Curriculum Vitae

Sven-Eric Jordt, Ph.D.

Associate Professor of Anesthesiology (Tenured)
Associate Professor of Pharmacology & Cancer Biology (secondary Appointment)
Faculty, Integrated Toxicology & Environmental Health Program (ITEHP)
Faculty, Cancer Prevention, Duke Cancer Institute (DCI)
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Education:

	Institution (name, location)	Degree	Degree Date (year)
High School:	Johanneum zu Lübeck, Germany	Abitur	1987
College:	Freie Universität Berlin, Germany	M.Sc.	1994
Graduate or Professional School:	Freie Universität Berlin, Germany	Ph.D.	1997

Professional training and academic career (chronologically, beginning with first postgraduate position):

Institution	Position/Title	Dates
Free University Berlin & Center for Molecular Neurobiology Hamburg, Germany Advisor: Thomas Jentsch, M.D., Ph.D.	Graduate Student / Ph.D.	1994-97
Center for Molecular Neurobiology, Hamburg, Germany Mentor: Thomas Jentsch, M.D., Ph.D.	Postdoctoral Fellow	1997-98
Dept. of Cellular & Molecular Pharmacology, University of California, San Francisco Mentor: David Julius, Ph.D.	Postdoctoral Fellow	1998-2003
Dept. of Cellular & Molecular Pharmacology, University of California, San Francisco Mentor: David Julius, Ph.D.	Postgraduate Researcher	2003-05
Department of Pharmacology Yale School of Medicine	Assistant Professor, Tenure Track	2005-10
Department of Pharmacology Yale School of Medicine	Associate Professor, Tenure Track	2010-14
Department of Psychiatry Yale School of Medicine	Associate Professor Adjunct	2014-present
Department of Anesthesiology Duke University School of Medicine	**Associate Professor with Tenure**	**2014-present**
Department of Pharmacology and Cancer Biology Duke University School of Medicine	Associate Professor (secondary appointment)	2014-present
Duke University Graduate School	Associate Professor (full Graduate Faculty)	2021-present
Duke University Integrated Toxicology and Environmental Health Program (ITEHP)	Associate Professor (Program Faculty)	2021-present

Scholarship

A. Publications in refereed journals (refereed journals are scientific publications that have active editorial boards and a system of critical review of all submissions)**, including:**

- Named author publications

*****: equally contributing coauthorship

1. **Jordt SE**, Jentsch TJ. Molecular dissection of gating in the ClC-2 chloride channel. ***EMBO J***. 1997;16(7):1582-92. Epub 1997/04/01. PubMed PMID: 9130703; PMCID PMC1169762.
2. Clark S, **Jordt SE**, Jentsch TJ, Mathie A. Characterization of the hyperpolarization-activated chloride current in dissociated rat sympathetic neurons. ***J Physiol***. 1998;506 (Pt 3)(Pt 3):665-78. Epub 1998/03/21. PubMed PMID: 9503329; PMCID PMC2230754.
3. Pusch M, **Jordt SE**, Stein V, Jentsch TJ. Chloride dependence of hyperpolarization-activated chloride channel gates. ***J Physiol***. 1999;515 (Pt 2)(Pt 2):341-53. Epub 1999/03/02. PubMed PMID: 10050002; PMCID PMC2269146.
4. **Jordt SE***, Tominaga M*, Julius D. Acid potentiation of the capsaicin receptor determined by a key extracellular site. ***Proc Natl Acad Sci U S A***. 2000;97(14):8134-9. Epub 2000/06/22. PubMed PMID: 10859346; PMCID PMC16682. (* co-first authors)
5. Bösl MR, Stein V, Hübner C, Zdebik AA, **Jordt SE**, Mukhopadhyay AK, Davidoff MS, Holstein AF, Jentsch TJ. Male germ cells and photoreceptors, both dependent on close cell-cell interactions, degenerate upon ClC-2 Cl(-) channel disruption. ***EMBO J***. 2001;20(6):1289-99. Epub 2001/03/17. PubMed PMID: 11250895; PMCID PMC145530.
6. Chuang HH, Prescott ED, Kong H, Shields S, **Jordt SE**, Basbaum AI, Chao MV, Julius D. Bradykinin and nerve growth factor release the capsaicin receptor from PtdIns(4,5)P2-mediated inhibition. ***Nature***. 2001;411(6840):957-62. Epub 2001/06/22. PubMed PMID: 11418861.
7. **Jordt SE**, Julius D. Molecular basis for species-specific sensitivity to "hot" chili peppers. ***Cell***. 2002;108(3):421-30. Epub 2002/02/21. PubMed PMID: 11853675.; 2002-02-08 News article in Science Magazine: Spicy Mystery Solved
8. **Jordt SE**, Bautista DM, Chuang HH, McKemy DD, Zygmunt PM, Högestätt ED, Meng ID, Julius D. Mustard oils and cannabinoids excite sensory nerve fibres through the TRP channel ANKTM1. ***Nature***. 2004;427(6971):260-5. Epub 2004/01/09. PubMed PMID: 14712238.
9. Bautista DM, Movahed P, Hinman A, Axelsson HE, Sterner O, Högestätt ED, Julius D, **Jordt SE**, Zygmunt PM. Pungent products from garlic activate the sensory ion channel TRPA1. ***Proc Natl Acad Sci U S A***. 2005;102(34):12248-52. Epub 2005/08/17. PubMed PMID: 16103371; PMCID PMC1189336.

10. Bautista DM, **Jordt SE***, Nikai T, Tsuruda PR, Read AJ, Poblete J, Yamoah EN, Basbaum AI, Julius D. TRPA1 mediates the inflammatory actions of environmental irritants and proalgesic agents. ***Cell***. 2006;124(6):1269-82. Epub 2006/03/28. PubMed PMID: 16564016. (*co- first author)

11. **Jordt SE**, Ehrlich BE. TRP channels in disease. ***Subcell Biochem***. 2007;45:253-71. Epub 2008/01/16. PubMed PMID: 18193640.

12. Guimaraes MZP, **Jordt SE**. TRPA1 : A Sensory Channel of Many Talents. In: Liedtke WB, Heller S, editors. TRP Ion Channel Function in Sensory Transduction and Cellular Signaling Cascades. Frontiers in Neuroscience Series, Boca Raton (FL): CRC Press/Taylor & Francis. Pubmed PMID: 21204487

13. Bautista DM, Siemens J, Glazer JM, Tsuruda PR, Basbaum AI, Stucky CL, **Jordt SE***, Julius D. The menthol receptor TRPM8 is the principal detector of environmental cold. ***Nature***. 2007;448(7150):204-8. Epub 2007/06/01. PubMed PMID: 17538622. (*co-corresponding author)

14. Boehmerle W, Zhang K, Sivula M, Heidrich FM, Lee Y, **Jordt SE**, Ehrlich BE. Chronic exposure to paclitaxel diminishes phosphoinositide signaling by calpain-mediated neuronal calcium sensor-1 degradation. ***Proc Natl Acad Sci U S A***. 2007;104(26):11103-8. Epub 2007/06/22. PubMed PMID: 17581879; PMCID PMC1904151.

15. Streng T, Axelsson HE, Hedlund P, Andersson DA, **Jordt SE**, Bevan S, Andersson KE, Högestätt ED, Zygmunt PM. Distribution and function of the hydrogen sulfide-sensitive TRPA1 ion channel in rat urinary bladder. ***Eur Urol***. 2008;53(2):391-9. Epub 2007/11/23. PubMed PMID: 18031925.

16. Bessac BF, Sivula M, von Hehn CA, Escalera J, Cohn L, **Jordt SE**. TRPA1 is a major oxidant sensor in murine airway sensory neurons. ***J Clin Invest***. 2008;118(5):1899-910. Epub 2008/04/10. PubMed PMID: 18398506; PMCID PMC2289796.

17. Escalera J, von Hehn CA, Bessac BF, Sivula M, **Jordt SE**. TRPA1 mediates the noxious effects of natural sesquiterpene deterrents. ***J Biol Chem***. 2008;283(35):24136-44. Epub 2008/06/14. PubMed PMID: 18550530; PMCID PMC2527119.

18. Bessac BF, Sivula M, von Hehn CA, Caceres AI, Escalera J, **Jordt SE**. Transient receptor potential ankyrin 1 antagonists block the noxious effects of toxic industrial isocyanates and tear gases. ***FASEB J***. 2009;23(4):1102-14. Epub 2008/11/28. PubMed PMID: 19036859; PMCID PMC2660642.

19. Caceres AI, Brackmann M, Elia MD, Bessac BF, del Camino D, D'Amours M, Witek JS, Fanger CM, Chong JA, Hayward NJ, Homer RJ, Cohn L, Huang X, Moran MM, **Jordt SE**. A sensory neuronal ion channel essential for airway inflammation and hyperreactivity in asthma. ***Proc Natl Acad Sci U S A***. 2009;106(22):9099-104. Epub 2009/05/22. PubMed PMID: 19458046; PMCID PMC2684498

20. Lanosa MJ, Willis DN, **Jordt S**, Morris JB. Role of metabolic activation and the TRPA1 receptor in the sensory irritation response to styrene and naphthalene. ***Toxicol Sci***. 2010;115(2):589-95. Epub 2010/02/24. PubMed PMID: 20176620; PMCID PMC2948824.

21. Bessac BF, **Jordt SE**. Sensory detection and responses to toxic gases: mechanisms, health effects, and countermeasures. ***Proc Am Thorac Soc***. 2010;7(4):269-77. Epub 2010/07/06. PubMed PMID: 20601631; PMCID PMC3136963.

22. Schulze C, McGowan M, **Jordt SE**, Ehrlich BE. Prolonged oxaliplatin exposure alters intracellular calcium signaling: a new mechanism to explain oxaliplatin-associated peripheral neuropathy. ***Clin Colorectal Cancer***. 2011;10(2):126-33. Epub 2011/08/24. PubMed PMID: 21859566; PMCID PMC3388801.

23. Willis DN, Liu B, Ha MA, **Jordt SE***, Morris JB. Menthol attenuates respiratory irritation responses to multiple cigarette smoke irritants. ***FASEB J***. 2011;25(12):4434-44. Epub 2011/09/10. PubMed PMID: 21903934; PMCID PMC3236628. *(corresponding author)

24. Liu B, Escalera J, Balakrishna S, Fan L, Caceres AI, Robinson E, Sui A, McKay MC, McAlexander MA, Herrick CA, **Jordt SE**. TRPA1 controls inflammation and pruritogen responses in allergic contact dermatitis. ***FASEB J***. 2013;27(9):3549-63. Epub 2013/06/01. PubMed PMID: 23722916; PMCID PMC3752543.

25. Liu B, Fan L, Balakrishna S, Sui A, Morris JB, **Jordt SE**. TRPM8 is the principal mediator of menthol-induced analgesia of acute and inflammatory pain. ***Pain***. 2013;154(10):2169-77. Epub 2013/07/04. PubMed PMID: 23820004; PMCID PMC3778045.

26. Gui J, Liu B, Cao G, Lipchik AM, Perez M, Dekan Z, Mobli M, Daly NL, Alewood PF, Parker LL, King GF, Zhou Y, **Jordt SE**, Nitabach MN. A tarantula-venom peptide antagonizes the TRPA1 nociceptor ion channel by binding to the S1-S4 gating domain. ***Curr Biol***. 2014;24(5):473-83. Epub 2014/02/18. PubMed PMID: 24530065; PMCID PMC3949122.

27. Balakrishna S, Song W, Achanta S, Doran SF, Liu B, Kaelberer MM, Yu Z, Sui A, Cheung M, Leishman E, Eidam HS, Ye G, Willette RN, Thorneloe KS, Bradshaw HB, Matalon S, **Jordt SE**. TRPV4 inhibition counteracts edema and inflammation and improves pulmonary function and oxygen saturation in chemically induced acute lung injury. ***Am J Physiol Lung Cell Mol Physiol***. 2014;307(2):L158-72. Epub 2014/05/20. PubMed PMID: 24838754; PMCID PMC4152165.

28. Ha MA, Smith GJ, Cichocki JA, Fan L, Liu YS, Caceres AI, **Jordt SE***, Morris JB. Menthol attenuates respiratory irritation and elevates blood cotinine in cigarette smoke exposed mice. ***PLoS One***. 2015;10(2):e0117128. Epub 2015/02/14. PubMed PMID: 25679525; PMCID PMC4334501.*(corresponding author)

29. Smith GJ, Cichocki JA, Doughty BJ, Manautou JE, **Jordt SE**, Morris JB. Effects of Acetaminophen on Oxidant and Irritant Respiratory Tract Responses to Environmental Tobacco Smoke in Female Mice. ***Environ Health Perspect***. 2016;124(5):642-50. Epub 2015/10/10. PubMed PMID: 26452297; PMCID PMC4858387.

