CURRICULUM VITA, December, 2025

Name: Stephanie Ann Tristram-Nagle
Address: Biological Physics Group, Physics Dept.
Carnegie Mellon University
5000 Forbes Avenue, Wean Hall 6415
Pittsburgh, Pennsylvania 15213
Tel. No.: 412-268-3174(work), 412-680-8640 (cell)
Fax No.: 412-681-0648
WWWebsite: http://lipid.phys.cmu.edu/stn/stn.html
http://www.cmu.edu/biolphys/jfstn

Degrees:
1970, B.A., Douglass College,
Rutgers University, New Brunswick, NJ
1981, Ph.D. in Comparative Biochemistry,
University of California
Berkeley, California

EMPLOYMENT

1972-1975: Clinical and Research Radioimmunoassay Technician, Clinical Assays, Cambridge, MA
1974-1975: Chemistry Tutor, University of Massachusetts, Boston, MA
1975-1980: Lab Assistant, Prof. Packer's Lab, Univ. of California, Berkeley, CA
1976-1978: Teaching Assistant and Reader, Biomembrane Course, University of California, Berkeley, CA
1982-1986: Postdoctoral Research Biologist with Prof. J.F. Nagle, Carnegie Mellon University, Pittsburgh, PA
1986-1998: Research Biologist in Membrane Structure and Thermodynamics, Carnegie Mellon University, Pittsburgh, PA
1998-2005: Senior Research Biologist, Carnegie Mellon University, Pittsburgh, PA
2005-2008: Associate Research Professor, Biological Physics Group Physics Department, Carnegie Mellon University, Pittsburgh, PA
2008-2016: Research Professor, Biological Physics Group Physics Department, Carnegie Mellon University, Pittsburgh, PA
2016-now: Research Professor Emerita, Biological Physics Group Physics Department, Carnegie Mellon University, Pittsburgh, PA
2012-now: Faculty member in the Molecular Biophysics & Structural Biology Graduate Program at the University of Pittsburgh, Pittsburgh, PA

HONORS

1976-1977: Out-of-State Tuition Waiver, Univ. of California, Berkeley, CA
1976-1980: Graduate Grants-in-Aid, Univ. of California, Berkeley, CA
1978: Honor Students' Society, Univ. of California, Berkeley, CA
1985,1990: Samuel and Emma Winters Foundation Grant
1989: Who's Who in the East, 22nd ed.
1990,1997: World's Who's Who of Women, 10th and 14th eds.
1994: American Men and Women of Science, 18th ed.
1996: Who's Who in Science and Engineering, 3rd ed.
1997: Who's Who in Medicine and Healthcare, 1st ed.
2003: Avanti Award in Lipids, Biophysical Society (with Prof. John Nagle)
2004: Chair-Elect, Membrane Structure and Assembly (MSAS) Subgroup meeting, Biophysical Society
2005: Chair, MSAS Subgroup meeting at the Biophysical Society meeting in Long Beach, California
2006: Who's Who in Science and Engineering, 9th ed.

2007: Who's Who in Science and Engineering, 10th ed.
2007: Who's Who in Sciences Higher Education
2009: Chair, Pittsburgh Diffraction Society nominating committee
2009: Who's Who in America, 64th ed.
2010: First Gluckstern Lecturer, Physics Dept., U. Mass., Amherst
2010: 3rd Charles E. Kaufman Science Award, Pittsburgh Foundation
2011: World Who's Who of Women, 15th ed.
2014: Berkman Fund recipient, Carnegie Mellon University
2018: World's Who's Who, Lifetime Achievement Award
2019: Who's Who in America, 2019 edition
Citations: H index = 56(Google Scholar), >17,000 citations total,~700 citations/year

AFFILIATIONS

1978-now: Biophysical Society
1982-now: Association for Women in Science, National organization
2004-now: Association for Women in Science, Pittsburgh chapter
1983-now: Sigma Xi, Carnegie Mellon University Chapter
1990-1992: Sigma Xi, CMU Chapter Membership Secretary
1993: Sigma Xi, CMU Chapter Vice President
1994: Sigma Xi, CMU Chapter President
1990-now: Pittsburgh Diffraction Society
2006-17,19: American Chemical Society (ACS)
2009-2026: American Physical Society (APS)
2009-2017: American Association for the Advancement of Science (AAAS)

