



## CURRICULUM VITAE

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

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#### **Education**

- May 2008      Ph.D. in Molecular Toxicology  
University of California, Berkeley
- May 2003      B.A. in Molecular and Cell Biology  
University of California, Berkeley

#### **Positions**

- 2018-current      Co-Founder, Frontier Medicines
- 2017-current      Director, Novartis-Berkeley Center for Proteomics and Chemistry Technologies  
(NB-CPACT)
- 2017-current      Founder, Artris Therapeutics
- 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 also 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 Founders of Artris Therapeutics and Frontier Medicines. Among his honors are selection as a Searle Scholar, American Cancer Society Research Scholar Award, and the Department of Defense Breakthroughs 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 developing 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

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	Co-Founder, Frontier Medicines
2017-current	Director, Novartis-Berkeley Center for Proteomics and Chemistry Technologies
2017-current	Founder, 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	Adviser for 3-V Biosciences
2015-current	Faculty in the Department of Chemistry (UC Berkeley)
2012-current	Member of the Synthetic Biology Institute (UC Berkeley)
2012-current	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

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-current	Member, Undergraduate Affairs Committee for the Nutritional Sciences and Toxicology Department
2011-current	Member, Molecular Toxicology Graduate Affairs Committee

### Professional Services

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 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

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

### 2018

1. 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* doi: 10.1021/acs.jmedchem.8b00029. PMID 29533650
2. 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* doi: 10.1021/acs.jproteome.7b00782. PMID 29457907
3. 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*. Doi: 10.1073/pnas.1715821115. PMID 29463747
4. 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* doi: 10.1021/acs.jcim.7b00399. PMID 29320178

- 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
- 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

- 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
- 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
- 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)
- 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
- 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
- Chomvong K, Benjamin DI, **Nomura DK**, Cate JH. Cellobiose consumption uncouples extracellular glucose sensing and glucose metabolism in *Saccharomyces cerevisiae*. *mBio* 8, e00855-17.
- 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
- 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
- Bateman LA#, Nguyen TB#, Roberts AM#, Miyamoto DK, Ku W-M, Huffman TR, 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)
- 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
- 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
- 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
- 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
- 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
- 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

22. 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
23. 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
24. 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
25. 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
26. 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

27. 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
28. 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
29. Braverman J, Sogi KM, Benjamin D, **Nomura DK**, Stanley SA. (2016) HIF-1 $\alpha$  is an essential mediator of IFA- $\gamma$ -dependent immunity to *Mycobacterium tuberculosis*. *Journal of Immunology* doi: 10.4049/jimmunol.1600266. PMID 27430718
30. 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
31. 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)
32. 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
33. 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
34. 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
35. 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, Tynnaismaa 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
36. **Nomura DK**, Casida JE (2016) Lipases and their inhibitors in health and disease. *Chemico-Biological Interactions* 259, 211-222. PMID 27067293
37. 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.
38. Saghatelian A, **Nomura DK**, Weerapana E (2016) Omics: The maturation of chemical biology. *Current Opinions in Chemical Biology* 30: v-vi. PMID 26739665
39. 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

40. 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. PMID26496688
41. 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).
42. 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. PMID26319139.
43. 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.
44. 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.
45. 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
46. 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
47. 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
48. 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

49. 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.
50. 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
51. 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.
52. Medina-Cleghorn D, **Nomura DK**. (2014) Exploring metabolic pathways and regulation through functional chemoproteomic and metabolomic platforms. *Chemistry & Biology* 21, 1171-1184. PMID: 25237861.
53. Mulvihill MM, **Nomura DK**. (2014) Metabolomic Strategies to Map Functions of Metabolic Pathways. *AJP Metabolism and Endocrinology* 307, E237-E244. PMID: 24918200
54. 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.
55. 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
56. 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

57. 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
58. 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
59. Hunerdosse D, **Nomura DK**. (2014) Activity-based proteomic and metabolomic approaches for understanding metabolism. *Current Opinion in Biotechnology* 28C, 116-126. PMID 24594637
60. 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
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### 2013

