

Hideaki Yano

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Current Position

Tenure-Track Assistant Professor, Department of Pharmaceutical Sciences, School of Pharmacy and Pharmaceutical Sciences, Northeastern University
Faculty Fellow, Center for Drug Discovery, Northeastern University

Education

Columbia University, Ph.D. degree in pharmacology (2012), Thesis advisor: Dr. Jonathan A. Javitch
(Thesis: <http://academiccommons.columbia.edu/catalog/ac%3A148832>)
Washington University in St. Louis, B.A. degree in chemistry (2002)

Positions and Employment

2021- Faculty Fellow, Center for Drug Discovery, Northeastern University
2020- Tenure-Track Assistant Professor, School of Pharmacy and Pharmaceutical Sciences, Department of Pharmaceutical Sciences, Northeastern University
2020-2022 Special Volunteer, NIDA IRP (PI: Dr. Lei Shi)
2016-2019 Research Fellow, NIDA IRP (PI: Drs. Lei Shi, Amy H. Newman, and Antonello Bonci)
2012-2016 IRTA Postdoctoral Fellow, NIDA IRP (PI: Drs. Sergi Ferré and Antonello Bonci)
2006-2012 Graduate Student, Columbia University Dept. of Pharmacology (PI: Dr. Jonathan A. Javitch)
2004-2006 Senior Research Technician, Columbia University Neuropharmacology Lab
2002-2004 Research Technician, Washington University Medical Center Chemical Genomics Lab

Fellowships

2014-2016 Japanese Society for the Promotion of Science (JSPS) Fellowship
2009-2010 Clinical and Translational Science Award (CTSA) Fellowship (#T32 TL1 RR024158-04)
2006-2008 NIH Training Program in Pharmacological Sciences (#2T32GM067182)

Grant Support

2024-2029 NIH R01 co-I Development of non-opioid, non-addictive analgesics for treating neuropathic pain
2021-2023 Tier 1 Grant at Northeastern University
2020-2022 Brain & Behavior Research Foundation Young Investigator Award (formally known as NARSAD Award)

Manuscript and Grant Reviewer

2023- Associate Editor, Frontiers in Pharmacology, Section Neuropharmacology
2022 NIH Study Section, CSRS-RBST
2012- Ad-hoc Reviewer: ACS Chem. Neurosci., Br. J. Pharmacol., FASEB J, Frontiers, Int. J. Mol. Sci., J Headache Pain., J. Med. Chem., Nat. Commun., Neuropharmacology, Sci. Rep., Cell Commun. Signal, among others.

Societal Memberships

2011-present Member, American Society for Pharmacology and Experimental Therapeutics (ASPET)
2011-present Member, Society for Neuroscience

Courses / Teaching

PHMD 5190 Concepts in Practice I (2023-), instructor
PHSC 2650 Introduction to Health Science Research (2020-), instructor
PHSC 3801 Pharmacology and Medicinal Chemistry I (2024-), instructor
PHSC 4501 Pharmacology and Medicinal Chemistry I (2020-2022), instructor/coordinator
PHSC 5110 Integrated Science and Therapeutics I (2023-), instructor/coordinator
PHSC 6300 Pharmaceutical Science Seminar (2020-), instructor/coordinator
PMCL 6260 Pharmacology I (2022), instructor
PMCL 6252 Small-Molecule Ligand Pharmacology (2024-), instructor