INVITED LECTURES

Nov., 1997: "Effect of DMSO on DPPC Phase Behavior", 33rd Japanese Conf. Calorimetry and Thermal Analysis, Okayama University, Okayama, Japan
Nov., 1997: "Understanding the Vapor Pressure Paradox: Implications for Membrane Structure", Workshop on Structure and Thermodynamic Approaches in Lipid Membranes, Kyoto, Japan
April, 1998: "The Importance and Structure of Lipids", Biomembrane Course of Prof. R. Epand, McMaster University, Ontario, CA
June, 2000: "Lipid Bilayer Structure", CHESS User's Meeting, Cornell University, Ithaca, New York
Feb., 2001: "Lipidat and Lipidag Databases", Workshop on Databases for Biophysicists, Biophysical Society, Boston, Massachusetts
June, 2001: "New X-Ray Method to Determine Lipid Bilayer Structure and Interactions", ACS 75th Colloid and Surface Science Symposium, Pittsburgh, PA
July, 2001: "Lipid Bilayer Structure – Gel and Fluid Phases", Hahn-Meitner Institute, Berlin, Germany "Fluctuations and Bragg Peak Shapes in Phospholipid Lamellar Phases", and "Interpretation of Scattering on Bilayers Under Grazing Incidence", Service Chimie Moleculaire, NEA, Saclay, France "Lipid Bilayer Structure – Gel and Fluid Phases", CNRS, Inst. Pharm. Biol. Structurale, Toulouse, France
May, 2002: "Bilayer Structure of 18:0-22:6n3PC and 18:0-22:5n6PC Using X-ray Diffraction", International Society for the Study of Fatty Acids and Lipids (ISSFAL) 2002 – Dietary Fats and Health, Montreal, Canada
Feb., 2003: "Effect of Unsaturation on Area/Lipid and Bilayer Structure", Workshop on Polyunsaturated Lipids, Biophysical Society, Baltimore, Maryland

June, 2004: "Effect of Peptides on DOPC Structure and Fluctuations", Emerging Challenges in Membrane Biophysics, Sun Valley, ID

Dec., 2005: "What are we made of? X-ray scattering Studies of Lipid Membranes and Peptides". First invited speaker for the new Pittsburgh chapter of Association for Women in Science

Sept., 2006: "Implications of Structure for Water Permeability Through Fully Hydrated Fluid Lipids Bilayers". Invited talk presented at three locations during a 10-day visit to Europe: 1)Gordon conference on Bioelectrochemistry, Sept. 4,2006. 2)Institute Laue-Langevin (ILL), Sept. 8, 2006. 3) Memphys, University of Southern Denmark, Odense, Denmark, 9/11, 2006.

Oct., 2006: "Determination of Fully Hydrated, Fluid Phase Lipid Bilayer Structures and Elastic Properties Using Synchrotron X-Radiation and Diffuse Scattering Analysis". 64th Annual Pittsburgh Diffraction Conference, Duquesne University, Pittsburgh, PA, Oct. 28, 2006.

March, 2007: "Use of X-ray Diffuse Scattering to Study Lipids Membranes, Peptides and Cholesterol", Lab Group of Prof. Ronald Montelaro, Dept. of Immunology, University of Pittsburgh

March, 2007: "Fusion Peptide (FP-23) from the HIV-1 Virus Increases Fluctuations and Changes Interactions between Model Membranes". Invited talk for the Department of Chemistry, Michigan State University, East Lansing, MI, March 27,2007.

June, 2007: "X-ray diffuse scattering probes interaction of HIV peptides with membranes". Biological Membranes and Membrane Proteins: Challenges for Theory and Experiment, Park City, UT

Oct., 2007: "Structure and Interaction of Fully Hydrated, Fluid Phase Lipid Membranes and HIV-1 Peptide/Lipid Mixtures". Invited talk for the University of Pittsburgh, Molecular Biophysics and Structure Biology Seminar Series

Nov., 2007: "My personal odyssey: A road with many turns". Invited talk at Douglass College, in Pathways to the Professions

Oct., 2008: "Structure and interactions of fully hydrated, fluid phase lipid membranes with HIV peptide and cholesterol additives." Invited talk for Dept. of Physics, Kent State U., Kent, Ohio.