63. **Nomura DK**, Cravatt BF. (2013) Lipid Metabolism in Cancer. *Biochimica et Biophysica Acta—Molecular and Cell Biology of Lipids* 1831, 1497-1498. PMID: 23921253
64. 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
65. 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)
66. 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
67. Medina-Cleghorn D, **Nomura DK**. (2013) Chemical Approaches to Study Metabolic Networks. *Pflugers Archive* 465,427-440. PMID: 23296751
68. 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)
69. Mulvihill MM, **Nomura DK**. (2013) Therapeutic Potential of Monoacylglycerol Lipase Inhibitors. *Life Sciences* 92, 492-497. PMID: 23142242

### 2012

70. 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-mediates loss following chronic systemic treatment with LPS. *Journal of Immunology* 189, 5498-5502. PMID: 23169588
71. Benjamin DI, Cravatt BF, **Nomura DK**. (2012) Global Profiling Strategies towards Mapping Dysregulated Metabolic Pathways in Cancer. *Cell Metabolism* 16, 565-567. PMID: 23063552
72. 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

73. **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)



74. 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)

75. **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)
76. 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
77. 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
78. 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
79. 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
80. **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)
81. Nicolaou KC, Sanchini S, Sarlah D, Lu G, Wu R, **Nomura DK**, Cravatt BF, Cubitt B, de la Torre JC, Hessel 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
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83. 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
84. 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
85. **Nomura DK**, Dix MM, Cravatt BF. (2010) Chemoproteomic Approaches for Biochemical Pathway Discovery in Cancer. *Nature Reviews Cancer* 10, 630-638. PMID: 20703252
86. **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
87. Long JZ, **Nomura DK**, Vann RE, Valentiny 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
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89. 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)