Seminars and Scientific Meetings

1. Chemistry & Pharmacology of Drug Abuse Conference (Seminar, Student Posters x4, Aug. 2024)
2. Society for Neuroscience 2023 in Washington D.C. (Poster, Nov. 2023)
3. Johns Hopkins Medical Institute Japanese Science Seminar in Baltimore (Seminar, Nov. 2023)
4. Chemistry & Pharmacology of Drug Abuse Conference (Student Posters x3, Aug. 2023)
5. Biology Department, Boston University (Seminar, Mar. 2023)
6. NIH Japanese Scientist Group "Kin-yo-kai" virtual (Seminar, Discussion group, Aug. 2022)
7. Chemistry & Pharmacology of Drug Abuse Conference (Seminar, Session moderator, Aug. 2022)
8. Dopamine 2022 in Montreal (Poster, May 2022)
9. Dopamine 2020 in Montreal (Poster, May 2020, **Cancelled due to pandemic**)
10. Experimental Biology 2020 in San Diego (Poster, Apr. 2020, **Cancelled due to pandemic**)
11. Society for Neuroscience 2019 in Chicago (Poster, Oct. 2019)
12. Chemistry and Pharmacology of Drug Abuse Meeting (Poster, Aug. 2020)
13. Experimental Biology 2019 in Orlando (Poster, Apr. 2019)
14. Tohoku University Meeting for Future Medicine (Scholarship, Short talk, Poster, Chair, Mar. 2019)
15. Biophysical Society Annual Meeting (Poster, Mar. 2019)
16. Gordon Research Seminar and Conference Molecular Pharmacology (Short talk, Poster, Feb. 2019)
17. GPCR Workshop at Thomas Jefferson University (Poster, Jun. 2018)
18. NIDA Director's Report Meeting (Short talk, May 2018)
19. Baltimore Brain Series (Seminar, Mar. 2018)
20. Society for Neuroscience 2017 in Washington D.C. (Poster, Nov. 2017)
21. Gordon Research Seminar and Conference Catecholamine (Poster, Aug. 2017)
22. 33rd Camerino Symposium on Receptor Chemistry (Seminar, May 2016)
23. NIH Baltimore Fellows Symposium (Poster, Nov. 2014)
24. Society for Neuroscience 2014 in Washington D.C. (Poster, Nov. 2014)
25. National Institute on Drug Abuse Mini-Convention in Washington D.C. (Poster, Nov. 2014)
26. American Psychological Association Early Career Poster in Washington D.C. (Poster, Aug. 2014)
27. National Institute on Drug Abuse poster day in Baltimore (Poster, May 2014)
28. NIH Baltimore Fellows Symposium (Poster, Nov. 2013)
29. Society for Neuroscience 2013 in San Diego (Poster, Nov. 2013)
30. National Institute on Drug Abuse poster day in Baltimore (Poster, May 2013)
31. G protein coupled receptor Colloquium in Boston (Poster, Apr. 2013)
32. Experimental Biology 2013 in Boston (Poster, Apr. 2013)
33. NIH Baltimore Fellows Symposium (Poster, Nov. 2012)
34. International Catecholamine Symposium in Monterey (Short talk, Poster, Sep. 2012)
35. Department of Psychiatry work in progress at Columbia University (Seminar, Mar. 2012)
36. Society for Neuroscience 2011 in Washington D.C. (Poster, Nov. 2011)
37. Department of Pharmacology retreat at Columbia University (Session chair, Poster, Nov. 2011)
38. National Graduate Student Research Conference at NIH (Poster, Oct. 2011)
39. Experimental Biology 2011 in Washington D.C. (Poster, Apr. 2011)
40. Department of Psychiatry retreat at Columbia University (Poster, Jun. 2010)
41. GPCR Workshop at Thomas Jefferson University (Poster, Jun. 2010)
42. CTSA National Pre-Doctoral Meeting at Washington University in St. Louis (Scholarship, Short talk, May. 2010)
43. Keystone Meeting for GPCR research at Breckenridge resort (Scholarship, Poster, Apr. 2010)
44. Department of Psychiatry work in progress at Columbia University (Seminar, Mar. 2010)
45. Clinical and translational science award (CTSA) Annual research day at Columbia University (Poster, Dec. 2009)