Nov., 2008: "My personal odyssey – a road with many turns." Invited speaker for Women in Science, Chemistry Dept., CMU

Feb., 2009: "Structure and Bending Rigidity of Fully Hydrated Lipid Bilayers With Added Peptides and Cholesterol Using Diffuse X-ray Scattering." Invited talk - Membrane Structure and Assembly Subgroup at the Biophysical Society, Boston, MA

July, 2009: "Alamethicin in lipid bilayers: Combined use of X-ray scattering and MD simulations." Invited talk – Telluride Science Research Center meeting of Biological Membranes and Membrane Proteins: Challenges for Theory and Experiment, Telluride, CO.

Feb., 2010: "Membrane work in the Nagle, Tristram-Nagle lab." Invited talk for the CMU undergraduate colloquium.

Mar., 2010: "Structure and Interactions of Fully Hydrated, Fluid Phase Lipid Membranes and HIV-1 Peptide/Lipid Mixtures." Invited talk for CMU Virology Club.

Oct.4,2010: First Gluckstern Lecture: "Lipid Bilayer Structure and Interactions", Physics Dept., U. Massachusetts, Amherst

Oct.6,2010: Second Gluckstern Lecture: "Lipid Bilayer/Additives- Structure and Interactions",Physics Dept., U.Mass, Amherst

Nov., 2010: "HIV Fusion Peptide Penetrates, Disorders, and Softens T-Cell Membrane Mimics." Invited talk for Biological & Biophysical

Basis of Membrane Dynamics and Organization workshop at Mellon Institute, Nov. 5-6.

Nov., 2010: Introduction to Research, CMU Graduate Colloquium, "Structure and Interactions of Lipid Bilayer/Additives"

Mar., 2011: Talk at the Biophysical Society meeting in Baltimore, MD, "HIV Fusion Peptide Penetrates, Disorders and Softens T-Cell Membrane Mimics"

May&Dec,2011: Invited talk at NCNR, NIST (May 10) and Chalk River Labs, Ontario, Canada (December 16), "CMU Humidity Chamber at NCNR – From Conception to Reality"

Sept., 2011: Introduction to Research, CMU Graduate Colloquium, "Structure and Interactions of Lipid Bilayers and Additives"

Sept., 2011: CMU Undergrad Upperclass Colloquium, "Using X-rays to Probe Membrane Structure and Elasticity in the Nagle/Tristram-Nagle (MSIL) Lab"

Oct., 2011: Physics Faculty Lunch, "Using X-rays to probe membrane structure and elasticity in the Nagle/Tristram-Nagle Lab"

Dec., 2011: Seminar at the Ellis School, Pittsburgh, PA, "How to write scientific articles"

Oct., 2012: Invited seminar at Molecular Biophysics/Structural Biology "Structure and interactions of fully hydrated, fluid phase lipid membranes and HIV-1 peptide/lipid mixtures"

Feb., 2013: Invited talk for MBSB Interview Weekend, Univ. Pitt. Structure and interactions of fully hydrated, fluid phase lipid membranes with HIV-1 peptides

May, 2013: Invited seminar in Biological Physics seminar series, Physics Dept., CMU. "Membrane structure correlates to function of LLP2 on the cytoplasmic terminal tail of HIV-1 gp41 protein"

July, 2013: Invited talk in workshop: Biological membranes and Membrane Proteins: Challenges for Theory and Experiment, Snowmass, CO "Synergistic approach to membrane structural studies using X-rays and MD simulations"

Nov., 2013: Invited seminar for Graduate student colloquium, Physics, CMU "Membrane structure correlates to function of LLP2 on the cytoplasmic terminal tail of HIV-1 gp41 protein"

Jan., 2014: Invited seminar for the MBSB interview weekend, Univ. Pitt. "Structure and interactions of fully hydrated, fluid phase lipid membranes with HIV-1 peptides"