30. Kaelberer MM, **Jordt SE**. A Method to Target and Isolate Airway-innervating Sensory Neurons in Mice. ***J Vis Exp***. 2016(110). Epub 2016/05/12. PubMed PMID: 27168016; PMCID PMC4911887.

31. Miao S, Beach ES, Sommer TJ, Zimmerman JB, **Jordt SE**. High-Intensity Sweeteners in Alternative Tobacco Products. ***Nicotine Tob Res***. 2016;18(11):2169-73. Epub 2016/05/25. PubMed PMID: 27217475; PMCID PMC5055742.

32. Rothenberg C, Achanta S, Svendsen ER, **Jordt SE**. Tear gas: an epidemiological and mechanistic reassessment. ***Ann N Y Acad Sci***. 2016;1378(1):96-107. Epub 2016/07/09. PubMed PMID: 27391380; PMCID PMC5096012.

33. Fan L, Balakrishna S, Jabba SV, Bonner PE, Taylor SR, Picciotto MR, **Jordt SE**. Menthol decreases oral nicotine aversion in C57BL/6 mice through a TRPM8-dependent mechanism. ***Tob Control***. 2016;25(Suppl 2):ii50-ii4. Epub 2016/11/01. PubMed PMID: 27698211; PMCID PMC5496986.

34. Liu B, Tai Y, Caceres AI, Achanta S, Balakrishna S, Shao X, Fang J, **Jordt SE**. Oxidized Phospholipid OxPAPC Activates TRPA1 and Contributes to Chronic Inflammatory Pain in Mice. ***PLoS One***. 2016;11(11):e0165200. Epub 2016/11/05. PubMed PMID: 27812120; PMCID PMC5094666

35. Liu B, Tai Y, Achanta S, Kaelberer MM, Caceres AI, Shao X, Fang J, **Jordt SE**. IL-33/ST2 signaling excites sensory neurons and mediates itch response in a mouse model of poison ivy contact allergy. ***Proc Natl Acad Sci U S A***. 2016;113(47):E7572-e9. Epub 2016/11/09. PubMed PMID: 27821781; PMCID PMC5127381.

36. Peter J, Kasper C, Kaufholz M, Buschow R, Isensee J, Hucho T, Herberg FW, Schwede F, Stein C, **Jordt SE**, Brackmann M, Spahn V. Ankyrin-rich membrane spanning protein as a novel modulator of transient receptor potential vanilloid 1-function in nociceptive neurons. ***Eur J Pain***. 2017;21(6):1072-86. Epub 2017/02/10. PubMed PMID: 28182310; PMCID PMC5504413.

37. Caceres AI, Liu B, Jabba SV, Achanta S, Morris JB, **Jordt SE**. Transient Receptor Potential Cation Channel Subfamily M Member 8 channels mediate the anti-inflammatory effects of eucalyptol. ***Br J Pharmacol***. 2017;174(9):867-79. Epub 2017/02/28 . PubMed PMID: 28240768; PMCID PMC5387001.

38. Fait BW, Thompson DC, Mose TN, Jatlow P, **Jordt SE**, Picciotto MR, Mineur YS. Menthol disrupts nicotine's psychostimulant properties in an age and sex-dependent manner in C57BL/6J mice. ***Behav Brain Res***. 2017;334:72-7. Epub 2017/07/27. . PubMed PMID: 28743602; PMCID PMC5580257.

39. Tai Y, Wang C, Wang Z, Liang Y, Du J, He D, Fan X, **Jordt SE**, Liu B. Involvement of Transient Receptor Potential Cation Channel Member A1 activation in the irritation and pain response elicited by skin-lightening reagent hydroquinone. ***Sci Rep***. 2017;7(1):7532. Epub 2017/08/10. PubMed PMID: 28790335; PMCID PMC5548750

40. Achanta S, Chintagari NR, Brackmann M, Balakrishna S, **Jordt SE**. TRPA1 and CGRP antagonists counteract vesicant-induced skin injury and inflammation. ***Toxicol Lett***. 2018;293:140-8. Epub 2018/03/15. http://dx.doi.org/10.1016/j.toxlet.2018.03.007. PubMed PMID: 29535050; PMCID PMC5975083.

41. Zhang L, Terrando N, Xu ZZ, Bang S, **Jordt SE**, Maixner W, Serhan CN, Ji RR. Distinct Analgesic Actions of DHA and DHA-Derived Specialized Pro-Resolving Mediators on Post-operative Pain After Bone Fracture in Mice. ***Front Pharmacol***. 2018;9:412. Epub 2018/05/17. PubMed PMID: 29765320; PMCID PMC5938385.

42. Erythropel HC, Kong G, deWinter TM, O'Malley SS, **Jordt SE**, Anastas PT, Zimmerman JB. Presence of High-Intensity Sweeteners in Popular Cigarillos of Varying Flavor Profiles. ***JAMA***. 2018;320(13):1380-3. Epub 2018/10/05. PubMed PMID: 30285168; PMCID PMC6233844.

43. Zheng X, Tai Y, He D, Liu B, Wang C, Shao X, **Jordt SE**, Liu B. ET(A)R and protein kinase A pathway mediate ET-1 sensitization of TRPA1 channel: A molecular mechanism of ET-1-induced mechanical hyperalgesia. ***Mol Pain***. 2019;15:1744806919842473. Epub 2019/04/17. PubMed PMID: 30990108; PMCID PMC6537062.

44. Liu B, Tai Y, Liu B, Caceres AI, Yin C, **Jordt SE**. Transcriptome profiling reveals Th2 bias and identifies endogenous itch mediators in poison ivy contact dermatitis. ***JCI Insight***. 2019;5(14). Epub 2019/06/12. PubMed PMID: 31184997; PMCID PMC6675552.

45. Erythropel HC, Davis LM, de Winter TM, **Jordt SE**, Anastas PT, O'Malley SS, Krishnan-Sarin S, Zimmerman JB. Flavorant-Solvent Reaction Products and Menthol in JUUL E-Cigarettes and Aerosol. ***Am J Prev Med***. 2019;57(3):425-7. Epub 2019/07/31. PubMed PMID: 31358341; PMCID PMC6702051.

46. Erythropel HC, Jabba SV, DeWinter TM, Mendizabal M, Anastas PT, **Jordt SE**, Zimmerman JB. Formation of flavorant-propylene Glycol Adducts With Novel Toxicological Properties in Chemically Unstable E-Cigarette Liquids. ***Nicotine Tob Res***. 2019;21(9):1248-58. Epub 2018/10/20. PubMed PMID: 30335174; PMCID PMC6698951.

47. Gotts JE, **Jordt SE**, McConnell R, Tarran R. What are the respiratory effects of e-cigarettes? ***BMJ***. 2019;366:l5275. Epub 2019/10/02. PubMed PMID: 31570493; PMCID PMC7850161.

48. Jabba SV, **Jordt SE**. Risk Analysis for the Carcinogen Pulegone in Mint- and Menthol-Flavored e-Cigarettes and Smokeless Tobacco Products. ***JAMA Intern Med***. 2019;179(12):1721-3. Epub 2019/09/17. PubMed PMID: 31524930; PMCID PMC6749541.

49. Eissenberg T, Bhatnagar A, Chapman S, **Jordt SE**, Shihadeh A, Soule EK. Invalidity of an Oft-Cited Estimate of the Relative Harms of Electronic Cigarettes. ***Am J Public Health***. 2020;110(2):161-2. Epub 2020/01/09. PubMed PMID: 31913680; PMCID PMC6951374.

50. Kaelberer MM, Caceres AI, **Jordt SE**. Activation of a nerve injury transcriptional signature in airway-innervating sensory neurons after lipopolysaccharide-induced lung inflammation. ***Am J Physiol Lung Cell Mol Physiol***. 2020;318(5):L953-l64. Epub 2020/03/12. PubMed PMID: 32159971; PMCID PMC7272742.

51. Erythropel HC, Anastas PT, Krishnan-Sarin S, O'Malley SS, **Jordt SE**, Zimmerman JB. Differences in flavourant levels and synthetic coolant use between USA, EU and Canadian Juul products. ***Tob Control***. 2020. Epub 2020/04/29. PubMed PMID: 32341193; PMCID PMC7606218.

52. Kuebler WM, **Jordt SE**, Liedtke WB. Urgent reconsideration of lung edema as a preventable outcome in COVID-19: inhibition of TRPV4 represents a promising and feasible approach. ***Am J Physiol Lung Cell Mol Physiol***. 2020;318(6):L1239-l43. Epub 2020/05/14. PubMed PMID: 32401673; PMCID PMC7276984.

53. Achanta S, **Jordt SE**. Transient receptor potential channels in pulmonary chemical injuries and as countermeasure targets. ***Ann N Y Acad Sci***. 2020;1480(1):73-103. Epub 2020/09/07. PubMed PMID: 32892378; PMCID PMC7933981.

54. Jabba SV, Diaz AN, Erythropel HC, Zimmerman JB, **Jordt SE**. Chemical Adducts of Reactive Flavor Aldehydes Formed in E-Cigarette Liquids Are Cytotoxic and Inhibit Mitochondrial Function in

Respiratory Epithelial Cells. ***Nicotine Tob Res***. 2020;22(Suppl 1):S25-s34. Epub 2020/12/16. doi: 10.1093/ntr/ntaa185. PubMed PMID: 33320255. PMCID: PMC8224836

55. Ye L, Bae M, Cassilly CD, Jabba SV, Thorpe DW, Martin AM, Lu HY, Wang J, Thompson JD, Lickwar CR, Poss KD, Keating DJ, **Jordt SE**, Clardy J, Liddle RA, Rawls JF. Enteroendocrine cells sense bacterial tryptophan catabolites to activate enteric and vagal neuronal pathways. ***Cell Host Microbe***. 2021;29(2):179-96.e9. Epub 2020/12/23. doi: 10.1016/j.chom.2020.11.011. PubMed PMID: 33352109; PMCID PMC7997396.

56. **Jordt SE**. Synthetic nicotine has arrived. ***Tob Control***. 2023 Apr;32(e1):e113-e117. doi: 10.1136/tobaccocontrol-2021-056626. Epub 2021/09/07. Pubmed PMID: 34493630. PMCID: PMC8898991

57. Jabba SV, Erythropel HC, Torres DG, Delgado LA, Woodrow JG, Anastas PT, Zimmerman JB, **Jordt SE**. Synthetic Cooling Agents in US-marketed E-cigarette Refill Liquids and Popular Disposable Ecigarettes: Chemical Analysis and Risk Assessment. ***Nicotine Tob Res***. 2022 Feb 15:ntac046. doi: 10.1093/ntr/ntac046. Online ahead of print. Pubmed PMID: 35167696. PMCID: PMC9980044

58. Marcus AD, Achanta S, **Jordt SE**. Protocol for non-invasive assessment of spontaneous movements of group-housed animals using remote video monitoring. ***STAR Protoc***. 2022 Apr 14;3(2):101326. doi: 10.1016/j.xpro.2022.101326. eCollection 2022 Jun 17. Pubmed PMID: 35479115; PMCID: PMC9036393.

59. Leventhal AM, Tackett AP, Whitted L, **Jordt SE**, Jabba SV. Ice flavours and non-menthol synthetic cooling agents in e-cigarette products: a review. ***Tob Control***. 2022 Apr 28:tobaccocontrol-2021-057073. doi: 10.1136/tobaccocontrol-2021-057073. Online ahead of print. Pubmed PMID: 35483721. PMCID: PMC9613790.

60. Rezk-Hanna M, Talhout R, **Jordt SE**. Sugars and Sweeteners in Tobacco and Nicotine Products: FDA Regulatory Implications. ***Nicotine Tob Res***. 2023 Mar 22;25(4):838-840.doi: 10.1093/ntr/ntac222. Pubmed PMID: 36148496. PMCID: PMC10032193 .

61. Jabba SV, Erythropel HC, Woodrow JG, Anastas PT, O'Malley SS, Krishnan-Sarin S, Zimmerman JB, **Jordt SE.** Synthetic Cooling Agent in Oral Nicotine Pouch Products Marketed as "Flavor-Ban Approved". ***Tob Control.*** 2023 Jun 28;tc-2023-058035.doi: 10.1136/tc-2023-058035. Pubmed PMID: 37380351. PMCID: PMC10753027.