Research Mentoring

1. **Hayato Umaoka** – Northeastern University, MSPS student thesis (2024-)
2. **Ruiru Guo** – Northeastern University BSPS student thesis (2024-)
3. **Jordan Davis** – Northeastern University BSPS student thesis (2024-)
4. **Yongju Dan** – Northeastern University, MSPS student volunteer (2024)
5. **Mimi Briggs** – Northeastern University, MSPS student thesis (2023-2024)
6. **Vianna Quach** – Northeastern University BSPS student thesis (2022-)
PEAK Summit Award, Best Undergraduate Poster at Research Showcase
7. **Sandy Oh** – Northeastern University, Ph.D. student (2022-)
8. **Michelle Jo** – Northeastern University, PharmD student volunteer (2022-2024)
9. **Wenqi Zhang** – Northeastern University, MSPS student thesis (2022-2023)
10. **Chan Tae Park** – Northeastern University, PharmD student capstone (2022-2024)
PEAK Summit Award, Huntington 100
11. **Rian Garland** – Northeastern University, Ph.D. student (2021-)
12. **Charlotte Pitha** – Northeastern University BSPS student thesis (2021-2024)

13. **Anh Minh Nguyen** – Northeastern University, Ph.D. student (2021-)
14. **Nicholas Letarte** – Northeastern University, PharmD student volunteer (2021)
15. **Antia Valle Tojeiro** – Northeastern University MSPS student thesis (2021-2022)
16. **Clara Wu** – Northeastern University Behavioral Neuroscience student volunteer (2020)
17. **Darby Kreinenberg** – Northeastern University MSPS student volunteer (2020)
18. **John Famiglietti** – Northeastern University BSPS student thesis (2020-2023)
19. **Juliana Pereira** – Northeastern University BSPS student thesis (2020-2021)
20. **Brandon Mrnak** – Northeastern University BSPS student thesis (2020-2021)
21. **Yun Chueh** – Northeastern University MSPS graduate Visiting scholar (2020-2021)
22. **Ji Hyun (Jennifer) Lim** – Northeastern University MSPS student thesis (2020-2021)
23. **Christopher Lucaj** – Northeastern University Ph.D. student thesis (2020-)
24. **Ana Semeano, Ph.D.** – Northeastern University Postdoctoral fellow (2020-2022)
25. **Phuong Tran** – NIDA Postbac student (2019)
26. **Pramisha Adhikari, Ph.D.** – NIDA Biologist (2018-2019)
27. **Leanne Liu** – NIDA Postbac student (2018-2019)
28. **Sophia Guan** – River Hill High School, Maryland (2018)
29. **Sett Naing** – NIDA Postbac student (2017-2018)
30. **Marta Sanchez-Soto** – University of Barcelona Ph.D. student (2013-2016)
31. **Andres Ciudad Roberts** – University of Barcelona Ph.D. student (2014)
32. **Adam Sierakowiak** – Karolinska Institute Ph.D. student (2013-2014)
33. **Prashant Donthamsetti** – Columbia University Ph.D. student (2009-2012)

Thesis Committee (excluding students from my lab)