Feb., 2014: Poster at the Biophysical Society meeting, San Francisco, CA. "HIV-1 Tat membrane translocation probed by low- and wide-angle X-ray scattering, neutron scattering, CD spectroscopy and MD simulations" (with Kiyo Akabori)

Nov., 2014: Invited talk for Plots and Scotch, "A tale of three chambers or why you should back up your data"

Dec., 2014: Invited talk for First year CMU Physics grad students, "Structure determination of HIV-1 Tat/fluid phase membranes"

Jan., 2015: Invited talk for visiting MB/SB grad students: "Structure and interactions of fully hydrated, fluid phase lipid membranes with HIV-1 peptides"

Feb., 2015: Co-chair Membrane Structure Platform Session at the Biophysical Society Mtg., Baltimore, MD. "Interaction of HIV-1 Gag protein's MA membrane binding domain with membrane mimics probed by low- and wide-angle X-ray scattering"

July, 2015: Invited talk at the Tellruide Science Research Center, Biological Membranes and membrane Proteins: Challenges for Theory and Experiment, "Structure determination of HIV-1 Tat/fluid phase membranes", Telluride, Colorado

Nov., 2015: Invited Keynote Lecture at the International Workshop: Membrane Hydration: A Challenge to Nanosystems, "Determination of number of water molecules/lipid using X-ray and neutron scattering methods and volumetric measurements", Santiago del Estero, Argentina

Nov., 2015: Invited Closing Plenary Lecture, 44th Annual Argentinian Biophysical Society Meeting, "Use of X-ray scattering to elucidate HIV peptide/membrane interactions", Santiago del Estero

Nov., 2015: Introduction to Research for first year CMU Physics grad students, "Membrane hydration and movement of HIV-1 Tat across membranes"

Feb 2016-18: Introduction to the Physics Dept. X-ray facility, 3 15-min lectures to upper class undergrad Colloquium students

May, 2016: Sigma Xi, Scientific Café, "HIV Today: Status and Research"

Oct., 2016: Introduction to Research for first year CMU Physics Grad students, "HIV-1 matrix-31 membrane binding peptide interacts differently with membranes containing PS vs. PI(4,5)P_2"

June, 2017: Biological Membranes and Membrane Proteins: Challenges for Theory and Experiment, "Interaction of an antimicrobial peptide with membrane mimics", Santa Fe, New Mexico

Oct., 2018: Biol. Sci. Dept., CMU, Journal Club, "Use of diffuse X-ray scattering to determine both elastic constants and structure of peptide/lipid interactions"

June, 2019: Biological Membranes and Membrane Proteins: Challenges for Theory and Experiment, "Elastic and structural results of the antimicrobial peptides WLBU2 and D8 interaction with membranes", Sante Fe, New Mexico

Nov., 2019: ChemMatCars Liquid/Interface Workshop, "X-ray diffuse scattering (XDS) – Tristram-Nagle lab, Physics Dept., CMU", Argonne, Chicago, Illinois

Mar., 2020: ACS National Meeting, "Elastic and structural interactions of eCAPs WLBU2 and D8 with bacterial lipid membrane mimics", held virtually when Philadelphia venue was cancelled (Covid)

Nov., 2021: Los Alamos National Lab Theoretical Biology and Biophysics Group, "Use of x-ray and neutron scattering to anchor MD simulations of membranes with additives", virtual

June, 2022: Biological Membranes and Membrane Proteins: Challenges for Theory and Experiment, "Antimicrobial peptide mechanism studied by scattering-guided molecular dynamics simulation", Santa Fe, New Mexico

March, 2023: DESYlab, CMPC meeting,"Antimicrobial peptide mechanism studied by scattering-guided molecular dynamics simulation", DESYlab, Petra III, Hamburg, Germany

Jan., 2024: Molecular Biophysics/Structure Biology (MBSB) seminar series, "Location matters for antimicrobial peptide effectivity", Pittsburgh, PA

Oct., 2024: Physics Department Undergraduate Colloquium talks by faculty, "Use of X-ray scattering and Circular Dichroism to study the interaction between antimicrobial peptides and membranes"