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63. Achanta S, Chintagari N, Balakrishna S, Liu B, **Jordt SE**. Pharmacologic Inhibition of TRPA1 Counteract CS Tear Gas Agent-induced Cutaneous Injuries. ***J Pharmacol Exp Ther***. 2023 Dec 1, doi.org/10.1124/jpet.123.001666. Pubmed PMID: 38050077. PMCID: PMC10801748.

64. Wu PY, Caceres AI, Chen J, Sokoloff J, Huang M, Baht GS, Nackley AG, **Jordt SE***, Terrando N.* Vagus nerve stimulation rescues persistent pain following orthopedic surgery in adult mice.

Pain 2024. 165(8):e80-e92. doi.org/10.1097/j.pain.0000000000003181. Pubmed PMID: 38422485 PMCID: PMC11247455 (*equally contributing authors)

65. **Jordt SE**, Jabba SV, Zettler PJ, Berman ML. Spree Bar, a vaping system delivering a synthetic nicotine analogue, marketed in the USA as 'PMTA exempt'. ***Tob Control***. 2024 Mar 18:tc-2023-058469. doi: 10.1136/tc-2023-058469. Pubmed PMID: 38499343. PMCID: PMC11408701
66. Achanta S, Gentile MA, Albert CJ, Schulte KA, Pantazides BG, Crow BS, Quiñones-González J, Perez JW, Ford DA, Patel RP, Blake TA, Gunn MD, **Jordt SE** Recapitulation of Human Pathophysiology and Identification of Forensic Biomarkers in a Translational Swine Model of Chlorine Inhalation Injury. ***Am J Physiol Lung Cell Mol Physiol.*** 2024 2024 Apr 1;326(4):L482-L495. doi: 10.1152/ajplung.00162.2023 Pubmed PMID: 38318664. PMCID: PMC11281795.
67. Jabba SV, **Jordt SE**. Marketing of nicotinamide as nicotine replacement in electronic cigarettes and smokeless tobacco. ***Tob Prev Cessat*** . 2024 Aug 10. doi: 10.18332/tpc/187767. Pubmed PMID: 39132445. PMCID: PMC11295357
68. Erythropel HC, Jabba SV, Silinski P, Anastas PT, Krishnan-Sarin S, Zimmerman JB, **Jordt SE**. Variability in Constituents of E-Cigarette Products Containing Nicotine Analogues. ***JAMA***. 2024 Sep 3;332(9):753-755. doi: 10.1001/jama.2024.12408. Pubmed PMID: 39110443. PMCID: PMC11307159
69. **Jordt SE**, Jabba SV. Introduction of Nicotine Analogue-Containing Oral Pouch Products in the United States. ***Tob Prev Cessat***. 2024 2024 Nov 25:10. doi: 10.18332/tpc/195621. Pubmed PMID: 39588526. PMCID: PMC11587819
70. **Jordt SE**, Jabba SV. California's Visionary Tobacco Bill – Will the FDA Follow ? ***JAMA***. 2024 Dec 2. doi: 10.1001/jama.2024.22986. Pubmed PMID: 39621329
71. Jabba SV, Silinski P, Yang AY, Ouyang W, **Jordt SE**. Artificial Sweeteners in US-Marketed Oral Nicotine Pouch Products: Correlation with Nicotine Contents and Effects on Product Preference. ***Nicotine Tob Res.*** 2024 Dec 5:ntae293. doi: 10.1093/ntr/ntae293. PMID: 39656927
72. Robichaud MO, Talbot EM, Ganz O, Mercincavage M, Erythropel HC, Zimmerman JB, Jabba SV, **Jordt SE**, Delnevo CD. Marketing for Sensa: a 'zero nicotine vapor product' from a major tobacco company. ***Tob Control.*** 2025 Feb 16:tc-2024-059074. doi: 10.1136/tc-2024-059074. PMID: 39956632

    - Letters and invited editorials (in refereed journals)

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73. Achanta S, **Jordt SE**. TRPA1: Acrolein meets its target. ***Toxicol Appl Pharmacol***. 2017;324:45-50. Epub 2017/03/13. PubMed PMID: 28284857; PMCID PMC5528158.
74. Liu B, **Jordt SE**. Cooling the Itch via TRPM8. ***J Invest Dermatol***. 2018;138(6):1254-6. Epub 2018/05/26. PubMed PMID: 29793621; PMCID PMC6301073.

75. **Jordt SE**, Jabba S. Sweeteners are added to modify consumer behaviour. ***BMJ***. 2019;364:l366. Epub 2019/01/27. PubMed PMID: 30683659; PMCID PMC6890469

76. **Jordt SE**, Jabba S. Tobacco industry's investment in sweetness comes full circle. ***BMJ***. 2019;365:l2338. Epub 2019/06/12. PubMed PMID: 31182501; PMCID PMC6890453.

77. Jabba SV, **Jordt SE**. Estimating Fluid Consumption Volumes in Electronic Cigarette Use-Reply. ***JAMA Intern Med***. 2020;180(3):468-9. Epub 2020/03/03. PubMed PMID: 32119051; PMCID PMC7341681.

78. Jabba SV, **Jordt SE**. Turbocharged Juul device challenges European tobacco regulators. ***Eur Respir J***. 2020;56(2). Epub 2020/08/21. PubMed PMID: 32817206; PMCID PMC7895680.

79. **Jordt SE**. TRPA1: An asthma target with a zing. ***J Exp Med***. 2021;218(4). Epub 2021/02/25. doi: 10.1084/jem.20202507. PubMed PMID: 33625497. PMCID PMC7918757.

- Invited scientific reviews (in refereed journals)

80. **Jordt SE**, McKemy DD, Julius D. Lessons from peppers and peppermint: the molecular logic of thermosensation. ***Curr Opin Neurobiol***. 2003;13(4):487-92. Epub 2003/09/11. PubMed PMID: 12965298.

81. Bessac BF, **Jordt SE**. Breathtaking TRP channels: TRPA1 and TRPV1 in airway chemosensation and reflex control. ***Physiology (Bethesda)***. 2008;23:360-70. Epub 2008/12/17. PubMed PMID: 19074743; PMCID PMC2735846.

82. Moore C, Gupta R, **Jordt SE**, Chen Y, Liedtke WB. Regulation of Pain and Itch by TRP Channels. ***Neurosci Bull***. 2018;34(1):120-42. Epub 2017/12/29. PubMed PMID: 29282613; PMCID PMC5799130.

83. Achanta S, **Jordt SE**. Toxic effects of chlorine gas and potential treatments: a literature review. ***Toxicol Mech Methods***. 2021;31(4):244-56. Epub 2019/09/19. PubMed PMID: 31532270; PMCID PMC7108975.

84. Krishnan-Sarin S, O'Malley SS, Green BG, **Jordt SE**. The science of flavour in tobacco products. ***World Health Organ Tech Rep Ser***. 2019 Oct 24;1015:125-142. PMID: 36743396 PMCID: PMC9896977.

85. Berman ML, Zettler PJ, **Jordt SE**. Synthetic nicotine: science, global legal landscape and regulatory considerations ***World Health Organ Tech Rep Ser***. 2023 Aug 23;1041:35-60. PMID: 37745838 PMCID: PMC10516533

- Position and background papers (e.g., guidelines, consensus statements)

86. Summerhill EM, Hoyle GW, **Jordt SE**, Jugg BJ, Martin JG, Matalon S, Patterson SE, Prezant DJ, Sciuto AM, Svendsen ER, White CW, Veress LA. An Official American Thoracic Society Workshop Report: Chemical Inhalational Disasters. Biology of Lung Injury, Development of Novel

Therapeutics, and Medical Preparedness. ***Ann Am Thorac Soc***. 2017;14(6):1060-72. Epub 2017/04/19. PubMed PMID: 28418689; PMCID PMC5529138.

87. Rebuli ME, Rose JJ, Noël A, Croft DP, Benowitz NL, Cohen AH, Goniewicz ML, Larsen BT, Leigh N, McGraw MD, Melzer AC, Penn AL, Rahman I, Upson D, Crotty Alexander LE, Ewart G, Jaspers I, **Jordt SE**, Kligerman S, Loughlin CE, McConnell R, Neptune ER, Nguyen TB, Pinkerton KE, Witek TJ Jr. The E-cigarette or Vaping Product Use-Associated Lung Injury Epidemic: Pathogenesis, Management, and Future Directions: An Official American Thoracic Society Workshop Report. ***Ann Am Thorac Soc***. 2023 Jan;20(1):1-17. doi: 10.1513/AnnalsATS.202209-796ST. PMID: 36584985; PMCID: PMC9819258

88. Lang AE, Kathuria H, Braillon A, Ewart G, Dagli E, Stepp EL, Galiatsatos P, Deepak J, **Jordt SE**, Hayes D Jr. England Is Handing Out E-Cigarettes: Is the 'Swap to Stop' Tobacco Control Scheme Harm Reduction or Harm Production? ***Am J Respir Crit Care Med*** . 2023 Sep 8. doi: 10.1164/rccm.202308-1354VP. PMID: 37682082

89. U.S. Department of Health and Human Services. **Jordt SE** (contributing author) Eliminating Tobacco-Related Disease and Death: Addressing Disparities—A Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. 2024 Nov 19.

B. Books (indicate as author or editor):

- Book chapters (as author)

1. **Jordt, SE** TRPV1, Regulation by Protons. In Gebhardt GF, Schmidt RF, editors. Encyclopedia of Pain., Berlin, Springer. 2013. pp. 2575-2578
2. **Jordt, SE** TRPV1, Regulation by Nerve Growth Factor, ibid. , pp. 2574-2575
3. Alexander SPH, Mathie AA, Peters JA, Veale EL, Striessnig J, Kelly E, Armstrong JF, Faccenda E, Harding SD, Davies JA, Aldrich RW, Attali B, Baggetta AM, Becirovic E, Biel M, Bill RM, Caceres AI, Catterall WA, Conner AC, Davies P, De Clerq K, Delling M, Di Virgilio F, Falzoni S, Fenske S, Fortuny-Gomez A, Fountain S, George C, Goldstein SAN, Grimm C, Grissmer S, Ha K, Hammelmann V, Hanukoglu I, Hu M, Ijzerman AP, Jabba SV, Jarvis M, Jensen AA, **Jordt SE**, Kaczmarek LK, Kellenberger S, Kennedy C, King B, Kitchen P, Liu Q, Lynch JW, Meades J, Mehlfeld V, Nicke A, Offermanns S, Perez-Reyes E, Plant LD, Rash L, Ren D, Salman MM, Sieghart W, Sivilotti LG, Smart TG, Snutch TP, Tian J, Trimmer JS, Van den Eynde C, Vriens J, Wei AD, Winn BT, Wulff H, Xu H, Yang F, Fang W, Yue L, Zhang X, Zhu M. The Concise Guide to PHARMACOLOGY 2023/24: Ion channels. ***Br J Pharmacol.*** 2023 Oct;180 Suppl 2:S145-S222. doi: 10.1111/bph.16178. PMID: 38123150

C. Digital output, other forms of public dissemination (other than publications / presentations):

- Social media

  Bluesky: @sejordt.bsky.social

- Traditional media (e.g., broadcast, news media)

Interviews with Dr. Jordt and reports on Jordt lab research in national and international media

1. 2004-01-01 **Der Spiegel**, Germany Scharfe Sachen - Chili und Senf lösen Feueralarm aus
2. 2007-11-01 **The White House** - President George W. Bush President George W. Bush stands amidst recipients of the 2006 Presidential Early Career Awards for Scientists and Engineers during a photo opportunity Thursday, Nov. 1, 2007, on the North Portico of the White House. (Dr. Jordt in top row, 4th from left)
3. 2010-09-07 **The Wall Street Journal** Why Does It Hurt So Bad? Scientists Find Receptors That Convey Pain to the Brain
4. 2011-09-05 **Washington Post** How your harsh reaction to horseradish may lead to new pain-managing medicines
5. 2012-11-05 **Frankfurter Allgemeine Zeitung**, Germany Gelobt sei, was scharf macht
6. 2014-06-21 **Science Magazine** Nervous system may hold key to treating asthma attacks
7. 2014-08-14 **Washington Post** Tear gas is a chemical weapon banned in war. But Ferguson police shoot it at protesters.
8. 2014-08-15 **Scientific American** Rubber Bullets in Missouri Clash Highlight Militarization of America's Police
9. 2016-11-10 **Scientific American** Poison Ivy's Itch Can Be Calmed By A Protein
10. 2018-06-23 **Le Monde**, France Gaz lacrymogène : pourquoi son utilisation massive pose question
11. 2018-10-20 **CNN**, Chemical changes in e-cigarette liquids can make them irritants, study says
12. 2018-10-20 **Il Messagero**, Italy Nelle e-cig si forma un nuovo e dannoso composto chimico
13. 2018-11-16 **The New York Times** The Price of Cool: A Teenager, a Juul and Nicotine Addiction
14. 2018-11-26 **Newsweek** What Is Tear Gas? Side Effects of 'Chemical Warfare Agent' Used on Migrants at Border
15. 2018-11-27 **USA Today** Tear gas: 'Harsh, terrifying' and legal to use on civilians (and immigrants)
16. 2018-11-29 **CNN** This is how tear gas affects children