1. Jenna Connolly – Pharmaceutical Sciences Ph.D. student in Plant Lab (2024-)
2. Charles Kissell – Pharmaceutical Sciences Ph.D. student in Plant Lab (2024-)
3. Erin Sullivan – Pharmaceutical Sciences Ph.D. student in Booth Lab (2023-)
4. Harvens Beauzile – Pharmaceutical Sciences Ph.D. student in Thakur Lab (2023-)
5. Ngan Tran – Pharmaceutical Sciences Ph.D. student in Makriyannis Lab (2023-)
6. Daniela Cozzi – Pharmaceutical Sciences Master's student in Logothetis Lab (2023)
7. Jahnavi Simhadri – Pharmaceutical Sciences Master's student in Logothetis Lab (2022)
8. Nicole Rivera – Pharmaceutical Sciences Master's student in Logothetis Lab (2022)
9. Brenda Winn – Pharmaceutical Sciences Ph.D. student in Logothetis Lab (2022-2023)
10. Rokhand Arvan – Pharmaceutical Sciences Ph.D. student in Logothetis Lab (2022-2023)
11. Sachin Thigale – Pharmaceutical Sciences Ph.D. student in Logothetis Lab (2021-)
12. Ryan McGlynn – Pharmaceutical Sciences Ph.D. student in Booth Lab (2021-2023)
13. Nickolas Fragola – Pharmaceutical Sciences Ph.D. student in Booth Lab (2021-2024)
14. Jordie Kamuene – Pharmaceutical Sciences Ph.D. student in Plant Lab (2021-2023)
15. Andrew Zorn – Pharmaceutical Sciences Ph.D. student in Logothetis Lab (2021-)
16. Peter Schaffer – Pharmaceutical Sciences Ph.D. student in Thakur Lab (2020-2022)
17. Archita Menon – Pharmaceutical Sciences Ph.D. student in Kim Lab (2020-2021)
18. Wilder Felix – Pharmaceutical Sciences Ph.D. student in Thakur Lab (2020-)
19. Wilder Felix – Pharmaceutical Sciences Master's student in Thakur Lab (2020)

Grant Peer Review

1. NIH Cellular Signaling and Regulatory Systems Study Section, Cell Biology Integrated Review Group (2022)

Publications

1. Nguyen AM, Semeano A, Quach V, Inoue A, Nichols DE, **Yano H***. Characterization of Gas and Gαolf activation by catechol and non-catechol dopamine D1 receptor agonists. bioRxiv preprint. 2024 Jan. 7; <https://doi.org/10.1101/2023.10.03.560682>. ***corresponding** (under review *iScience*)
2. Semeano A, Garland R, Bonifazi A, Lee KH, Famiglietti J, Zhang W, Jo YJ, Battiti FO, Shi L, Newman AH, **Yano H***. Linkers in Bitopic Agonists Shape Bias Profile among Transducers for the Dopamine D2 and D3 Receptors. *ACS Pharmacol Transl Sci*. 2024 Aug 9;7(8):2333-2349. ***corresponding**
3. **Yano H***, Chitsazi R+, Lucaj C, Tran P, Hoffman AF, Baumann MH, Lupica CR, Shi L*, A subtle structural modification of a synthetic cannabinoid receptor agonist drastically increases its efficacy at the CB1 receptor. +equally contributed, ***co-corresponding**, *ACS Chem Neurosci*. 2023 Nov 1;14(21):3928-3940.
4. Park JC, Luebbbers A, Dao M, Semeano A, Papakonstantinou M, Broselid S, **Yano H**, Martemyanov K, Garcia-Marcos M. Fine-tuning GPCR-mediated neuromodulation by biasing signaling through different G-protein subunits *Mol Cell*. 2023, Jul. 20;83(14):2540-2558.e12.
5. Pavletić P, Semeano A+, **Yano H+**, Bonifazi A, Giorgioni G, Piergentili A, Quaglia W, Sabbieti MG, Agas D, Santoni G, Pallini R, Ricci-Vitiani L, Sabato E, Vistoli G, Del Bello F, Highly Potent and Selective Dopamine D4 Receptor