90. **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
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92. **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
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95. 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
96. **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
97. 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
98. 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
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100. 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, Ward C, Fung SK, Varma C. (2018) Methods and compounds for targeted autophagy. Provisional Application for Patent
2. **Nomura DK**, Zoncu R, Roberts AM, Cho, KF. (2018) mTORC1 modulators; Provisional Application for Patent.
3. **Nomura DK**, Anderson KE. (2017) Thioredoxin modulators and uses thereof; Provisional Application for Patent.
4. **Nomura DK**, Roberts LS, Ward CC. (2017) Compositions for treating breast cancer. Provisional Application for Patent.
5. **Nomura DK**, Roberts AM, Bateman LA, Miyamoto DK, Huffman TR, Ward CC. (2017) Compositions and methods for modulating UBA5. Provisional Application for Patent.
6. **Nomura DK**, Olzmann JA, Bateman LA, Nguyen TB, Miyamoto DK, Huffman TR. (2017) Compositions and methods for inhibiting Reticulon 4. Provisional Application for Patent.
7. **Nomura DK**, Grossman EA, Ward CC, Bateman LA, Huffman TR, Miyamoto DK. (2017) Compositions and methods for modulating PPP2R1A. Provisional Application for Patent.
8. Cravatt BF, **Nomura DK**, Chang JW, Moellering M, Bachovchin, D, Li, W. (2011) Anti-cancer serine hydrolase inhibitory carbamates. PCT/US2011/057321.
9. 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** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. BASF-CARA Symposium, Santa Barbara, CA.
2. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. Pharmapier Drug Discovery Symposium, Boston, MA.
3. 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.
4. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. ACS National Medicinal Chemistry Symposium, Nashville, TN.
5. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. Merck, South San Francisco, CA.
6. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. 2018 San Antonio Drug Discovery Symposium, San Antonio, TX.
7. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. AACR meeting, Chicago, IL.
8. Invited Speaker and Session Chair: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. ASBMB meeting, San Diego, CA.
9. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. Agios, Cambridge, MA.
10. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. Astrazeneca, Waltham, MA.
11. Invited Speaker: **Nomura DK** (2018) Redefining Druggability and Toxicology using Chemoproteomic Platforms. University of California, Riverside, Riverside, CA.
12. Invited Speaker: **Nomura DK** (2018) Redefining Druggability using Chemoproteomic Platforms. Tumor Metabolism Keystone meeting, Snowbird, Utah.
13. Invited Speaker: **Nomura DK** (2017) Redefining Toxicology and Druggability using Chemoproteomic Platforms. Superfund Research Program meeting, Philadelphia, Pennsylvania.
14. Invited Speaker: **Nomura DK** (2017) Redefining Druggability using Chemoproteomic Platforms. Tufts University Medical School, Boston, MA.
15. Invited Speaker: **Nomura DK** (2017) Redefining Druggability using Chemoproteomic Platforms. University of Virginia, Charlottesville, VA.
16. Invited Speaker and Wendell Griffith Lecturer: **Nomura DK** (2017) Redefining Druggability using Chemoproteomic Platforms. St Louis University, St. Louis, MO.
17. Invited Speaker: **Nomura DK** (2017) Redefining Druggability using Chemoproteomic Platforms. AACR Advances in Breast Cancer Meeting, Hollywood, CA.
18. Invited Speaker: **Nomura DK** (2017) Redefining Druggability using Chemoproteomic Platforms. Austrian Proteomics Association meeting, Graz, Austria.
19. Invited Speaker: **Nomura DK** (2017) Chemoproteomic Platforms for Mapping Druggable Hotspots in Disease. Enzymes, Coenzymes, & Metabolic Pathways Gordon Conference. Waterville Valley, NH.
20. Invited Speaker: **Nomura DK** (2017) Chemoproteomic and Metabolomic Platforms for Mapping Drivers of Disease. American Diabetes Association meeting. San Diego, CA.
21. Invited Speaker: **Nomura DK** (2017) Chemoproteomic Platforms for Mapping Druggable Hotspots in Disease. Royal Society of Chemistry Chemical Biology Symposium. London, UK.
22. Invited Speaker: **Nomura DK** (2017) Chemoproteomic Platforms for Mapping Druggable Hotspots in Disease. World Molecular Engineering Network conference, San Jose Del Cabo, Mexico.
23. Invited Speaker: **Nomura DK** (2017) Using Chemoproteomic and Metabolomic Platforms to Map Drivers of Human Disease, UCSF Breast Oncology Program Seminar, San Francisco, CA.
24. 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.
25. 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.
26. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, The University of Sydney Charles Perkin Centre, Sydney, Australia.
27. Keynote Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, Third Australian Lipids Meeting, Melbourne, Australia.

28. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, University of Georgia, Athens, Georgia.
29. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, UCSD Metabolomics Symposium, La Jolla, CA.
30. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, Oregon Health State University, Portland, Oregon.
31. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, Amgen South San Francisco, CA
32. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Drug Discovery and Toxicology, Vanderbilt University Chemical Biology Seminar Series, Nashville, Tennessee.
33. Invited Speaker: **Nomura DK** (2016) Using Chemoproteomic Platforms for Toxicology and Drug Discovery GETA (Genetic and Environmental Toxicology Association) Symposium, Oakland, CA.
34. Invited Speaker: **Nomura DK** (2016) Mapping Metabolic Drivers of Cancer using Chemoproteomic and Metabolomic Platforms. Gilead Medicinal Chemistry Seminar Series, Foster City, CA.
35. Invited Speaker: **Nomura DK** (2016) Mapping Metabolic Drivers of Cancer using Chemoproteomic and Metabolomic Platforms. Gordon Conference on Bioorganic Chemistry, New Hampshire.
36. Invited Speaker: **Nomura DK** (2016) Mapping Metabolic Drivers of Cancer using Chemoproteomic and Metabolomic Platforms. AACR National Meeting, New Orleans, Louisiana.
37. Invited Speaker: **Nomura DK** (2016) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. University of Pavia, Italy.
38. Invited Speaker: **Nomura DK** (2016) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. Medical University of Graz, Graz, Austria.
39. 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.
40. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. Cleveland Clinic, Cleveland, Ohio.
41. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. Purdue University, Department of Nutrition, Indiana.
42. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. UCLA, Los Angeles, California.
43. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. University of Wisconsin, Madison Department of Biochemistry, Madison, Wisconsin.
44. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. UCSF Cancer Center, San Francisco, CA
45. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. UCSF Endocrinology, San Francisco, CA
46. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. UCSD Bioengineering Department, La Jolla, CA
47. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. Dana Farber Cancer Institute, Boston, Massachusetts.
48. 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.
49. 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.
50. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Cancer using Chemoproteomic and Metabolomic Platforms. AACR Metabolism and Cancer meeting, Bellevue, Washington.
51. Invited Speaker: **Nomura DK** (2015) Mapping Metabolic Drivers of Disease using Chemoproteomic and Metabolomic Platforms. Lipid Maps Meeting 2015, La Jolla, CA.
52. Invited Speaker: **Nomura DK** (2015) Mapping Dysregulated Metabolic Pathways in Disease Using Chemoproteomic and Metabolomic Platforms, Dana Farber/Harvard Medical School, Boston, MA.
53. Invited Speaker: **Nomura DK** (2015) Mapping Dysregulated Metabolic Pathways in Disease Using Chemoproteomic and Metabolomic Platforms, Searle Meeting, Chicago, IL.