REVIEWER of SCIENTIFIC JOURNALS:

Phys. Rev. E., Journal of Physical Chemistry B

TEACHING

Research for Physics Undergraduates: 33-350 (sophomores and juniors), and 33-451 (seniors) ongoing

Experimental Physics: 33-104 (Fall, 2016)

Local trainer for the Xenocs Xeuss SAXS: Dec.,2022-present

Advanced X-Ray Scattering Techniques, SAXS/GIWAXS: 27-707, Material Science and Engineering (Fall, 2023, 2025)

Small-angle x-ray scattering (SAXS): Molecular Biophysics I, MBSB (Fall, 2023,2024,2025)

See also Teaching Activities in Elements Annual Report

SCIENCE FAIRS and OUTREACH ACTIVITIES

1990-2000: Science-By-Mail, Boston Museum of Science
1992-2007,10-19:Sigma Xi Undergraduate Research Symposium, (part of Meeting of the Minds at CMU), Judge
1993: Sigma Xi Undergraduate Research Symposium, Director
1995-2005: Volunteer Research Mentor for CMU High School Outreach
1996,1998: Volunteer Research Mentor for NSF Summer Research Experience for Undergraduates, CMU
1995-2000: Pittsburgh Regional Science & Engineering Fair PRSEF, Judge
2000-2010: Presenter of the Sigma Xi Award at the PRSEF
1996-1999: Pennsylvania Jr. Academy of Sciences PJAS Science Fair, Judge
2000-2025: Founder and Presenter of CMU Sigma Xi Award, PJAS Fair
2004, 2016: Judge, SRAA Poster Competition, Biophysical Society
2005-2006: Mentor for the Milliones-CMU Physics Dept. PJAS Outreach
2005,7,10,12,14: Mentor HHMI Summer Research Experience for Undergraduates
2006-08,12,17-25:Mentor for CMU undergraduate summer research programs
2008: Lectured Ms. Wright's science class, Perry Traditional Acad.
2008-2013: Mentor for Sigma Xi CMU competition, Meeting of the Minds
2009-2013: Mentor for Douglass College Extern Program, 2 weeks, January
2011: Lectured Dr. Richards' Ellis HS students - scientific writing
2012: Mentored Ellis HS students to publish their scientific papers
2012,15,18: Judge, Intel International Science & Engg. Fair, David L. Lawrence Convention Center, Pittsburgh, PA
2013: Mentor for recent CMU undergrad funded by Lipella Company
2013: Presented my research to two high school students,Tzarina and Guillaume Shippee on Oct. 25, while they videotaped me.
2014: Mentored Ellis HS student who published her work in The National High School Journal of Science, Sruthi Muluk
2014: Demonstrated oriented lipid membrane sample preparation and microscope imaging for the Tour Your Future series of talks organized by Nina Barbuto of the Carnegie Science Center
2020: Lab tour for visiting CUWIP physics students
2021: Alpha Epsilon Delta, Pre-med club at CMU, virtual presentation
2021: Pittsburgh-Allderdice Field Virtual Field Trip to Physics Dept. X-ray Facility
2022: High School Physics Teacher Training,Biological Physics at CMU
2022: Eden Christian Academy high school students, lab demo and talk
2020, 2022: Judge, Sigma Xi virtual poster session, National and international high school students at the ISEF science fair
2023,'24,'25:Pennsylvania Governor's School for the Sciences, CMU mentor
2025: Tour of the Materials Chacterization Facility Xenocs Xeuss for the National Association for College Admission Counseling
2025: Girl Scouts of Western Pennsylvania, STEM career exploration day, Tour of the MCF Xenocs Xeuss in Hamerschlag Hall

LIST OF PUBLICATIONS (December, 2025):

120) Knox, L., Winstel, P., Deserno, M., Nagle, J.F., TRISTRAM-NAGLE, S. Bending moduli of mixtures: diffusional softening and interactions Biophysical Journal Dec 2025 (published online).