17. 2018-11-29 **Scientific American** How Tear Gas Works: A Rundown of the Chemicals Used on Crowds
18. 2019-05-11 **Liberation**, France Effets persistants, rumeurs de cyanure : les gaz lacrymo utilisés contre les manifestants
19. 2019-09-19 **Los Angeles Times** Hoodies, watches and other camouflaged vaping devices confound parents, schools
20. 2019-09-21 **ABC News** High levels of cancer-causing chemical found in mint and menthol e-cigarettes: Study
21. 2019-12-01 **CNN** Experts warn effects of tear gas on Hong Kong population
22. 2019-12-04 **Time Magazine** Tear Gas Is Now a Fact of Life in Hong Kong. Residents Are Wondering What It's Doing to Their Health
23. 2020-06-03 **Washington Post** If You're Going Out To Protest During The Pandemic, Be Careful Of The Coronavirus Risk
24. 2020-06-03 **New York Times** Trump Defends Cops as US Park Police Deny Using Tear Gas Before President's Walk to Church
25. 2020-06-05 **National Public Radio (NPR)** Tear-Gassing Protesters During An Infectious Outbreak Called 'A Recipe For Disaster'
26. 2020-06-05 **National Geographic** From tear gas to rubber bullets, here's what 'nonlethal' weapons can do to the body
27. 2020-06-07 **CBS17** Tear gas could spread COVID-19 or make infection easier, researchers say
28. 2020-06-16 **New York Times** Here Are the 97 U.S. Cities Where Protesters Were Tear-Gassed
29. 2020-08-26 **Fast Company** Portland protesters are reporting women's health problems from tear gas: What's going on?
30. 2020-09-03 **Daily Mail**, UK Chemicals in e-cigarettes mix to form entirely new combinations that are toxic to lung cells and blood vessels, scientists discover
31. 2020-09-03 **La Repubblica**, Italy Attenti alle e-cig: i liquidi creano nuovi composti tossici per cuore e polmoni
32. 2021-03-20 **Washington Post** Current Smokers at Higher Risk of Developing Severe COVID-19, Study Finds
33. 2021-05-01 **New York Times** Hundreds Reported Abnormal Menstruation After Exposure to Tear Gas, Study Finds
34. 2021-10-04 **@dukemedschool** Two @dukemedschool faculty members -- Sven-Eric Jordt, PhD, and Jorg Grandl, PhD -- had the opportunity to train under today's NobelPrize winners: David Julius and Ardem Patapoutian, respectively.

35. 2021-12-07 **Nobelprize.org**: David Julius - Nobel Prize Lecture - 28:32 & 37:35
36. 2022-03-08 **New York Times** The Loophole That's Fueling a Return to Teenage Vaping
37. 2022-04-28 **ABC11** 'They make you addicted faster': Menthol cigarette ban proposal could further lower smoking rates
38. 2022-09-08 **STAT**+ Tobacco giant Philip Morris is investing billions in health care. Critics say it's peddling cures for its own poison
39. 2022-10-04 **CBS News** Tear gas video triggers investigation into Navy SEAL selection course
40. 2023-01-11 **New York Times** R.J. Reynolds Pivots to New Cigarette Pitches as Flavor Ban Takes Effect
41. 2023-01-30 **South China Morning Post** (Hong Kong) Peru's protest 'deactivators' run toward tear gas to stop it
42. 2023-10-11 **U.S.News & World Report** As Menthol Ban Nears, Big Tobacco Is Adding Synthetic Version to Cigarettes Instead
43. 2023-10-15 **CNN** FDA takes 'momentous' step toward banning menthol cigarettes and flavored cigars
44. 2023-11-01 **The Lancet Respiratory Medicine** US Government finally moves to ban menthol cigarettes
45. 2024-01-16 **CNN** Biden administration must decide soon on menthol cigarettes or risk proposed ban going up in smoke, advocates say
46. 2024-01-16 **NPR National Public Radio** The fight over banning menthol cigarettes has a long history steeped in race
47. 2024-05-29 **Reuters** Exclusive: Nicotine-like chemicals in U.S. vapes may be more potent than nicotine, FDA says
48. 2024-08-08 **U.S. News & World Report** Are Vape Makers Using Dubious Nicotine 'Mimics' to Bypass Regulations?

D. Non-refereed publications (non-refereed publications refer to published manuscripts which are not subject to a system of critical review – articles are often solicited by the publisher):

Popular science publications :

Zimmerman JB, Erythropel HC, Muellers TD, Petrovic PV, O'Malley SS, Krishnan-Sarin S, Jabba SV, **Jordt SE**, Anastas PT. How Tobacco Companies Use Chemistry to Get around Menthol Bans. ***Sci. Am.*** 2025 Jan 1;332(1):71. PMID: 39688992

E. Other forms of scholarship dissemination (not included above):

Federal Regulatory Docket comment submissions, requested by the funders (FDA, NIDA, NIEHS, NHLBI) as part of the Jordt laboratory's tobacco regulatory science effort:

1. 04/01/2014 FDA-2013-N-0521 Menthol in Cigarettes, Tobacco Products

2. 08/08/2018 FDA-2017-N-6565 Regulation of Flavors in Tobacco Products 1

3. 08/08/2018 FDA-2017-N-6565 Regulation of Flavors in Tobacco Products 2

4. 12/20/2018 FDA-2017-N-4678 Modified Risk Tobacco Product Applications: Applications for Six Camel Snus Smokeless Tobacco Products Submitted by R.J. Reynolds Tobacco Company

5. 05/07/2019 FDA-2019-D-0661 Modifications to Compliance Policy for Certain Deemed Tobacco Products; Draft Guidance for Industry; Availability

6. 10/30/2019 FDA-2017-N-6565 Regulation of Flavors in Tobacco Products

7. 06/19/2020 FDA-2020-N-0597 Request for Information on Electronic Nicotine Delivery Systems (ENDS) and Other Vaping Products Associated With Pulmonary Illnesses

8. 08/03/2022 FDA-2021-N-1309 Tobacco Product Standard for Characterizing Flavors in Cigars

9. 08/03/2022 FDA-2021-N-1349 Tobacco Product Standard for Menthol in Cigarettes

Appointments and Recognition:

A. Scientific reviewer (e.g., editorial boards, study section review group):

Ad hoc manuscript reviewer for journals:
Addiction
American Journal of Physiology – Lung Cellular & Molecular Biology
American Journal of Respiratory and Critical Care Medicine (AJRCCM)
American Journal of Respiratory Cellular & Molecular Biology (AJRCMB)
Annals of the American Thoracic Society
Annals of the New York Academy of Sciences
Applied in vitro Toxicology
Biophysical Journal
British Journal of Pharmacology
Cell
Cell Reports
Cellular & Molecular Neurobiology
Chemical Research in Toxicology
Cough

eLife
EMBO Molecular Medicine
eNeuro
Environmental Health Perspectives
Environmental Research
European Respiratory Journal
FASEB Journal
JCI Insight
Journal of the American Medical Association (JAMA)
Journal of Biological Chemistry
Journal of Clinical Investigation (JCI)
Journal of Experimental Medicine
Journal of Investigative Dermatology
Journal of Neuroscience
Journal of Pharmacology and Experimental Therapeutics (JPET)
Journal of Physiological Sciences
Journal of Physiology
Nature
Neuron
Neuroreport
Neuroscience Bulletin
Neuroscience Letters
Neurotoxicology
Nicotine and Tobacco Research (also guest editor for 2022 Special Issue on polydrug use)
Pain
Physiology
PLOS Genetics
PLOS One
Proceedings of the National Academy of Sciences
Science
Science Translational Medicine
Scientific Reports
Thorax
Tobacco Control
Toxicology Letters

NIH study section or special emphasis panel service:

2009 ZRG1-F02B-Y-20L (NRSA Fellowship Applications, NIH Center for Scientific Review)

09.29.-09.30.2010 ZRG1-IFCN-B-03M, Internet assisted review (R01 applications in sensory biology)

02.22-02.23.2011 ZRG1-IFCN-B-51, Internet assisted review (R01 applications in sensory biology)

06.01-06.02.2011 ZRG1-IFCN-B-02M, Internet assisted review (R01 applications in sensory biology)

03.22.2012 Member, MDCN J54 / J50, CounterACT special emphasis panel, Alexandria, MD

07.19.-07.20.2012 ZAT1 SM (25), NCCAM, Internet assisted review (Asthma mechanisms)

10.22.2012 NIH Intramural Center for Tobacco Regulatory Science

01.31.2013 ZDC1 SRB-R (39). Clinical Research Center Grants (P50), FDA-sponsored tobacco regulatory research

03.19.2013 ZRG1 MDCN-J54 / J50 CounterACT special emphasis panel, Washington, DC

06.04.2013 ZRG1 MDCN-B(55) CounterACT special emphasis panel, Washington, DC

07.11.2014 ZRG1 MDCN-B(55) CounterACT special emphasis panel, Washington, DC

07.16.2015 ZRG1 MDCN-B(55) CounterACT Special Emphasis Panel, Baltimore, MD

07.08.2016 ZRG1 MDCN-B(55) CounterACT Special Emphasis Panel, Baltimore, MD

06.21.2018 ZRG1 MDCN-B(55) CounterACT Special Emphasis Panel, Baltimore, MD

12.04-05.2018 ZRG1-CVRS-N(03): R21 and R01 applications on Electronic Nicotine Delivery Systems: Basic Mechanisms of Health Effects

03.22-23 2019 ZRG1 CVRS-H: R21 and R01 applications on Electronic Nicotine Delivery Systems: Basic Mechanisms of Health Effects.

03.27.2019 ZAT1 AJT 10 NCCIH Training and Education Review Panel (CT) Review Panel

05.30.2019 2019/08 ZRG1 BST-T (55) R RFA Panel: Tobacco Regulatory Biomedical Science - Basic

10.11.2019 ZGM1 RCB-5 (SC) S, NIGMS Support of Competitive Research (SCORE) Program

07.09.2020 ZRG1 F02B-E 20 L, Fellowships: Sensory and Motor Neuroscience, Cognition and Perception

11.03.-04.2020 ZRG1 MDCN-B (55) R CounterACT R21s

12.17.-18.2020 ZRG1 CVRS-H 50R NIH-CSR-E-Cigarettes-Basic Mechanisms of Health Effects R01

03.17.-18.2021 ZAT1 JM (12) R SEP the NIH Blueprint for Neuroscience Research: Functional Neural Circuits of Interoception (R01, Clinical Trial Not Allowed) (NCCIH)

06.08.2021 2021-10 ZES1 LWJ-S (IR) 1 Mechanisms Mediators of Environmentally Induced Inflammation R01

12.14.-15.2021 ZRG1 CVRS-N(50) Electronic Nicotine Delivery Systems: Basic Mechanisms of Health Effects R01

03.09.2022 ZRG1 VH-K (90) ENDS & Tobacco Use Special Emphasis Panel, K01-K99

06.21.2023 ZRG1 ICN-E (56) Understanding Tobacco product toxicology and abuse liability

07.25.2023 2023/10 ZES1 ARL-S (R1) 1 NIEHS Outstanding New Environmental Scientist (ONES)

08.11.2023 2023/10 ZES1 ARL-W (21) 1 Time-Sensitive Research Opportunities in Environmental Health Sciences

10.22.-10.23.2024 2025/01 EDD Environmental Determinants of Disease Study Section

12.02.2024 2025/01 ZRG1 KUDS-W (91) S Topics in Environmental Determinants of Disease

Internal grant reviewing activity

2017 Reviewer for Duke Bridge Funding Committee

B. Professional societies, service organizations (list membership status, leadership positions, committee membership, etc.):