54. Invited Speaker: **Nomura DK** (2015) Mapping Dysregulated Metabolic Pathways in Disease Using Chemoproteomic and Metabolomic Platforms, University of Chicago, Chicago, IL.
55. Invited Speaker: **Nomura DK** (2015) Mapping Dysregulated Lipid Metabolism in Disease using Chemoproteomic and Metabolomic Platforms, RIKEN, Yokohama, Japan.
56. Invited Speaker: **Nomura DK** (2015) Mapping Dysregulated Lipid Metabolism in Disease using Chemoproteomic and Metabolomic Platforms, Phospholipase Meeting, Tokyo, Japan.
57. Seminar speaker: **Nomura DK** (2014) Chemoproteomic and Metabolomic Strategies for Drug Discovery and Toxicology, UC Berkeley, Nutritional Sciences and Toxicology Department
58. 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.
59. Invited Speaker: **Nomura DK** (2014) Chemoproteomic and Metabolomic Strategies for Drug Discovery and Toxicology, Genentech, South San Francisco, CA Investigative Toxicology Division
60. Poster: **Nomura DK** (2014) Mapping Dysregulated Metabolic Pathways in Cancer Using Functional Proteomic and Metabolomic Platforms, Searle Scholars Meeting, Chicago, IL.
61. Invited Speaker: **Nomura DK** (2014) Mapping Dysregulated Lipid Metabolism in Cancer using Chemoproteomic and Metabolomic Platforms, ASBMB meeting, San Diego, CA.
62. Invited Speaker: **Nomura DK** (2014) Mapping Dysregulated Lipid Metabolism in Cancer using Chemoproteomic and Metabolomic Platforms, Keystone Meeting on Tumor Metabolism, Whistler, Canada.
63. Invited Speaker: **Nomura DK** (2014) Validating Monoacylglycerol Lipase Inhibitors in Combatting Parkinson's Disease, Michael J Fox Foundation, New York, NY.
64. Invited Seminar Speaker: **Nomura DK** (2014) Mapping Dysregulated Metabolic Pathways in Disease using Chemoproteomic and Metabolomic Platforms, Karolinska Institute, Stockholm, Sweden.
65. Invited Seminar Speaker: **Nomura DK** (2014) Mapping Dysregulated Metabolic Pathways in Disease using Chemoproteomic and Metabolomic Platforms, University of Pavia, Pavia, Italy.
66. Invited Seminar Speaker: **Nomura DK** (2013) Mapping Dysregulated Metabolic Pathways in Disease using Chemoproteomic and Metabolomic Platforms, Novartis, Cambridge, MA.
67. Invited Seminar Speaker: **Nomura DK** (2013) Mapping Dysregulated Metabolic Pathways in Disease using Chemoproteomic and Metabolomic Platforms, UC Merced, Merced, CA.
68. 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.
69. Keynote Speaker: **Nomura DK** (2013) Chemoproteomic and Metabolomic Strategies for Drug Discovery and Toxicology. NorCal Society of Toxicology meeting, South San Francisco, CA.
70. 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.
71. 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.
72. Invited Speaker: **Nomura DK** (2013) Endocannabinoid hydrolysis generates eicosanoids that promote inflammation. Gordon conference Molecular and Cellular Biology of Lipids, New Hampshire, NJ
73. Poster: **Nomura DK** (2013) Mapping dysregulated metabolic pathways in cancer. Gordon conference bioorganic chemistry, New Hampshire, NJ.
74. Poster: **Nomura DK** (2013) Mapping Dysregulated Metabolic Pathways in Cancer Using Functional Proteomic and Metabolomic Platforms, Searle Scholars Meeting, Chicago, IL.
75. 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
76. Invited Speaker: **Nomura DK** (2013) Endocannabinoid hydrolysis generates brain prostaglandins that promote neuroinflammation. Seminar speaker at University of Minnesota, Minneapolis, MN.
77. Invited Speaker: **Nomura DK** (2012) Mapping dysregulated metabolic pathways in disease using functional proteomic and metabolomic platforms. Seminar speaker at Agilent, Santa Clara, CA.
78. Invited Speaker: **Nomura DK** (2012) Endocannabinoid hydrolysis generates brain prostaglandins that promote neuroinflammation. Seminar speaker at Pfizer Neuroscience, Cambridge, MA.