119) Sharma, D., Kawakami, M., Rice, M., Smith, E., Westrey, S., Shang, Y., Gist, C., Madureira, L.M.P., Schulz, K.H.G., Varni, A.J., Stranick, I.M., Gil, R.R., TRISTRAM-NAGLE, S., Peteanu, L., Kowalewski, T., Noonan, K.J.T. 2025. Examining the Impact of Side-Chain Chirality on Conformation of a Helical Poly(3-(S-1-ethylhexyl)esterfuran). Macromolecules 58:12336-12345

118) Kuzel, Z., Clement, A., Tabrizi, M., AboHussien, A., Irla, S., Seresht, H.B., Chun, Y., TRISTRAM-NAGLE, S., Liu, Q., Shankar, M.R. 2025. Multifunctional Ionene Liquid Crystal Elastomers. ACS Applied Materials and Interfaces 17: 9728-9740

117) Mitra, S., Chen, M-T. Stedman, F., Hernandez, J., Kumble, G., Kang, X., Zhang, C, Tang, G, Reed, I., Daugherty, I.Q., Liu, W., Klucznik, K.R., Ocloo, J.L., Li, A.A., Klousnitzer, J., Heinrich, F., Deslouches, B., TRISTRAM-NAGLE, S. 2024. Cyclization of antimicrobial peptides improves their activity. ACS Omega 10: 9728-9740

116) Mitra, S., Chen, M.-T., Stedman, F., Hernandez, J., Kumble, G., Kang, X., Zhang, C., Tang, G., Daughterty, I., Liu, W., Ocloo, J., Klucznik, K.R., Li, Z.Z., Heinrich, F., Deslouches, TRISTRAM-NAGLE, S. 2024. How Unnatural Amino Acids in Antimicrobial Peptides Change Interactions with Lipid Model Membranes. Journal of Physical Chemistry B. 128: 9772-9784

115) Mitra, S., Chandersekhar, B., Li, Y., Coopershlyak, M., Mahoney, M.E., Evans, B., Koenig, R., Hall, S.C.L., Kloesgen, B., Heinrich, F., Deslouches, B., TRISTRAM-NAGLE, S. 2024. Novel non-helical antimicrobial peptides insert into and fuse lipid model membranes. Soft Matter 20: 4088-4101

114) Mitra, S., Coopershlyak, M., Li, Y., Chandersekhar, B., Koenig, R., Chen, M.-T., Evans, B., Heinrich, F., Deslouches, B., TRISTRAM-NAGLE, S. 2023. Novel Helical Trp- and Arg-Rich Antimicrobial Peptides Locate Near Membrane Surfaces and Rigidify Lipid Model Membranes. Advanced Nanobiomed Research 3:2300013

113) Jakkampudi, T., Lin, Q., Mitra, S., Vijai, A., Qin, W., Kang, A., Chen, J., Ryan, E., Wang, R., Gong, Y., Heinrich, F., Song, J., Di, Y.-P., TRISTRAM-NAGLE, S. 2023. Lung SPLUNC1 Peptide Derivatives in the Lipid Membrane Headgroup Kill Gram-Negative Planktonic and Biofilm Bacteria. Biomacromolecules 24:2904-2815

112) Kawakami, M., Sharma, D., Varni, A.J., TRISTRAM-NAGLE, S., Yaron, S., Kowalewski, T., Noonan, K.J.T. 2023. Design, Synthesis and Aromaticity of an Alternating Cyclo[4]Thiophene[4]Furan. Chemistry – A European Journal e202300477

111) Shafieenezhad, A., Mitra, S., Wassall, S.R., TRISTRAM-NAGLE, S., Nagle, J.F., Petrache, H.I. 2023. Location of Dopamine in Lipid Bilayers and Its Relevance to Neuromodulator Function. Biophysical Journal 122:1118-1129

110) Nagle, J.F., Jennings, N., Qin, W., Yan, D., TRISTRAM-NAGLE, S., Heinrich, F. 2023. Structure of the Gel Phase of diC22:1PC Lipid Bilayers Determined by X-ray Diffraction. Biophysical Journal 122:1033-1042

109) Xiang, W., Clemenza, P., Klousnitzer, J., Chen, J., Qin, W., TRISTRAM-NAGLE, S., Doi, Y., Di, Y.P., Deslouches, B. 2022. Rational

Framework for the Design of Trp- and Arg-Rich Peptide Antibiotics Against Multidrug-Resistant Bacteria. Frontiers in Microbiology 13:889791(1-16).