2002-present	Member, Society for Neuroscience (SFN)
2002-present	Member, International Association for the Study of Pain (IASP)
2009-present	Member, Society of Toxicology (SOT)
2010-present	Member, American Thoracic Society (ATS)
2011-present	Member, Society for Research on Nicotine and Tobacco (SRNT)
2012-present	Member, Association for Chemoreception Sciences (AChemS)
2012-2013	Delegate, Planning Committee, Environmental and Occupational Health (EOPH) Assembly, American Thoracic Society (ATS)
2013-2019	Delegate, Program Committee, Environmental and Occupational Health (EOPH) Assembly, American Thoracic Society (ATS)
2013-present	Member, Executive Committee, Terrorism and Inhalation Disaster Section (TID), American Thoracic Society (ATS)
2017-19	Chair, Terrorism and Inhalation Disaster Section, American Thoracic Society (ATS)
2018-19	Executive Committee, Environmental and Occupational Health (EOPH) Assembly, American Thoracic Society (ATS)
2019-2020	Member, Program Committee, Environmental and Occupational Health (EOPH) Assembly, American Thoracic Society (ATS)
2019	Chair, Nominating Committee, Terrorism and Inhalation Disaster Section, American Thoracic Society (ATS)
2019-2022	Co-Chair, Basic Science Network, Society for Research on Nicotine and Tobacco (SRNT)
2020-present	Member, Tobacco Task Force (Basic Research), American Thoracic Society (ATS)
2021-present	Member, Tobacco Action Committee, American Thoracic Society (ATS)
2022	NGO Delegate of the American Thoracic Society (ATS) at the 27th Conference of State Parties of the Organization for the Prohibition of Chemical Weapons (OPCW), The Hague, Netherlands

2022-present	Member, Planning Committee, Environmental and Occupational Health (EOPH) Assembly, American Thoracic Society (ATS)
2022-present	Member, Advisory Committee, Basic Science Network, Society for Research on Nicotine and Tobacco (SRNT)
2022-present	Member, Tobacco Regulatory Science Working Group, Society for Research on Nicotine and Tobacco
2023	NGO Delegate of the American Thoracic Society (ATS) at the 5th Review Conference (RC-5) of the Organization for the Prohibition of Chemical Weapons (OPCW), The Hague, Netherlands
2023	NGO Delegate of the American Thoracic Society (ATS) at the 28th Conference of State Parties of the Organization for the Prohibition of Chemical Weapons (OPCW), The Hague, Netherlands

C. Advisory and consultant appointments (include government, non-government organizations, life science companies, private organizations, etc.):

2006-18	Member, Scientific Advisory Board, Hydra Biosciences LLC, Cambridge, MA *TRP ion channel inhibitors for pain, inflammation and anxiety*
2008	Forrest Laboratories, LLC, Jersey City, NJ *TRP ion channel inhibitors for pain*
2008	Health Effects Institute, Research Planning Workshop, Boston, MA *Mechanisms of respiratory irritation by environmental pollutants*
2009	Ono Pharmaceuticals, Japan *Bioactive lipids and their targets*
2011	Cubist Pharmaceuticals, Lexington, MA *Development of TRPA1 inhibitors for pain treatment*
2011	Boehringer Ingelheim, Biberach, Germany *TRP inhibitors for treatment of asthma*
2011	Abbott Laboratories, Chicago, IL *TRPA1 inhibitors for pain*
2018	Sanofi Pharma, Cambridge MA *Treatment of dysphagia*
2020-21	Research Institute for Fragrance Materials (RIFM) *Sensitizing properties of fragrance chemicals*

2022-23 Advisor, World Health Organization (WHO) Study Group on Tobacco Product Regulation (TobReg)

2023-28 Voting Member, Tobacco Products Scientific Advisory Committee (TPSAC) United States Food and Drug Administration (FDA)

D. Scholarly societies (Alpha Omega Alpha, Sigma Xi, Phi Beta Kappa, etc.):

German Academic Scholarship Foundation

E. Professional awards and recognition:

1992-94 Scholarship, German Academic Scholarship Foundation, Bonn, Germany

1994 Permanent Fellow, German Academic Scholarship Foundation, Bonn, Germany

1998-2001 Postdoctoral Fellowship, German Academy of Sciences, Leopoldina

2003 Young Investigator Award, European Society for Neurochemistry, Warsaw, Poland

2006 Outstanding New Environmental Scientist Award (ONES), National Institute of Environmental Health Sciences

2007 Presidential Early Career Award for Scientists and Engineers (PECASE), President of the United States

2007 Early Excellence Award, Sandler Foundation for Asthma Research (renamed American Asthma Foundation), San Francisco, USA

2010 Extension Award - American Asthma Foundation, San Francisco, USA

2019 Leading Edge in Basic Science Award – Society of Toxicology, Baltimore, USA

2022 Service Award – Society for Research on Nicotine and Tobacco (SRNT)

2024 Fellow - Society for Research on Nicotine and Tobacco (SRNT)

Research support

Current:

Project title:	Pulmonary cell fate and lung repair in rodent and porcine models of chlorine and phosgene inhalation injuries
Grant number:	R01ES034387
PIs:	Sven-Eric Jordt, Satya Achanta
Role:	Multi-PI
Funding source:	NIH / NIEHS
Duration:	09/02/2022 – 08/31/2025
Project synopsis:	This project will characterize the cell biological basis of pulmonary injury and repair in mouse and pig models of chlorine and phosgene inhalation injury. Stem cell and stem cell niche fate will be monitored and mechanisms explored to improve cell survival and re-seeding for epithelial repair.

Funding source:	NIH/NIDA/FDA
Grant number:	U54DA036151
Title:	Yale Center for the Study of Tobacco Product Use and Addiction: Flavors, Nicotine and Other Constituents (YCSTP)
PI:	Suchitra Krishnan-Sarin, Ph.D., Stephanie O'Malley, Ph.D.
Role:	Project Co-Director, Project 1 (subcontract from Yale University)
Duration:	09/01/2023 – 08/31/2028
Project synopsis:	This project investigates the behavioral and toxicological effects of synthetic nicotine isomers, synthetic cooling agents and sweeteners on initiation of nicotine use, and on long-term use after intermittent use in adolescence, using mouse behavioral paradigms.

Funding source:	NIH/NIDA/FDA
Grant number:	R01DA060884
Project title:	Impact of new tobacco product design and synthetic additives on use initiation and preference behavior
PIs:	Sven-Eric Jordt
Funding source:	NIH/NIDA
Duration:	08/15/2024-07/31/2028
Project synopsis:	This project examines the chemical composition, physiological and behavioral effects of tobacco products introduced to evade federal and state regulations, including "non-menthol" cigarettes containing synthetic cooling agents, and "tobacco-free" oral nicotine pouches.

Completed:

Project title:	Ion Channels in Airway Sensory Nerve Endings as Mediators of the Irritant Effects of Acrolein
Grant number:	-
PI:	Sven-Eric Jordt
Funding source:	Health Effects Institute (HEI)
Duration:	05/01/2006-04/31/2007
Project synopsis:	

Project title:	Sensory Irritant Receptors in the Pathogenesis of Smoking-Induced Lung Disease
Grant number:	2007-0161 BIOMED
PI:	Sven-Eric Jordt
Funding source:	Department of Public Health, State of Connecticut
Duration:	07/01/2006-12/31/2008
Project synopsis:	

Project title:	Sensory Chemoreceptors in Asthma and Airway Hyperresponsiveness
Grant number:	-
PI:	Sven-Eric Jordt, Ph.D.
Funding source:	American Asthma Foundation (formerly Sandler Foundation for Asthma Research)
Duration:	08/01/2007 – 07/31/2010
Project synopsis:	Study the role of TRP ion channels in sensory neurons in a mouse model of asthma, using different mouse strains and TRP-deficient mice; characterization of the pulmonary inflammatory response, and pulmonary mechanics.

Project title: (Extension)	Sensory Chemoreceptors in Asthma and Airway Hyperresponsiveness
Grant number:	10-JORD-EX1
PI:	Sven-Eric Jordt, Ph.D.
Funding source:	American Asthma Foundation (formerly Sandler Foundation for Asthma Research)
Duration:	07/01/2010 – 06/30/2011
Project synopsis:	Examine the efficacy of novel TRPA1 inhibitors in mouse environmental asthma models

Project title:	Novel Analgesics from Australian Funnel-Web Spider Venom
Grant number:	R21NS058330
PI:	Michael Nitabach, Ph.D., J.D., Department of Physiology, Yale University School of Medicine
Your role:	Co-PI

Funding source:	NIH/NINDS
Duration:	05/15/2009 – 04/30/2011
Project title:	Mechanisms of Chlorine Hypersensitivity in Asthma (Sub-project)
Grant number:	U54ES017218
PI:	Sadis Matalon, Ph.D., University of Alabama, Birmingham, AB
Your role:	Project-PI (subcontract to Yale University)
Funding source:	NIH/NIEHS
Duration:	09/01/2008 – 08/31/2011
Project title:	Targeting Injury Pathways to Counteract Pulmonary Agent and Vesicant Toxicity
Grant number:	U01ES015674-07S1 (Supplement)
PI:	Sven-Eric Jordt
Funding source:	NIH/NIEHS
Duration:	09/01/2012 – 05/31/2013
Project synopsis:	Investigation of mechanisms of cutaneous and pulmonary injury by chloropicrin
Project title:	TRPA1 Channels in Sensory Neurons as Targets for Environmental Irritants
Grant number:	R01ES015056
PI:	Sven-Eric Jordt, Ph.D.
Funding source:	NIH/NIEHS
Duration:	09/01/2006 – 10/31/2013
Project synopsis:	Exploring the role of TRPA1 receptors in the detection of aldehydes and other environmental irritants by sensory neurons, neurogenic inflammation and chronic inflammation models
Project title:	Accelerating Inflammation Resolution to Counteract Chemical Injury
Grant number:	R21ES022875
PI:	Sven-Eric Jordt, Ph.D.
Funding source:	NIH/NIEHS
Duration:	09/19/2012 – 08/31/2015
Project synopsis:	Examining the effects of inflammation-resolving lipid mediators in chemical pulmonary and skin injury models.
Project title:	Counterirritation by Menthol: Molecular Targets and Role in Airway Disease
Grant number:	R01HL105635
PI:	Sven-Eric Jordt
Funding source:	NIH/NHLBI
Duration:	01/01/2011 – 12/31/2015

Project synopsis:	Examining the effects of menthol in combustible cigarettes using plethysmography in mice; Studying the effects of menthol and related cooling agents on pulmonary inflammation.
Project title:	Counterirritation by Menthol: Molecular Targets and Role in Airway Disease
Grant number:	R01HL105635-02/03S1 (Supplement)
PI:	Sven-Eric Jordt
Funding source:	NIH/NHLBI
Duration:	09/14/2012 – 12/31/2015
Project synopsis:	Supplement to examine the effects of menthol on electronic cigarette vapor inhalation in mouse models using plethysmography in mice.
Project title:	Project 1: Effects of Flavors on Nicotine Choice and Central Reward
Grant number:	P50DA036151
PIs:	Suchitra Krishnan-Sarin, Stephanie O'Malley (Yale University)
Role:	Subcontract PI
Funding source:	NIH/NIDA/FDA
Duration:	09/30/2013 – 08/31/2018
Project synopsis:	Behavioral effects of flavor chemicals in new tobacco products on nicotine intake and vapor inhalation.
Project title:	Irritant Flavor Products in Heated E-Cigarette Liquids and Vapors
Grant number:	P50DA036151-03S1 (Supplement)
PI:	Suchitra Krishnan-Sarin, Stephanie O'Malley (Yale University)
Role:	Subcontract PI
Funding source:	NIH/NIDA/FDA
Duration:	09/01/2015 – 08/31/2016
Project synopsis:	Chemical detection flavor-solvent adducts in e-cigarette liquids and vapor; characterization of their effects on sensory irritant receptors
Project title:	Targeting Injury Pathways to Counteract Pulmonary Agent and Vesicant Toxicity
Grant number:	U01ES015674
PI:	Sven-Eric Jordt
Funding source:	NIH/NIEHS
Duration:	09/29/2006 – 05/31/2018
Project synopsis:	Development of TRP ion channel inhibitors as countermeasures to inhalational and cutaneous injuries by chemical warfare agents, including chlorine gas and mustard agents.
Project title:	Mechanisms of Itch in Poison Ivy-Induced Allergic Contact Dermatitis
Grant number:	R21AR070554
PI:	Sven-Eric Jordt