79. 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.
80. Keynote Invited Speaker: **Nomura DK** (2012) Mapping dysregulated metabolic pathways in cancer using functional proteomic and metabolomic platforms. Austrian Proteomics Research Symposium, Graz, Austria.
81. Invited Speaker: **Nomura DK**. (2012) Endocannabinoid hydrolysis generates brain prostaglandins that promote neuroinflammation. *International Cannabinoid Research Society* meeting, Freiberg, Germany.
82. Poster: **Nomura DK** and Samad TA (2012) Metabolomic profiling for mapping anti-inflammatory pathways in neurodegenerative disease. *Genetics and Chemistry Cell Symposium*, Cambridge, Massachusetts.
83. 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
84. 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.
85. Invited Speaker: **Nomura DK** (2011) Mapping dysregulated metabolic pathways in cancer using activity-based proteomics. American Chemical Society meeting, Denver, Colorado.
86. Invited Speaker: **Nomura DK**, Cravatt BF (2011) Mapping dysregulated metabolic pathways in cancer. American Association for Cancer Research meeting, Orlando, Florida.
87. 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.
88. Invited Speaker: **Nomura DK**. (2009) Chemical Approaches to Annotating Toxicological and Biological Systems. University of California Toxic Substances & Teaching Program Symposium, Berkeley, California.
89. 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.
90. 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.
91. 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.
92. 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
Sarah Buzsaki (2018-current)	Undergraduate Researcher	
May Fung (2018-current)	Postdoctoral Fellow	
Sasha Demeulenaere (2018-current)	Undergraduate Researcher	
Kenneth Kim (2017-current)	Undergraduate Researcher	
Samantha Tang (2017-current)	Administrative and Lab Assistant	
Christine Tatcher (2017-current)	Undergraduate Researcher	
Kyra Berger (2017-current)	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-current)	Undergraduate Researcher	
Linda Waldherr (2017-2017)	Visiting Grad Student	
Raymond Ho (2017-current)	Undergraduate Researcher	
Sage Geher (2017-2017)	Undergraduate Researcher	
Mai Luo (2016-current)	Visiting Grad Student	
Tamara Tomin (2016-2017)	Visiting Grad Student	