- Antagonists Potentially Useful for the Treatment of Glioblastoma. **+equally contributed**. *J Med Chem*. 2022, 65, 12124–12139.
6. Adhikari P, Xie B, Semeano A, Bonifazi A, Battiti FO, Newman AH, **Yano H***, Shi L*. Chirality of Novel Bitopic Agonists Determines Unique Pharmacology at the Dopamine D3 Receptor. *Biomolecules*. 2021 Apr 13;11(4):570. ***co-corresponding**
 7. Henderson MJ, Trychta KA, Yang SM, Bäck S, Yasgar A, Wires ES, Danchik C, Yan X, **Yano H**, Shi L, Wu KJ, Wang AQ, Tao D, Zahoránszky-Kóhalmi G, Hu X, Xu X, Maloney D, Zakharov AV, Rai G, Urano F, Airavaara M, Gavrilova O, Jadhav A, Wang Y, Simeonov A, Harvey BK. A target-agnostic screen identifies approved drugs to stabilize the endoplasmic reticulum-resident proteome. *Cell Rep*. 2021 Apr 27;35(4):109040.
 8. **Yano H***, Adhikari P, Naing S, Hoffman AF, Baumann MH, Lupica CR, Shi L*, Positive allosteric modulation of the 5-HT1A receptor by indole-based synthetic cannabinoids abused by humans, ***co-corresponding** *ACS Chem Neurosci*. 2020, Apr. 30. Epub
 9. Sanchez-Soto M, Verma RK, Willette BKA, Gonye EC, Moore AM, Moritz AE, Boateng CA, **Yano H**, Free RB, Shi L, Sibley DR, A structural basis for how ligand binding site changes can allosterically regulate GPCR signaling and engender functional selectivity. *Sci Signal*. 2020, Feb 4;13(617)
 10. Lane JR, Abramyan AM, Adhikari P, Keen AC, Lee KH, Sanchez J, Verma RK, Lim HD, **Yano H**, Javitch JA, Shi L, Distinct inactive conformations of the dopamine D2 and D3 receptors correspond to different extents of inverse agonism. *Elife*. 2020 Jan 27;9
 11. Köfalvi A, Moreno E, Cordero A, Cai NS, Fernández-Dueñas V, Ferreira SG, Guixà-González R, Sánchez-Soto M, **Yano H**, Casadó-Anguera V, Cunha RA, Sebastião AM, Ciruela F, Pardo L, Casadó V, Ferré S, Control of glutamate release by complexes of adenosine and cannabinoid receptors. *BMC Biol*. 2020 Jan 23;18(1):9
 12. Abramyan AM*, **Yano H***, Xu M*, Liu L, Naing S, Fant AD, Shi L, The Glu102 mutation disrupts higher-order oligomerization of the sigma 1 receptor. ***equally contributed**. *Comput Struct Biotechnol J*. 2020, Jan. 7.
 13. **Yano H***, Liu L, Naing S, Shi L*, The effects of terminal tagging on homomeric interactions of the sigma 1 receptor, ***co-corresponding**, *Front. Neurosci*. 2019, Dec. 19. 13, 1356
 14. Slack RD, Abramyan AM, Tang H, Meena S, Davis BA, Bonifazi A, Giancola JB, Deschamps JR, Naing S, **Yano H**, Singh SK, Newman AH, Shi L, A Novel Bromine-Containing Paroxetine Analogue Provides Mechanistic Clues for Binding Ambiguity at the Central Primary Binding Site of the Serotonin Transporter. *ACS Chem Neurosci*. 2019, Aug. 19. 10 (9), 3946-3952
 15. Francis TC, **Yano H**, Demarest TG, Shen H, Bonci A, High-frequency activation of nucleus accumbens D1-MSNs drives excitatory potentiation on D2-MSNs. *Neuron*. 2019, Aug. 7. 103 (3), 432-444. e3