Funding source:	NIH/NIAMS
Duration:	07.01.2016-06.30.2018
Project synopsis:	Development of a mouse model of poison ivy contact allergy-induced pruritus. Analysis of pruritic signaling pathways in peripheral sensory neurons. Discovery of anti-inflammatory and anti-pruritic pharmacological interventions.
Project title:	Development of Antidotes for Toxic Gases
Grant number:	U54ES027698
PI:	Carl White, M.D.
Role:	Subcontract-PI
Funding source:	NIH/NIEHS
Duration:	09/30/2016-08/31/2021
Project synopsis:	Investigating the efficacy of TRPA1 inhibitors in rat and mouse models of methyl isocyanate inhalation injury
Project title:	Resolution of Neuroinflammation and Persistent Pain by Complementary Approaches
Grant number:	P01AT009968
PI:	William Maixner, D.D.S., Ph.D.; Mathew, Joseph, M.D.
Role:	Co-I, Project 3; PI, Molecular Core
Funding source:	NCCIH
Duration:	04.20.2020 – 12.31.2021
Project synopsis:	Investigating the effects of vagal nerve stimulation and pro-resolving lipid mediators in a mouse model of bone fracture-induced chronic pain
Project title:	Anesthetic and synthetic cooling flavors in E-cigarettes: Chemistry and respiratory effects modulating nicotine intake
Grant number:	R01ES029435
Role:	PI
Funding source:	NIH/NIEHS
Duration:	08/01/2018 – 07/31/2022
Project synopsis:	Chemical analysis of anesthetic flavors (eugenol and related compounds) and synthetic cooling flavors (WS series) in electronic cigarettes and related new tobacco products. Behavioral analysis of the effects of flavorings in nicotine intake in mice.
Project Title:	Effects of odorless constituents on tobacco product use behaviors from adolescence to adulthood
Grant number:	U54DA036151 Yale Center for the Study of Tobacco Product Use and Addiction: Flavors, Nicotine and Other Constituents (YCSTP)
PI:	Suchitra Krishnan-Sarin, Ph.D., Stephanie O'Malley, Ph.D.
Role:	Project Co-Director, Project 1 (subcontract from Yale University)
Funding source:	NIH/NIDA/FDA

Duration:	09/01/2018 – 08/31/2023
Project title:	Nicotine Pouches: Chemical Composition, Toxicity and Behavioral Effects of a New Tobacco Product Category
Grant number:	R56DA055996
PI:	Sven-Eric Jordt
Funding source:	NIH/NIDA
Duration:	09/15/2022 – 02/28/2024
Project synopsis:	The market share of oral nicotine pouch products has rapidly increased in the United States, and youth and young adult use is high. In this project, we investigate the chemical composition of these products, especially flavor chemicals, sweeteners, cooling agents and nicotine content. Cold receptor and sweet taste receptor-deficient mice are used to examined the behavioral impact of these constituents on product use initiation and nicotine consumption.

Project title:	Advanced TRPA1 Inhibitor for the Treatment of Chlorine Inhalation Injury
Grant number:	U01ES030672
PIs:	Sven-Eric Jordt, Satya Achanta
Role:	Multi-PI
Funding source:	NIH/NIEHS
Duration:	07/01/2019-08/31/2024 (in no-cost extension)

Education / teaching activities (residents, fellows, medical students, CME, graduate students):

- Lectures (title, date):

At Yale School of Medicine

04.21.2006	Lung Biology Seminar Series, Pulmonary Section, Department of Internal Medicine
10.25.2007	Developmental Therapeutics Conference, Yale Cancer Center
12.04.2007	Vascular Biology and Therapeutics Seminar, VBT Program (CME)
02.18.2009	Center for Neuroscience and Regeneration Research, VA Hospital, West Haven
02.20.2009	Lung Inflammation Group, Pulmonary Section / Dept. of Immunobiology
03.30.2010	Pulmonary Research Conference, Pulmonary Section, Department of Internal Medicine
09.17.2010	Lung Inflammation Group, Pulmonary Section / Dept. of Immunobiology
11.22.2010	Biological Sciences Training Program (BSTP) Lecture / Dept. of Psychiatry
02.13.2012	Pierce Laboratories Seminar Series

At Duke University

07.16.2014 Duke Pain Research Seminar *"Control of sensory neuronal function by TRP Channels: Role in chemosensation, injury and inflammation"*

10.01.2014 Duke Integrated Toxicology and Environmental Health Program (ITEHP) *"Counter-irritation By Menthol: Pharmacological Targets and Implications for Smoking Initiation.""*

01.20.2016 Grand Rounds, Department of Anesthesiology, *"The Vagal Sensory Transcriptome: Mining with Next Generation Techniques, Organ-specific Mapping and Regulation During Inflammation"*

09.11.2017 Department of Pharmacology & Cancer Biology, Departmental Seminar, *"TRP Channels in Respiratory Chemical Sensing and Inflammation Control"*

10.08.2018 Center for Perioperative Organ Protection Seminar, Department of Anesthesiology, *"Chlorine Inhalation Injury: Targets, Biomarkers and Countermeasures"*

01.08.2019 Pinnell Center for Investigative Dermatology, Department of Dermatology *"Skin - sensory nerve interactions in contact dermatitis and chemical exposures"*

09.27.2019 Duke Integrated Toxicology and Environmental Health Program (ITEHP) *"The role of the TRPA1 receptor in toxicology"*

01.15.2020 Grand Rounds, Department of Anesthesiology, *"A Brave New World of Flavored Tobacco Products: Epidemiology, Toxicology and Behavioral Effects"*

01.20.2021 Duke Integrated Toxicology and Environmental Health Program (ITEHP) *"Sensing the chemical environment: Receptors, Mechanisms and Implications for Toxicology"*

04.22.2024 Duke Smoking Cessation Program (DSCP) *"A New E-cigarette That Uses "Metatine""*

- Courses taught (title, course number, date, audience):

At Yale School of Medicine:

		Academic Year / hours									
Course	**Role**	**2005-6**	**6-7**	**7-8**	**8-9**	**9-10**	**10-11**	**11-12**	**12-13**	**13-14**	**14-15**
Bioethics in Neuroscience NSCI 580b [G]	Lecturer	8	3	-	-	3	-	-	-	-	-
Pharmacology 504A [G]	Lecturer	-	16	24	14	10	12	12	12	12	-
Pharmacology 504A [G]	Group discussion leader	-	-	-	-	8	8	8	8	8	-
Seminar in Pharmacology 502 [G]	Course Director	-	45	-	-	-	-	-	40	40	-
Neuropharmacology 508b [G]	Lecturer	-	12	4	4	4	4	4	-	-	-

Principles of Neuroscience NSCI 501a [G]	Lecturer/ Group Discussion Leader	-	-	15	-	-	-	-	-	-	-
Pharmacology, Ethics and responsible conduct in research [G]	Group discussion leader	-	-	-	-	20	4	4	-	-	-
Pharmacology 501 [M]	Lecturer/ conference leader	5	8	22	20	20	20	20	20	-	-
Pharmacology 560b [C]	Lecturer	-	-	-	-	-	-	-	12		-
Pharmacology Graduate Student Laboratory Rotations	Preceptor	-	20		40	-	20	20	-	-	-
Pharmacology Graduate Student Qualifying Exams	Committee member	16	-		-	-	-	-	-	-	-
Interdepartmental Neuroscience Program Rotations [G]	Preceptor	-	-	-	20	-	-	-	-	-	-
MSTP Rotations [G][M]	Preceptor	-	-	-	20	-	-	-	-	-	-
Regulatory & Scientific Issues of Tobacco Use CDE582	Lecturer										8

At Duke University School of Medicine:

		Academic Year / hours			
Course	**Role**	**2017-8**	**2018-19**	**2019-20**	**2020-21**
Cellular Signaling-CBI/PHARM/BIOCHEM/MOLCAN 761-1,-2,-3 Module I, II, III	Lecturer	16	16	16	
PHARM.533.01.F20 Essentials of Pharmacology and Toxicology	Lecturer				8

- Education program development (title of program, date first available): none

- Education assessment methods and tools development (title of tool, date first available): none
- Education management and leadership (title, dates – e.g., fellowship director): none

Invited lectures and presentations (do not list abstract presentations):

At University Departments and Research Centers:

09.1999 Pain Research Center, University of Erlangen, Germany

10.2002 Department of Physiology, Yale School of Medicine, New Haven, CT

11.2002 Department of Physiology, University of California, Davis, CA

12.2002 Department of Pharmacology, McGill University, Montreal, Canada

03.2003 Department of Pharmacology, University of British Columbia, Canada

04.2003 Pain Center, Washington University, St. Louis, MO

01.2007 University of Southern California, Molecular Biology Seminar Series, Los Angeles, CA

01.2007 Department of Cell Biology, Neurobiology & Anatomy, Medical College of Wisconsin, Milwaukee, WI

05.09.2007 University of Connecticut Health Sciences Center, Farmington, CT, "*Sensory TRPA1 channels in pain transduction and chemosensation*"

09.27.2007 University of Alabama in Birmingham, Department of Anesthesiology Seminar Series, "*TRPA1 in chemosensation of pulmonary threat agents and tear gas*"

01.31.2008 Forest Research Institute, Pharmacology, Jersey City, NJ, "*TRP channels in sensory neurons: function in pain and chemosensation*"

06.16.2008 Max-Delbrück Center, Research Institute for Molecular Pharmacology, Berlin, Germany, "*TRP channels in thermosensation and respiratory reflex control*"

01.27.2009 Humboldt University, Department of Physiology, Berlin, Germany, "*Sensory TRP Channels in Respiratory Reflex Control and Inflammation*"

02.05.2009 Duke University, Ion Channel Research Unit Seminar Series, Durham, NC, "*Sensory TRP Channels in Respiratory Reflex Control and Inflammation*"

02.06.2009 National Institute of Environmental Health Sciences, Laboratory of Respiratory Biology (LRB) Lecture Series, Durham, NC, "*Sensory TRP Channels in Respiratory Reflex Control and Inflammation*"

06.03.2009 University of Cincinnati, Department of Environmental Health Seminar Series, Cincinnati, OH, "*Role of Sensory TRPA1 Channels in Airway Irritant Detection and Asthmatic Inflammation*"

09.01.2010 National Advisory Environmental Health Sciences Council (NAEHSC), National Institute of Environmental Health Sciences, Research Triangle Park, NC, *"TRP Channels in Chemical Sensing and Environmental Disease"*

11.29.2011 University of Vermont Medical College, Burlington, Department of Environmental Pathology, "*TRP Channels in Respiratory Chemosensation and Inflammation*"

12.15.2011 Abbott Pharmaceuticals, Lake Forest, IL, Pain Research Group, *"Sensory TRP Channels: Function in the Respiratory Irritation Response and Airway Inflammation"*

10.03.2011 UMDNJ, New Jersey Medical School, Pharmacology & Physiology, Newark, NJ, "*Sensory TRP Channels: Function in the Respiratory Irritation Response and Airway Inflammation*"

10.05.2011 University of Connecticut, Pharmaceutical Sciences, Storrs, CT, "*TRP Channels in Respiratory Chemosensation and Inflammation*"

01.30.2012 Institute of Biomedical Sciences, Academia Sinica, Taipei, Taiwan, "*Role of Neuronal TRP Channels in Respiratory Chemosensation and Inflammation*"

04.25.2012 Columbia University Medical Center, Skin Disease Research Center, New York, NY, "*Control of Skin Inflammation and Pruritus by Sensory TRP Ion Channels in Murine Contact Dermatitis*"

06.01.2012 Neurocolloquium, Charite School of Medicine, Berlin, Germany, *"TRP Channels as Mediators of the Cooling and Counterirritant Effects of Menthol"*

03.26.2013 University of Alabama, Birmingham, Dept. of Anesthesiology, *"Sensory TRP Channels: Function in the Respiratory Irritation Response and Airway Inflammation"*

04.12.2013 Brown University, Department of Molecular Pharmacology, Physiology and Biotechnology, *"Control of Skin Inflammation and Pruritus by Sensory TRP Ion Channels"*

08.28.2013 University of Pittsburgh, Dept. of Environmental Health, Center for Pain Research, "*Neuronal mechanisms of respiratory irritation: Molecular targets and parallels with the pain pathway*"

09.04.2013 University of Vermont, Dept. of Pharmacology, Burlington, VT, "*Neuronal mechanisms of respiratory irritation: Molecular targets and parallels with the pain pathway*"