Fernando Alvarez (2016-current)	Graduate Researcher	
Alex Renn (2016-2017)	Undergraduate Researcher	
Jordan Kleinman (2016-current)	Undergraduate Researcher	
Ashley Ives (2016-2017)	Undergraduate Researcher	
Sultana Mojadidi (2016-2016)	Undergraduate Researcher	
Jessica Spradlin (2016-current)	Graduate Researcher	
Carl Ward (2016-current)	Graduate Researcher	
Allison Roberts (2016-current)	Graduate Researcher	
Amanda Wiggenghorn (2016-current)	Research Associate	
Joseph Hendricks (2016-current)	Undergraduate Researcher	
Anna Flury (2016-2016)	Lab Assistant	
Haley Lehtola (2016-2017)	Undergraduate Researcher	
Yana Petri (2016-current)	Research Associate	
Justin Wang (2016-2017)	Undergraduate Researcher	
Ivan Atencio (2016-2017)	Undergraduate Researcher	
Andrew Hong (2016-2016)	Undergraduate Researcher	
Catherine Schneider (2015-2017)	Graduate Researcher	
Catherine Cascavita (2015-2016)	Lab Manager	
Elizabeth Grossman (2015-current)	Graduate Researcher	
Michelle Luu (2015-2017)	Undergraduate Researcher	
Deepika Raghavan (2015-2016)	Undergraduate Researcher	
Peter Yan (2015-2017)	Undergraduate Researcher	
Kimberly Anderson (2015-current)	Graduate Researcher	
Melanie Hubbuck (2015-2017)	Graduate Researcher	
Megan Duckering (2015-2016)	Undergraduate Researcher	
Angela Yang (2015-2015)	Undergraduate Researcher	
Charles Berdan (2014-current)	Graduate Researcher	
Wan-Min Ku (2014-2017)	Undergraduate Researcher	
Derek Barbas (2014-2015)	Undergraduate Researcher	
Leslie Bateman (2014-2016)	Postdoctoral Fellow	Senior Scientist at Celgene
Breanna Ford (2014-current)	Graduate Researcher	
Wallace Lowe (2014-2015)	Undergraduate Researcher	
Tucker Huffman (2014-2017)	Undergraduate Researcher	Graduate Student at TSRI in Ryan Shenvi's lab
Olivia Dibenedetto (2014-2014)	Undergraduate Researcher	
Jeffrey Coleman (2014-2014)	Undergraduate Researcher	
Lara Bideyan (2014-2015)	Undergraduate Researcher	
Esha Dalvie (2013-2016)	Undergraduate Researcher	
Daniel Li (2013-2015)	Undergraduate Researcher	
Jessica Counihan (2013-current)	Graduate Researcher	
Sharon Zhong (2013-2015)	Undergraduate Researcher	
David Miyamoto (2013-2015)	Undergraduate Researcher	
Karl Fisher (2013-2014)	Associate Specialist	Director of Chemistry at Lygos
Lauryn Chan (2013-2014)	Undergraduate Researcher	
Lucky Ding (2013-2016)	Undergraduate Researcher	
Nivedita Keshav (2013-2014)	Undergraduate Researcher	
Ann Heslin (2013-2015)	Undergraduate Researcher	
Chynna Tang (2013-2014)	Undergraduate Researcher	Graduate student in UC Berkeley Optometry Program
Yoav Azaria (2012-2014)	Undergraduate Researcher	Research Assistant at Genentech
Devon Hunerdosse (2012-2015)	Graduate Researcher	Postdoc at Stanford in Mary Teruel Lab
Lindsay Roberts (2012-2017)	Graduate Researcher	Senior Scientist, Nuredis Inc.
Ramandeep Dhillon (2012-2015)	Administrative and Lab Asst.	
Alice Shieh (2012-2013)	Undergraduate Researcher	Undergraduate at Duke University
Tara Narasimhalu (2012-2014)	Undergraduate Researcher	

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)	Postdoctoral Fellow Postdoctoral Fellow Postdoctoral Fellow Undergraduate Researcher Graduate Researcher  Undergraduate Researcher  Undergraduate Researcher Graduate Researcher Graduate Researcher	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
Anayo Ohiri (2011-2013) Jae Wong Chang (2009-2011) Anna M. Ward (2004-2008, 2010)	Undergraduate Researcher Graduate Researcher Undergraduate Researcher	
Roger Issa (2004-2008)	Undergraduate Researcher	