 16. Sánchez-Soto M, **Yano H**, Cai NS, Casadó-Anguera V, Moreno E, Casadó V, Ferré S, Revisiting the functional role of dopamine D4 receptor gene polymorphisms: Heteromerization-dependent gain of function of the D4.7 receptor variant. *Mol Neurobiol*. 2019, July 1. 56 (7), 4778-4785
 17. Bonifazi A*, **Yano H***, Guerrero AM, Kumar V, Hoffman AF, Lupica CR, Shi L, Newman AH, Novel and potent dopamine D2 receptor Go-protein biased agonists. ***equally contributed**. *ACS Pharm. & Transl. Sci*. 2019 Feb 8; 2(1): 52–65. **(cover, editors' choice)**
 18. **Yano H***, Cai NS, Javitch JA, Ferré S, Luciferase complementation based-detection of G protein coupled receptor activity, ***corresponding**, *Biotechniques*. 2018 Jul;65(1):9-14.
 19. Del Bello F, Bonifazi A, Giorgioni G, Cifani C, Micioni Di Bonaventura MV, Petrelli R, Piergentili A, Fontana S, Mammoli V, **Yano H**, Maticci R, Vistoli G, Quaglia W, 1-[3-(4-Butylpiperidin-1-yl)propyl]-1,2,3,4-tetrahydroquinolin-2-one (77-LH-28-1) as a Model for the Rational Design of a Novel Class of Brain Penetrant Ligands with High Affinity and Selectivity for Dopamine D4 Receptor. *J Med Chem*. 2018, Apr 26.
 20. Sánchez-Soto M, Casadó-Anguera V, **Yano H**, Bender BJ, Cai NS, Moreno E, Canela EI, Cortés A, Meiler J, Casadó V, Ferré S, α 2A- and α 2C-Adrenoceptors as potential targets for dopamine and dopamine receptor ligands. *Mol Neurobiol*. 2018 Mar 18.
 21. **Yano H***, Cai NS, Xu M, Verma RK, Rea W, Hoffman AF, Shi L, Javitch JA, Bonci A, Ferré S, Gs- versus Golf-dependent functional selectivity mediated by the dopamine D1 receptor. ***corresponding**. *Nat Commun*. 2018 Feb 5;9(1):486. **(featured on NIDA website)**
 22. **Yano H***, Bonifazi A, Xu M, Guthrie D, Schneck, SN, Abramyan A, Fant A, Hong WC, Newman AH, Shi L*, Pharmacological profiling of sigma 1 receptor ligands by novel receptor homomerization assays. ***corresponding**, *Neuropharmacology*. 2018 Jan 31;133:264-275.
 23. **Yano H***, Provasi D, Cai NS, Filizola M, Ferré S, Javitch JA*, Development of novel biosensors to study receptor-mediated activation of the G-protein α subunits Gs and Golf. ***corresponding**. *J Biol Chem*. 2017 VOL. 292, NO. 49, pp. 19989–19998
 24. **Yano H***, Sanchez-Soto M, Ferré S, Bioluminescence Resonance Energy Transfer assay to characterize Gi-like G protein subtype-dependent functional selectivity. ***corresponding**. *Curr Protoc Neurosci*. 2017 VOL. 81, NO. 5, pp. 33.1-33.13
 25. Hong WC, **Yano H**, Hiranita T, Chin FT, McCurdy CR, Su TP, Amara SG, Katz JL, The sigma-1 receptor modulates dopamine transporter conformation and cocaine binding and may thereby potentiate cocaine self-administration in rats. *J Biol Chem*. 2017 VOL. 292, NO. 27, pp. 11250–11261.