09.17.2013 Case Western Reserve University, Dept. of Pharmacology, Cleveland, OH, *"Sensory TRP Channels in Airway Chemosensation and Inflammation"*

03.27.2014 Monell Chemical Senses Center, Philadelphia, PA, *"Menthol: Cooling down pain and irritation"*

10.02.2014 University of North Carolina, Cell Biology & Physiology, Chapel Hill, NC, *""*

02.20.2015 FDA Center for Tobacco Products (FDA-CTP), Bethesda, MD, *"Toxic Aldehyde Flavors in E-Liquids ?"*

11.05.2015 Science Day, National Institute of Environmental Health Sciences (NIEHS), Raleigh, NC, "*Effects of Inflammation on the Vagal Sensory Transcriptome and Vagal Excitability*"

09.08.2016 UNC Tobacco Center of Regulatory Science Retreat, University of North Carolina, Chapel Hill, NC, *"Flavorants in Alternative Tobacco Products: Chemistry, Sensory and Behavioral Effects in Rodent Models"*

02.22.2017 Depts. of Immunology, Neuroscience, Genentech, South San Francisco, CA, *"Targeting TRPA1 in Chlorine Gas Inhalation Injury"*

03.08.2017 Department of Biochemistry, University of Florence, Italy, Departmental Seminar Speaker, *"Neuro-immune Interactions and Plasticity of Peripheral Sensory Neurons in Inflammation"*

06.01.2017 Department of Physiology, University of Tennessee Health Science Center, Memphis, TN, *"TRP Channels in Respiratory Chemical Sensing and Inflammation Control"*

06.18.2017 Department of Neurobiology, Zhejiang Chinese Medical University, Hangzhou, China, *"TRP Channels in Pain Transduction Discovery Milestones, Natural Products, Pharmacology and Translational Value"*

08.18.2018 Department of Molecular Biomedical Sciences, NC State Veterinary Medicine, Raleigh, NC, *"Irritant Sensing and Inflammation Control by TRP channels"*

11.15.2018 Organization for the Prohibition of Chemical Weapons (OPCW), Temporary Working Group on Investigative Science and Technology Meeting, The Hague, The Netherlands, *"Chlorine Inhalation Injury: Targets, Biomarkers and Countermeasures"*

04.24.2019 A Tobacco Regulatory Agenda for Vulnerable and Disparate Groups: Developing a Blueprint for Research, Policy, and Regulatory Standards, University of Arkansas Little Rock, AK

05.23.2019 Toxicology Graduate Program Seminar Series, Department of Pharmacology, LMU University Munich, Germany, *"Sensing the Chemical Environment: Receptors, Mechanisms and Implications for Toxicology"*

02.25.2020 Department of Anatomy and Physiology, College of Veterinary Medicine. Kansas State University, Manhattan, KS, *"TRP Channels in Respiratory Chemical Sensing and Inflammation Control"*

03.01.2021 Center for Research on Flavored Tobacco, University of Rochester, NY, *"Flavor Chemicals in Tobacco Products: Pharmacology, Toxicology and Effects on Nicotine Intake"*

12.13.2023 United States Food and Drug Administration (FDA), Center for Tobacco Products (CTP), Office of Science, Scientific Seminar Series, *"Synthetic Cooling Agents in Tobacco Products: Chemistry, Sensory Mechanism and Toxicology"*

04.08.2024 Department of Physiological Sciences, East Virginia Medical School (EVMS), Norfolk, VA, *"TRP Ion Channels in the Chemical Injury Response: Animal Models and Countermeasure"*

02.06.2025 Christina Lee Brown Envirome Institute, University of Louisville, Louisville, KY, Environmental Medicine Grand Rounds *"Evading Regulation with Chemistry: Examples from Tobacco Regulatory Science"*

Courses, symposiums, workshops – invited (lecture title, meeting role, meeting, date):

06.02.2003 European Society for Neurochemistry (ESN), Annual Meeting, Warsaw, Poland, ESN Young Investigator Award Lecture "*Acid potentiation of the capsaicin receptor determined by a key extracellular site*"

07.2006 13th Annual Environmental Health Sciences Symposium Dates: July 12-13, 2006, Mt. Desert Island Marine Laboratory, ME

04.2007 Health Effects Institute, Annual Meeting, Chicago

04.2007 NIH Countermeasures against Chemical Threats Network Symposium, Washington, DC

09.08. 2007 International Society for Environmental Epidemiology, Mexico City, Mexico, "*Environmental Irritants and Chemosensory Nerve Endings in Airways*"

09.27.2007 American Academy of Physical Medicine and Rehabilitation, Boston, MA (CME), *"TRP Channel in Temperature Sensation and Pain"*

03.2008 Society of Toxicology Annual Meeting, Seattle, WA (CME)

04.2008 NIH Countermeasures against Chemical Threats Network Symposium, Washington, DC

04.12.2008 International Society for Nephrology - Forefronts Symposium on Polycystic Kidney Disease (PKD), Montreal, Canada, Session Chair: Polycystins & Calcium Signaling; Speaker:"*TRP Channels and Sensation*"

05.02.2008 Spring Pain Conference, Grand Cayman, Cayman Islands, "*TRPA1 in Environmental Chemosensation*"

05.2008 American Asthma Foundation, Annual Meeting, San Francisco, CA

06.12.2008 German-American Frontiers of Science Symposium, Humboldt Foundation, National Academy of Sciences USA, Potsdam, Germany, *"TRP ion channels as neuronal detectors for environmental stimuli"*

11.15.2008 Society for Neuroscience, Annual Meeting, Minisymposium,*" Sensory TRP Channels: Molecular and Cellular Signal Integration"*, Talk: *" TRPA1 in environmental irritant sensation and respiratory control"* Washington, DC (Chair)

04.2009 NIH Countermeasures against Chemical Threats Network Symposium, Washington, DC

05.13.2009 American Asthma Foundation, Annual Meeting, San Francisco, CA, "*Sensory Chemoreceptors in Asthma and Airway Hyperresponsiveness*"

06.11.2009 Aspen Lung Conference, Aspen, CO, "*The environmental irritant receptor TRPA1 is essential for airway inflammation and hyperreactivity in asthma*"

09.16.2009 Lovelace Biomedical and Environmental Research Institute, Second Lovelace CounterACT-CRCE Research Symposium , Albuquerque, NM, *"Inhibition of cutaneous vesicant injury progression by post-exposure treatment with a TRPA1 antagonist"*

09.24.2009 Life Sciences Summit, University of Stony Brook, NY, *"Inflammatory Pain Mechanisms, Drugs and New Targets"*

03.10.2010 Society of Toxicology Annual Meeting, Symposium on TRP channel function in chemical sensing (Chair), Salt Lake City, UT, *"TRPA1 mediates the noxious effects of tear gases and industrial isocyanates"*

04.14.2010 Annual Meeting and Conference of the Canadian Society of Biochemistry, Molecular and Cellular Biology, Banff, Canada, *"TRPA1 in Chemical Sensing and Inflammation"*

05.2010 American Asthma Foundation, Annual Meeting, San Francisco, CA

06.22.2010 NIH Countermeasures against Chemical Threats Network Symposium, San Francisco, CA, Speaker, *"Hypersensitivity to Chlorine in Asthma"*

06.25.2010 Sixth International Cough Symposium, London, UK, Speaker, *"TRP receptors: role in health and disease"*

06.28.2010 Ion Channel Retreat, Vancouver, BC, Canada, Speaker, *"The Sensory Irritant Receptor TRPA1 is essential for airway inflammation and hyperreactivity in asthma"*

09.24.2010 TRP Ion Channel Conference, Leuven, Belgium, Speaker, *"TRPA1 in asthma and airway chemosensation"*

10.12.2010 Harvard-Cyprus Initiative for Environment and Public Health, Workshop: Environmental Chemical Threats and Lung Injury: Mechanisms and Countermeasures, Limassol, Cyprus, *"Breathtaking TRP channels: TRPA1 and TRPV1 in airway chemosensation and reflexes"*

10.16.2010 102nd International Titisee Symposium, Boehringer Ingelheim Foundation, Neustadt/Titisee, Germany, Speaker, *"Nociceptive TRP channels in chemosensation and inflammatory disease"*

11.04.2010 European Rhinitis and Asthma Meeting ERAM, Brussels, Belgium, Plenary Symposium Upper-lower airways interactions: Really one airway? Speaker, *"Neural regulation and TRP channels – Sensing the air around us"*

05.12.2011 American Asthma Foundation, Annual Meeting, San Francisco, CA,

06.12.2011 NIH Countermeasures against Chemical Threats Network Symposium, Washington, DC, Speaker

02.16.2011 Society for Research on Nicotine and Tobacco (SRNT), Annual Meeting, Toronto

05.12.2011 American Asthma Foundation, Annual Meeting, San Francisco, CA, Symposium: Neurons and Asthma/Assessment of Asthma, Speaker, *"Sensory Chemoreceptors in Asthma and Airway Hyperresponsiveness"*

06.23.2011 NIH Countermeasures against Chemical Threats Network Symposium, Washington, DC

11.12.2011 Society for Neuroscience, Annual Meeting, Washington, DC

03.12.2012 Society of Toxicology Annual Meeting, San Francisco, CA, *"L-menthol inhibits respiratory irritation by cigarette smoke irritants targeting diverse chemosensory receptors"*

06.27.2012 NIH Countermeasures against Chemical Threats Network Symposium, San Francisco, CA, *"Targeting Injury Pathways To Counteract Pulmonary Agent and Vesicant Toxicity"*

09.08.2012 Society of General Physiologists, 66th Annual Symposium, MBL, Woods Hole, MA, Speaker, *"Sensory TRP channels in airway chemosensation and inflammation"*

09.12.2012 International Workshop on Transient Receptor Potential Ion Channels, Valencia, Spain, Scientific Planning Committee & Speaker, *"Menthol Attenuates Respiratory Irritation Responses to Multiple Cigarette Smoke Irritants"*

06.17.2014 NIH Countermeasures against Chemical Threats Network Symposium, Denver, CO, Speaker, *"Accelerating Inflammation Resolution to Counteract Chemical Injury"*

07.01.2014 Outstanding Environmental Scientists Symposium, NIEHS, Raleigh, NC, Speaker, *"Sensory TRPA1 Channels Control Inflammation and Pruritogen Responses in Allergic Contact Dermatitis"*

09.18.2014 Symposium: Electronic Cigarettes: What Do We Know So Far ? Society for Research on Nicotine and Tobacco Europe, Santiago de Compostela, Spain, Speaker *"Flavor additives in*

tobacco and electronic cigarettes: Effects on sensory irritation and nicotine uptake in rodent models"

02.25.2015 FDA Pre-Conference Workshop on Tobacco Regulatory Science, Society for Research on Nicotine and Tobacco Annual meeting, Philadelphia, PA, Speaker, *"Effects of Menthol and Flavors in Tobacco Products: Lessons from Animal Models"*

05.20.2015 American Thoracic Society, NIEHS Symposium: Environmental Chemicals, Denver, CO, Speaker, *"Novel Anti-Inflammatory Strategies Targeting TRP Channels to Counteract Chemical Lung Injury"*

06.02.2015 FDA 3rd Public Workshop on Electronic Cigarettes, College Park, MD, Speaker, *"Toxic Aldehyde Flavors in E-Liquids ?"*

06.15.2015 NIH Countermeasures against Chemical Threats Network Symposium, New York, NY

03.14.2016 Society of Toxicology, Workshop on TRP Ion Channels, New Orleans, LA, Speaker, *"TRP Ion Channels as Key Targets of Tobacco and Electronic Cigarette Irritants and Flavor Additives"*

05.16.2016 American Thoracic Society, Symposium of the Terrorism and Inhalation Disaster Section, San Francisco, CA, Chair & Speaker, *"Chemosensation and Reflex Control in Inhalational Exposures"*

06.15.2016 NIH Countermeasures against Chemical Threats Network Symposium, Davis, CA, Speaker, *"Targeting Injury Pathways to Counteract Pulmonary Agent and Vesicant Toxicity"*

09.29.2016 International Symposium on TRP Ion Channels, Munich, Germany, Speaker, *"TRPM8 in Analgesia and Respiratory Counterirritation"*

03.09.2017 Society for Research on Nicotine and Tobacco International Meeting, Florence, Italy, USFDA Symposium: Exploring Dimensions of Flavors: Toxicity, Preference, and Use, Speaker, *"Analysis and Behavioral Effects of High-Intensity Sweeteners in Alternative Tobacco Products"*