108) Allsopp, R., Pavlova, A., Cline, T., Salyapongse, A.M., Gillilan, R.E., Di, Y.P., Deslouches, B., Klauda, J.B., Gumbart, J.C., TRISTRAM-NAGLE, S. 2022. Antimicrobial Peptide Mechanism Studied by Scattering-Guided Molecular Dynamics Simulation. Journal of Physical Chemistry B 126:6922-6935.

107) Nagle, J.F., Evans, E.A., Bassereau, P., Baumgart, T., TRISTRAM-NAGLE, S., Dimova, R. 2021. A Needless but Interesting Controversy. Proceedings of the National Academy of Sciences USA 118:e2025011118 (Letter).

106) Varni, A.J., Kawakami, J.M., TRISTRAM-NAGLE, S., Yaron, D., Kowalewski, T., Noonan, K.J. 2021. Design, Synthesis, and Properties of a Six-Membered Oligofuran Macrocycle. Organic Chemistry Frontiers 8:1775-1782.

105) Loney, R.W., Brandner, B., Dagan, M.P., Smith, P.N., Roche, M., Fritz, J.R., Hall, S.B., TRISTRAM-NAGLE, S.A. 2021. Changes in membrane elasticity caused by the hydrophobic surfactant proteins correlate poorly with adsorption of lipid vesicles. Soft Matter 17:3358-3366.

104) Fritz, J.R., Loney, R.W., Hall, S.B., TRISTRAM-NAGLE, S. 2020. Suppression of $L\alpha/L\beta$ phase coexistence in the lipids of pulmonary surfactant. Biophysical Journal 120:243-253.

103) Loney, R.W., Panzuela, S., Chen, J., Yang, Z., Fritz, J.R., Dell, Z., Corradi, V., Kumar, K., Tieleman, D.P., Hall, S.B., TRISTRAM-NAGLE, S. 2020. Location of the hydrophobic surfactant proteins, SP-B and SP-C, in Fluid-Phase Bilayers. Journal of Physical Chemistry B 124:6763-6774.

102) West, A., Zoni, V., Teague, W.E., Leonard, A.N., Vanni, S., Gawrisch, K., TRISTRAM-NAGLE, S., Sachs, J.N., Klauda, J.B. 2020. How do ethanolamine plasmalogens contribute to order and structure of neurological membranes? Journal of Physical Chemistry B 124:828-839.

101) Seper, B.C., Ko, A., Abma, A., Folkerts, A.D., TRISTRAM-NAGLE, S., Harper, P.E. 2020. Methylene volumes in monoglyceride bilayers are larger than in liquid alkanes. Chemistry and Physics of Lipids 226:104833(1-8).

100) Heinrich, F., Salyapongse, A., Kumagai, A., Dupuy, F.G., Shukla, K., Penk, A., Huster, D., Ernst, R.K., Pavlova, A., Gumbart, J.C., Deslouches, B., Di, Y.P., TRISTRAM-NAGLE. 2020. Synergistic biophysical techniques reveal structural mechanisms of engineered cationic antimicrobial peptides in lipid model membranes. Chemistry – A European Journal 26:6247-6256.

99) Nagle, J.F., Venable, R.M., Maroclo-Kemmerling, E., TRISTRAM-NAGLE, S., Harper, P.E., Pastor, R.W. 2019. Revisiting volumes of lipid components in bilayers. Journal of Physical Chemistry B 123:2697-2709.

98) Nagle, J.F., Cognet, P., Dupuy, F.G., TRISTRAM-NAGLE, S. 2019. Structure of gel phase DPPC determined by X-ray diffraction. Chemistry and Physics of Lipids,218:168-177.

97) Kumagai, A., Dupuy, F., Arsov, Z., Elhady, Y., Moody, D. Ernst, R.K., Deslouches, B., Montelaro, R.C., Di, Y.P., TRISTRAM-NAGLE, S. 2019. Elastic behavior of model membranes with antimicrobial peptides depends on lipid specificity and D-enantiomers. Soft Matter 15:1860-1868.