26. Bonifazi A⁺, **Yano H⁺**, Ellenberger MP, Muller L, Kumar V, Zou MF, Cai NS, Guerrero AM, Woods AS, Shi L, Newman AH, Novel Bivalent Ligands Based on the Sumanriole Pharmacophore Reveal Dopamine D2 Receptor (D2R) Biased Agonism. ***equally contributed**. *J Med Chem*. 2017, Mar 16.
27. Gaskill PJ, Miller DR, Gamble-George J, **Yano H**, Khoshbouei H, HIV, Tat and dopamine transmission. *Neurobiol Dis*. 2017 Sep 106:51-73
28. Michino M, Boateng CA, Donthamsetti P, **Yano H**, Bakare OM, Bonifazi A, Ellenberger MP, Keck TM, Kumar V, Zhu C, Verma R, Deschamps JR, Javitch JA, Newman AH, and Shi L, Towards understanding the structural basis of partial agonism at the dopamine D3 receptor. *J Med Chem*. 2017 Jan 26;60(2):580-593.
29. Cao J, Slack RD, Bakare OM, Burzynski C, Rais R, Slusher BS, Kopajtic T, Bonifazi A, Ellenberger MP, **Yano H**, He Y, Bi GH, Xi ZX, Loland C J, and Newman AH, Novel and High Affinity 2-[(Diphenylmethyl)sulfinyl]acetamide (Modafinil) Analogues as Atypical Dopamine Transporter Inhibitors. *J Med Chem*. 2016, 59, 10676-10691
30. Sánchez-Soto M, Bonifazi, Cai NS, Ellenberger MP, Newman AH, Ferré S, **Yano H⁺**, Evidence for non-canonical neurotransmitter activation: Norepinephrine as a dopamine D2-like receptor agonist. ***corresponding**. *Mol Pharmacol*. 2016 VOL. 89, NO. 4, pp.457-466
31. Frederick AL⁺, **Yano H⁺**, Trifilieff P⁺, Vishwasrao HD, Biezonski D, Mészáros J, Urizar E, Sibley DR, Kellendonk C, Sonntag KC, Graham DL, Colbran RJ, Stanwood GD⁺, Javitch JA⁺, Evidence against dopamine D1/D2 receptor heteromers. ***equally contributed**. *Mol Psychiatry*. 2015 VOL. 20, NO. 11, pp. 1373-85.
32. Malinauskaitė L, Quick M, Reinhard L, Lyons JA, **Yano H**, Javitch JA, Nissen P, A mechanism for intracellular release of Na⁺ by neurotransmitter/sodium symporters. *Nat Struct Mol Biol*. 2014 VOL. 21, NO. 11, pp. 1006-1012.
33. Bonifazi A, **Yano H**, Del Bello F, Farande A, Quaglia W, Petrelli R, Matucci R, Nesi M, Vistoli G, Ferré S, Piergentili A, Synthesis and biological evaluation of a novel series of heterobivalent muscarinic ligands based on xanomeline and 1-[3-(4-butylpiperidin-1-yl)propyl]-1,2,3,4-tetrahydroquinolin-2-one (77-LH-28-1). *J Med Chem*. 2014 VOL. 57, NO. 21, pp. 9065-9077.
34. Guitart X, Navarro G, Moreno E, **Yano H**, Cai NS, Sánchez-Soto M, Kumar-Barodia S, Naidu YT, Mallol J, Cortés A, Lluís C, Canela EI, Casadó V, McCormick PJ, Ferré S, Functional selectivity of allosteric interactions within G protein-coupled receptor oligomers: the dopamine D1-D3 receptor heterotetramer. *Mol Pharmacol*. 2014 VOL. 86, NO. 4, pp. 417-429.
35. Gaskill PJ, **Yano H**, Kalpana GV, Javitch JA, Berman JW, Dopamine receptor activation increases HIV entry into primary human macrophages. *PLoS ONE*. 2014 VOL. 9, NO. 9, e108232.
36. Pizzo AB, Karam CS, Zhang Y, **Yano H**, Freyberg RJ, Karam DS, Freyberg Z, Yamamoto A, McCabe BD, Javitch JA, The membrane raft protein Flotillin-1 is essential in dopamine neurons for amphetamine-induced behavior in *Drosophila*. *Mol Psychiatry*. 2013 VOL. 18, NO. 7, pp. 824-833.
37. Urizar E⁺, **Yano H⁺**, Kolster R, Galés C, Lambert N, Javitch JA, CODA-RET reveals functional selectivity as a result of GPCR heteromerization. ***equally contributed**. *Nat Chem Biol*. 2011 VOL. 7, NO. 9, pp. 624-630.
38. Sohy D, **Yano H**, de Nadai P, Urizar E, Guillabert A, Javitch JA, Parmentier M and Springael JY, Hetero-oligomerization of CCR2, CCR5, and CXCR4 and the protean effects of "selective" antagonists. *J Biol Chem*. 2009 VOL. 284, NO. 45, pp. 31270-31279.
39. Quick M, **Yano H**, Goldberg NR, Duan L, Beuming T, Shi L, Weinstein H, Javitch JA, State-dependent Conformations of the Translocation Pathway in the Tyrosine Transporter Tyt1, a Novel Neurotransmitter:Sodium Symporter from *Fusobacterium nucleatum*. *J Biol Chem*. 2006 VOL. 281, NO. 36, pp. 26444–26454.
40. Suehiro K, Takuma S, Shimizu J, Hozumi T, **Yano H**, Cardinale C, DiTullio MR, Wang J, Smith CR, Burkhoff D, Homma S., Assessment of Left Ventricular Systolic Function Using Contrast Two-Dimensional Echocardiography With a High-Frequency Transducer in the Awake Murine Model of Myocardial Infarction. *Jpn Circ J*. 2001 Nov; 65 (11): 979-83.
41. Takuma S, Suehiro K, Cardinale C, Hozumi T, **Yano H**, Shimizu J, Mullis-Jansson S, Sciacca R, Wang J, Burkhoff D, Di Tullio MR, Homma S., Anesthetic inhibition in ischemic and nonischemic murine heart: comparison with conscious echocardiographic approach. *Am J Physiol Heart Circ Physiol*. 2001 May; 280 (5): H2364-70.
42. Suehiro K, Takuma S, Cardinale C, Hozumi T, Shimizu J, **Yano H**, Di Tullio MR, Wang J, Smith CR, Burkhoff D, Homma S., Assessment of segmental wall motion abnormalities using contrast two-dimensional echocardiography in awake mice. *Am J Physiol Heart Circ Physiol*. 2001 Apr; 280 (4): H1729-35.