03.10.2017 Society for Research on Nicotine and Tobacco International Meeting, Florence, Italy, Podium Presentation, Paper Session: Nicotine and Animal Models, Speaker *"Menthol decreases oral nicotine aversion in C57BL/6 mice through a TRPM8-dependent mechanism"*

04.05.2017 Medical Chemical Defense Conference, German Armed Forces University, Munich, Germany

04.27.2017 Association for Chemosensation Sciences Annual Meeting, Bonita Springs, FL, Speaker, *"TRP Ion Channels As Key Targets of Tobacco and Electronic Cigarette Irritants and Flavor Additives"*

06.12.2017 NIH Countermeasures against Chemical Threats Network Symposium, Boston, MA, Speaker, *"Targeting Injury Pathways to Counteract Pulmonary Agent and Vesicant Toxicity"*

06.21.2017 Translational Pain Research Symposium, Duke Kunshan University, China, Speaker, *"TRPM8 Mediates the Anti-Inflammatory Effects of Eucalyptol"*

11.11.2017 Society for Neuroscience Annual Meeting, Washington, DC, Nanosymposium: Touch, Itch & Pain, Speaker, *"IL-33/ST2 signaling excites sensory neurons and mediates itch responses in a mouse model of poison ivy contact allergy"*

11.12.2017 Society for Neuroscience Annual Meeting, Washington, DC, Minisymposium: Peripheral Neural Modulation of Inflammation, Speaker, *"Transcriptional and Functional Plasticity of Airway-innervating Sensory Neurons in Pulmonary Inflammation"*

02.23.2018 Society for Research on Nicotine and Tobacco Annual Meeting, Baltimore, MD, Symposium: Cooling Agents, Flavors and Nicotine: Additives or Drugs ?, Co-Chair & Speaker, *"Menthol decreases oral nicotine aversion in C57BL/6 mice through a TRPM8-dependent mechanism"*

03.22.2018 Virginia Conference on Youth Tobacco Use, Virginia Commonwealth University, Richmond, VA, Speaker, *"Menthol as a Counterirritant in Tobacco Products: Pharmacology and Effects on Nicotine Intake"*

04.27.2018 Strategic Asthma Basic Research Center (SABRE), University of California, San Francisco, CA, Symposium, Speaker,*"TRP Ion Channels: Function in Asthma, Lung Injury and Respiratory Chemical Sensing"*

06.19.2018 NIH/FDA Tobacco Regulatory Science Symposium, Speaker,*"Propylene Glycol and Glycerin in E-Cigarettes Modulate Respiratory Irritation Responses and Human Sensory Irritant Receptor Function"*

09.08.2018 Society for Research on Nicotine and Tobacco Europe (SRNT-E) Annual Meeting, Munich Oral Session: Biological Impact of Tobacco Smoke and E-Vapor, Chair & Speaker, *"Formation of Flavorant-Propylene Glycol Adducts with Novel Toxicological Properties in Chemically Unstable E-Cigarette Liquids"*

12.18.2018 Workshop Sensory Pharmacology, Sanofi, Cambridge, MA, Speaker, *"TRPM8: Physiology, Indications and Targeting"*

03.05.2019 Gordon Research Conference - Chemical and Biological Terrorism Defense, Ventura, CA, Speaker, *"Chemical Injury Countermeasures – Insights from Chemosensation Science"*

03.13.2019 Leading Edge in Basic Science Award Lecture, Annual Meeting, Society of Toxicology, Baltimore, MD, Awardee & Speaker, *"Sensing the Chemical Environment - Receptors, Mechanisms and Implications for Toxicology"*

03.26.2019 Inflammation Resolution Biology Workshop, National Institute of Environmental Health Sciences (NIEHS), RTP, NC, Speaker, *"Accelerating Inflammation Resolution to Counteract Cutaneous and Pulmonary Chemical Injury"*

05.19.2019 Minisymposium Chemical Threats and Injury: Mechanisms and Treatment, American Thoracic Society, Annual Meeting, Dallas, TX, Chair

11.17.2019 International Forum for the Study of Itch (IFSI), Annual Meeting, Sydney, Australia, Session: Skin inflammation and itch, Speaker, *"Transcriptome profiling reveals Th2 bias and identifies TSLP as a key endogenous itch mediator in a model of poison ivy contact dermatitis"*

03.03.2020 5th German PharmTox Summit, German Society for Pharmacology and Toxicology (DGPT). Leipzig, Germany, Symposium: Molecular Mechanisms of Chemical Sensing, Speaker, *"Deciphering molecular mechanisms of irritant sensing"*

08.05.2020 American Thoracic Society, Annual Meeting (virtual), Symposium: Emerging Dangers from E-cigarettes: Let's Have a Vape Debate, Co-Chair & Speaker *"Health Effects of Flavors and Flavor-Solvent Reaction Products in Electronic Cigarette Liquids"*

09.01.2020 European Respiratory Society (ERS), Annual Meeting (virtual), Speaker, *"Flavor-solvent reaction products in electronic cigarette liquids activate respiratory irritant receptors and elicit cytotoxic metabolic responses in airway epithelial cells"*

04.12.2021 Association of Chemosensation Scientists (AChemS), Annual Meeting, Speaker, *"Chemical Adducts of Flavor Aldehydes Formed in E-Cigarette Liquids Are Cytotoxic and Inhibit Mitochondrial Function in Respiratory Epithelial Cells"*

04.16.2021 Gulf Coast Consortia 2021 Pain Workshop, MD Andersen Cancer Center, Houston, TX, Speaker, *"Transcriptome profiling reveals Th2 bias and identifies TSLP as a key endogenous itch mediator in a model of poison ivy contact dermatitis"*

06.09.2021 20 Years of TRPV4, American Physiological Society, Speaker, *"TRPV4 as a Target to Counteract Lung Injury - Studies in Chemical Injury Models"*

10.19.2021 Tobacco Regulatory Science (TRS) annual meeting, FDA & NIH, Plenary Speaker, *"High-Intensity Synthetic Sweeteners in Smokeless Tobacco and Nicotine Pouch Products"*

03.17.2022 Society for Research on Nicotine and Tobacco, Annual Meeting, Baltimore, MD, Co-Chair Symposium: *"Keeping it real about synthetic nicotine: Products, patents, perceptions and policies"*

06.21.2022 15th NIH Countermeasures against Chemical Threats (CounterACT) Network Symposium, New Orleans, LA. *"Advanced TRPA1 Inhibitors for the Treatment of Chlorine Inhalation Injury"*

06.23.2022 World Health Organization (WHO) and European Union (EU) Technical Workshop on Novel and Emerging Nicotine and Tobacco Products Experiences, Copenhagen, Denmark, Speaker (remotely), "*Synthetic nicotine – Properties and Science, including its chemistry, metabolism and pharmacological effects*"

10.24.2022 NIH/FDA Tobacco Centers of Regulatory Science (TCORS) Grantee Meeting, Bethesda, MD, Plenary Speaker, *"Aversion and Preference in Mice Towards Nicotine Enantiomers in Synthetic Nicotine"*

12.13.2022 Eleventh Meeting of the World Health Organization (WHO) Study Group on Tobacco Product Regulation, Tblisi, Georgia "*Synthetic nicotine and cooling agents: Basic Pharmacology and Actions During Tobacco Product Use*"

03.03.2023 Society for Research on Nicotine and Tobacco (SRNT) annual meeting. San Antonio, TX "*Aversion and Preference in Mice Towards Nicotine Enantiomers in Synthetic Nicotine*"

06.03.2023 Symposium: New Aspects in Molecular Neuropathology, University of Hamburg School of Medicine, Germany, "*Neural Sensing of the Chemical Environment: Implications for Pain and Toxicology*"

09.10.2023 European Respiratory Society (ERS) 2023 International Congress, Milan, IT, Hot Topic Session: Burden of tobacco farming and use of electronic nicotine delivery systems on the

environment and occupational health, "*Health effects of e-liquids, flavours and other chemicals*"

10.17.2023 NIH/FDA Fall Tobacco Centers of Regulatory Science (TCORS) Grantee Meeting, Bethesda, MD, *"High Toxicity of Cinnamon-Flavored Electronic Cigarette Liquids: A Lesson Not Learned"*

11.29.2023 Organization for the Prohibition of Chemical Weapons (OPCW), 28th Conference of State Parties (CSP-28), The Hague, Netherlands, Side Event: "*Riot Control Agents: Addressing Use in Law Enforcement and Conflict*", Presentation:"*Riot Control Agents: Health Concerns and Research Gaps*" Role: Side Event Organizer and Speaker

03.21.2024 Society for Research on Nicotine and Tobacco (SRNT) international meeting. Edinburgh, UK. Symposium 001 (Co-Chair) "*Beyond Menthol: Expanding the Definition of Harm to Include Synthetic Cooling Agents Used in E-Cigarette and Tobacco Products*", Presentation: "*Synthetic Cooling Agent and Sweet Flavors in "Non-Menthol" Cigarettes Marketed in Response to US State-Level Menthol Cigarette Bans*"

04.17.2024 Virginia Conference on Youth Tobacco Use, Virginia Commonwealth University, Richmond, VA, *Session # 4 – New Products: Oral Nicotine Pouches and "Non-Menthol" Cigarettes*, Presentation: "*Cooling Agents Replacing Menthol: Chemical and Pharmacological Analysis of "Ice" and "Non-menthol" Tobacco Products*"

06.05.2024 17th NIH Countermeasures against Chemical Threats (CounterACT) Network Symposium, Salt Lake City, UT. *"Advanced TRPA1 Inhibitors for the Treatment of Chlorine Inhalation Injury"*

10.20.2024 NIH/FDA Fall Tobacco Centers of Regulatory Science (TCORS) Grantee Meeting, Bethesda, MD, Plenary Symposium (Symposium Chair) *"6-Methyl Nicotine and "Clear" E-Cigarettes: Market Surveillance, Pharmacology and Health Effects"*

Major Lectures, Seminars,Workshops at School of Medicine

Yale School of Medicine

04.21.2006 Lung Biology Seminar Series, Pulmonary Section, Department of Internal Medicine
10.25.2007 Developmental Therapeutics Conference, Yale Cancer Center
12.04.2007 Vascular Biology and Therapeutics Seminar, VBT Program (CME)
02.18.2009 Center for Neuroscience and Regeneration Research, VA Hospital, West Haven
02.20.2009 Lung Inflammation Group, Pulmonary Section / Dept. of Immunobiology
03.30.2010 Pulmonary Research Conference, Pulmonary Section, Department of Internal Medicine
09.17.2010 Lung Inflammation Group, Pulmonary Section / Dept. of Immunobiology
11.22.2010 Biological Sciences Training Program (BSTP) Lecture / Dept. of Psychiatry
02.13.2012 Pierce Laboratories Seminar Series

Duke University School of Medicine

07.16.2014 Duke Pain Seminar, *"Control of sensory neuronal function by TRP Channels: Role in chemosensation, injury and inflammation"*

10.01.2014 Duke Integrated Toxicology and Environmental Health Program (ITEHP), *"Counter-irritation By Menthol: Pharmacological Targets and Implications for Smoking Initiation"*

09.11.2017 Department of Pharmacology, Seminar, *"TRP Channels in Respiratory Chemical Sensing and Inflammation Control"*

10.08.2018 Center for Perioperative Organ Protection Seminar, Department of Anesthesiology, *"Chlorine Inhalation Injury: Targets, Biomarkers and Countermeasures"*

01.08.2019 Pinnell Center for Investigative Dermatology, Department of Dermatology , *"Skin - sensory nerve interactions in contact dermatitis and chemical exposures"*

09.27.2019 Duke Integrated Toxicology and Environmental Health Program (ITEHP), *"Chemical Sensing: Receptors, Mechanisms and Implications for Toxicology"*

04.22.2024 Duke Smoking Cessation Program (DSCP) *"A New E-cigarette That Uses "Metatine""*

Academic, leadership and administrative activities – School of Medicine (list roles / responsibilities, include dates):

2014 - present	Department of Anesthesiology, Research Council
2015- present	Anesthesiology Research Progress Update (RPU) Committee
2016	Search Committee, Vice Chair of Research, Department of Anesthesiology
2016 - 17	Search Committee, Basic Science Division Chief, Department of Anesthesiology
2017	Reviewer for Duke Bridge Funding Committee
2018-present	Member, Departmental Appointments, Promotion and Tenure (DAPT) Committee, Department of Anesthesiology
2019- present	Associate Research Quality Officer, Department of Anesthesiology
2022-23	Search Committee, Research Faculty, Duke Cancer Institute