96) Peralta, M.F., Smith, H., Moody, D., TRISTRAM-NAGLE, S., Carrer, D.C. 2018. Effect of anti-Leishmania drugs on the structural and elastic properties of ultra-deformable lipid membranes. J. Phys. Chem. B 122:7332-7339.

95) TRISTRAM-NAGLE, S. 2018. Physics of HIV. Invited review for Journal of Physics D: Applied Physics 51:183001(1-18).

94) Arsov, Z., González-Ramírez, E.J., Goñi, F.M., TRISTRAM-NAGLE, S.,

Nagle, J.F. 2018. Phase behavior of palmitoyl and egg sphingomyelin. Chemistry and Physics of Lipids 213:102-110.

93) Dupuy, F.G., Pagano, I., Andenoro, K., Peralta, M.F., Elhady, Y., Heinrich, F., TRISTRAM-NAGLE, S. 2018. Selective interaction of colistin with lipid model membranes. Biophysical Journal 114:919-928.

92) Skandani, A., Clement, J.A., Tristram-Nagle, S., Shankar, M.R. 2017. Aliphatic flexible spacer length controls photomechanical response in compact, ordered liquid crystalline polymer networks. Polymer 133:30-39.

91)O'Neil, L., Andenoro, K., Pagano, I., Carroll, L., Langer, L., Dell, Z., Perera, D., Treece, B.W., Heinrich, F., Lösche, M., Nagle, J.F., TRISTRAM-NAGLE, S. 2016. HIV-1 Matrix-31 Membrane Binding Peptide Interacts Differently with Membranes Containing PS vs. PI(4,5)P_2. Biochimica et Biophysica Acta 1858:3071-3081.

90)Stetten, A.Z., Moraca, G., Corcoran, T.E., TRISTRAM-NAGLE, S., Garoff, S., Przybycien, T.M., Tilton, R.D. 2016. Enabling Marangoni Flow at Air-Liquid Interfaces Through Deposition of Aerosolized Lipid Dispersions. Journal of Colloid and Interface Science 484:270-278.

89)Nagle, J.F., Jablin, M.S., TRISTRAM-NAGLE, S. 2016. Sugar Does Not Affect the Bending and Tilt Moduli of Simple Lipid Bilayers. Chemistry and Physics of Lipids 196:76-80.

88)Nagle, J.F., Akabori, K., Treece, W., TRISTRAM-NAGLE, S. 2016. Determination of Mosaicity in Oriented Stacks of Lipid Bilayers. Soft Matter 12:1884-1891.

87)TRISTRAM-NAGLE, S. 2015. Use of X-Ray and Neutron Scattering Methods with Volume Measurements to Determine Lipid Bilayer Structure and Number of Water Molecules/Lipid. In Membrane Hydration, The Role of Water in the Structure and Function of Biological Membranes, Subcellular Biochemistry Vol. 71. Ed. E. Anibal Disalvo, Springer International Publishing AG, Switzerland.

86)Neale, C., Huang, K., Garcia, A.E., TRISTRAM-NAGLE, S. 2015. Penetration of HIV-1 Tat_{47-57} into PC/PE bilayers assessed by MD simulation and X-ray scattering. Membranes 5:473-494.

85)Qiu, Y., Mohin, J., Tsai, C.-H., TRISTRAM-NAGLE, S., Gil, R.R., Kowalewski, T., Noonan, K.J.T. 2015. Stille Catalyst-Transfer Polycondensation Using Pd-PEPPSI-Ipr for High-Molecular-Weight Regioregular Poly(3-hexylthiophene). Macromolecular Rapid Communications 36:840-844.

84)Reese, C.W., Strango, Z.I., Dell, Z.R., TRISTRAM-NAGLE, S., Harper, P.E. 2015. Structural Insights Into the Cubic-Hexagonal Phase Transition Kinetics of Monolein Modulated by Sucrose Solutions. Physical Chemistry Chemical Physics 17:9194-9204.

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