Accomplishment

1. Grant-writing and Research Opportunities Workshops (GROW) Fellow at Northeastern University (Feb. 2024)
2. Gerald E. Schumacher Pharmacy Faculty Award at Northeastern University (Apr. 2023)
3. Travel grant for Tohoku University Meeting for Future Medicine (Mar. 2019)
4. Selected for a talk at Gordon Research Seminar Molecular Pharmacology (Feb. 2019)
5. NIH Stadtman Tenure-Track Investigator Search – Top 25% Selection, Molecular Pharmacology (Feb. 2019)
6. Journal article (Novel and potent dopamine D2 receptor...) selected for a cover and editors' choice (Feb. 2019)
7. Selected for a talk at Baltimore Brain Series (Mar. 2018)
8. Journal article (Gs- versus Golf-dependent functional selectivity...) featured on NIDA website (Feb. 2018)
9. Scientists Teaching Science, 9-week online course, NIH Office of Intramural Training and Education (Jun. 2016)
10. Selected for a talk at 33rd Camerino Symposium on Receptor Chemistry (May 2016)

11. Selected for early career investigators poster session at NIDA Mini-Convention (Nov. 2014)
12. Best poster for NIA-NIDA poster day (May. 2014)
13. Translational science training program award at NIH (Apr. 2014)
14. Young scientist travel award for Experimental Biology 2013 (Apr. 2013)
15. IUBMB travel fellowship for International Catecholamine Symposium (Sep. 2012)
16. Kavli travel grant for Society for Neuroscience 2011 (Nov. 2011)
17. Travel grant for National Graduate Student Research Conference at NIH (Oct. 2011)
18. Best abstract (runner-up) for Experimental Biology 2011 ASPET division (Apr. 2011)
19. Graduate student travel grant for Experimental Biology 2011 (Apr. 2011)
20. Brian Hoffman Service Award for Ph.D student at Columbia Univ. Pharmacology Dept. (May. 2010)
21. Travel grant for CTSA national pre-doctoral meeting (May. 2010)
22. Scholarship for Keystone meeting (Apr. 2010)