112. 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
113. 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.
114. Invited Speaker: **Nomura DK** (2011) Mapping dysregulated metabolic pathways in cancer using activity-based proteomics. American Chemical Society meeting, Denver, Colorado.
115. Invited Speaker: **Nomura DK**, Cravatt BF (2011) Mapping dysregulated metabolic pathways in cancer. American Association for Cancer Research meeting, Orlando, Florida.
116. 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.
117. Invited Speaker: **Nomura DK**. (2009) Chemical Approaches to Annotating Toxicological and Biological Systems. University of California Toxic Substances & Teaching Program Symposium, Berkeley, California.
118. 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.
119. 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.
120. 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.
121. 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	Student at Northwestern University
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	
Deirdre Willgohs (2018-2018)	Research Intern	
Reagan Kennedy (2018-2018)	Undergraduate Researcher	
Benjamin Fontaine (2018-current)	Postdoctoral Fellow	
Lydia Boike (2018-current)	Graduate Researcher	PhD program at UCSF
Chad Altobelli (2018-2019)	Undergraduate Researcher	

<p>Angela Xiong (2018-2019)  Felix Majewski (2018-current)  Ross White (2018-current)  Liam McCarthy (2018-current)  Sarah Buzsaki (2018-current)  May Fung (2018-current)  Sasha Demeulenaere (2018-2018)  Kenneth Kim (2017-current)  Samantha Tang (2017-current)</p> <p>Christine Thatcher (2017-2018)  Kyra Berger (2017-2018)  Yosuke Isobe (2018-current)  Clive Chung (2017-current)  Katherine Near (2017-current)  Alexander Cioffi (2017-current)  Lisha Ou (2017-2019)  Linda Waldherr (2017-2017)  Raymond Ho (2017-2018)  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 Wiggernhorn (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 (2014-2019)  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)</p> <p>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)</p>	<p>Undergraduate Researcher  Undergraduate Researcher  Undergraduate Researcher  Summer Intern  Undergraduate Researcher  Postdoctoral Fellow  Undergraduate Researcher  Undergraduate Researcher  Administrative and Lab Assistant  Undergraduate Researcher  Undergraduate Researcher  Postdoctoral Fellow  Postdoctoral Fellow  Postdoctoral Fellow  Postdoctoral Fellow  Undergraduate Researcher  Visiting Grad Student  Undergraduate Researcher  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</p> <p>Undergraduate Researcher  Undergraduate Researcher  Postdoctoral Fellow  Graduate Researcher  Undergraduate Researcher  Undergraduate Researcher</p>	<p>PhD program at Boston College</p> <p>PhD program at Stanford University</p> <p>PhD program at UCSF</p> <p>Scientist at Frontier Medicines  PhD program at Stanford University</p> <p>PhD program at MIT</p> <p>Innovation Postdoc at Novartis</p> <p>Scientist at Frontier Medicines</p> <p>Associate Consultant with McKinsey and Company</p> <p>Senior Scientist at Celgene  Postdoc at BASF</p>
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<p>Olivia Dibenedetto (2014-2014)  Jeffrey Coleman (2014-2014)  Lara Bideyan (2014-2015)  Esha Dalvie (2013-2016)  Daniel Li (2013-2015)  Jessica Counihan (2013-2018)</p>	<p>Undergraduate Researcher  Undergraduate Researcher  Undergraduate Researcher  Undergraduate Researcher  Undergraduate Researcher  Graduate Researcher</p>	<p>Graduate Student at TSRI in Ryan Shenvi's lab   PhD program at Vanderbilt University</p>
<p>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)</p>	<p>Undergraduate Researcher  Undergraduate Researcher  Associate Specialist  Undergraduate Researcher  Undergraduate Researcher  Undergraduate Researcher  Undergraduate Researcher  Undergraduate Researcher</p>	<p>Consultant for ClearView Healthcare Partners   PhD program at Harvard University  Director of Chemistry at Lygos</p>
<p>Yoav Azaria (2012-2014)  Devon Hunerdosse (2012-2015)  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)  Sharon M Louie (2011-2017)</p>	<p>Undergraduate Researcher  Graduate Researcher  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</p>	<p>Graduate student in UC Berkeley Optometry Program  Research Assistant at Genentech  Senior Research Biologist at 3M  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</p>
<p>Anayo Ohiri (2011-2013)  Jae Wong Chang (2009-2011)  Anna M. Ward (2004-2008, 2010)   Roger Issa (2004-2008)</p>	<p>Undergraduate Researcher  Graduate Researcher  Undergraduate Researcher   Undergraduate Researcher</p>	<p>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</p>