CURRICULUM VITAE

NIHAL ALTAN-BONNET

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Education:

1988-1992	Hunter College, City University of New York Bachelor of Arts in Biology and Chemistry
1992-1998	The Rockefeller University Doctor of Philosophy in Cellular Biophysics Thesis: Cell biology of Multidrug Resistance **Thesis Advisor: *Prof. Sanford Simon***

Postdoctoral Training:

1999 – 2005	Postdoctoral fellow in Cell Biology and Cellular Biophysics National Institutes of Health **Postdoctoral Advisor: *Dr. Jennifer Lippincott-Schwartz***

Positions and Appointments:

2006-2013	Assistant Professor Rutgers University, State University of New Jersey
2013-2017	Earl Stadtman Investigator Head, Laboratory of Host-Pathogen Dynamics National Heart, Lung and Blood Institute National Institutes of Health, USA
2017-present	Senior Investigator Chief, Laboratory of Host-Pathogen Dynamics National Heart, Lung and Blood Institute National Institutes of Health, USA

Honors and Awards:

2023	Elected Member, Henry Kunkel Society
2022	Elected Fellow of the American Academy of Microbiology
2022	NIH Director's Challenge Award
2021	NIH Director's Award
2020	NIH ITAC Award for COVID-19 investigations
2019	NIH Board of Scientific Counselors Presentation
2018	Norman P. Salzman Memorial Award in Virology
2018	National Heart Lung and Blood Institute Director's Diversity and Inclusion Award
2017	NIH Director's Seminar
2017	John J. Holland Lecture, American Society of Virology
2017	Scialog Fellow, Gordon and Betty Moore Foundation, Research Corporation of America.
2016	Scialog Fellow, Gordon and Betty Moore Foundation, Research Corporation of America.
2016	Orloff Science Award- National Heart Lung and Blood Institute
2015	Invitation to the National Academy of Sciences President's Circle Annual Meeting.
2015	Scialog Fellow, Gordon and Betty Moore Foundation, Research Corporation of America.
2015	Profiled in "People and Ideas" section of the *Journal of Cell Biology*.
2014	National Heart Lung and Blood Institute Directors Award.
2013	Earl Stadtman Investigator Award
2013	Kavli Fellow
2012	Presidential Early Career Award in Science and Engineering (PECASE)
2011	Young Investigator Award, ASM/Theobald Smith Society.
2003	Fellows Award in Research Excellence, National Institutes of Health.
1998-2005	Fogarty Fellow, National Institutes of Health.

Extramural Research Funding (2006-2013). Note after 2013 switched to Intramural NIH.

2011	National Institutes of Health. R01AI091985 PI: Nihal Altan-Bonnet, Total Award: $2,300,000. "Assembly dynamics and role of PI4P enriched organelles for enteroviral replication."
2010 - 2013	GlaxoSmithKline. PI: Nihal Altan-Bonnet. Total Award: $300,000. "Impact of Novel PI4 kinase inhibitors on enterovirus and Hepatitis C virus replication."
2008 - 2012	National Science Foundation. MCB 0822058 PI: Nihal Altan-Bonnet. Total Award: $476,984. "Viral RNA Dynamics in Living Cells".
2008 - 2011	Busch Foundation PI: Nihal Altan-Bonnet. Total Award: $75,000. "Viral RNA Dynamics in Living Cells".

Professional Affiliations

2018-present	Swedish Society of Virology
2010-present	American Society of Virology.
2009-present	American Society of Microbiology.
1997-present	American Society for Cell Biology.

Editorial Functions

Associate Editor, *Sciences Advances*
Associate Editor, *mBio*
Associate Editor, *Molecular Biology of the Cell*
Editorial Board, *Trends in Cell Biology*
Edited Special issue of *PLOS Pathogens* on Microbes and Host Cell Membrane Interactions

Reviewer Functions

Reviewer for Federal Grant Panels:
2021 DARPA
2018 Member of Committee for Program Evaluation of NIH Peer Review Processes
2016 Maximizing Investigators' Research Award (MIRA) grant panel, CSR, NIH
2011-present Ad Hoc member, Virology B Study Section, CSR, National Institutes of Health,
2010-present Ad Hoc member, American Heart Association Scientist Development Grant Panel.
2010-present Ad Hoc member, US-Israeli Binational Science Foundation.
2008-2017 Member, Molecular and Cellular Biology Panel, National Science Foundation.

Reviewer for International Scientific Programs:
2021 CNRS
2016 Netherlands Organization for Scientific Research, Innovational Research Incentives Scheme
2016 Scientific Review of the MRC Laboratory for Molecular Cell Biology, University College London.

Reviewed Manuscripts for:
Cell, Science, Nature, Cell Host and Microbe, Immunity, Developmental Cell, Cell Reports, Nature Cell Biology, Nature Microbiology, Journal of Virology, Viruses, Virus Research, Current Opinion in Cell Biology, EMBO Journal, Journal of Cell Science, Molecular Biology of the Cell, Public Library of Science, PLOS Pathogens, PLOS One, Proceedings of the National Academy of Sciences, Traffic.

Scientific Supervisory functions

Current Scientific Trainees:
2022-present Gunjan Arora, Staff Scientist
2022-present Virginia Silva, Post-Doctoral Fellow
2022-present Kojiro Mukai, Post-Doctoral Research Fellow
2022-present Jared Wahl, Post-Doctoral Research Fellow
2022-present Graham Brogden, Post-Doctoral Research Fellow
2021-present Mamata Panigrahi, Post-Doctoral Research Fellow
2021-present Hannah Karen Labayo, Post-Doctoral Research Fellow

Former Scientific Trainees
Post-Doctoral Scientists:
2017-2022 Sourish Ghosh PhD Assistant Professor, CSR-IICB, India
2017-2021 Banu Bayyurt PhD Assistant Professor, METU, Turkey
2019-2021 Ashish Mishra PhD Interdisciplinary Scientist, FDA, USA
2015-2017 Teegan Dellibovi-Ragheb PhD Interdisciplinary Scientist, FDA, USA
2012-2015 Marne Hagemeijer PhD Research Scientist, Erasmus, Netherlands.
2011-2013 Pakieli Kaufusi PhD Assistant Professor, University of Hawaii, USA
2009-2013 Olha Ilnytska PhD Research Assistant Professor, Rutgers University, USA

PhD Students:
2018-2021 Mengyang Zhang PhD. Currently Post-Doctoral Research Fellow, Stanford University
2009-2015 Marianita Santiana PhD. Currently: Staff Scientist, NIA/NIMH
2008-2017 Ying-Han Chen PhD Currently: Post-Doctoral Research Fellow, New York University.
2007-2013 Nai-Yun Hsu, PhD Currently: Research Scientist, Mt. Sinai Icahn School of Medicine.

Masters Students:
2006-2007 Nidhi Tandon MS Currently: Research Project Coordinator, MSKCC

Undergraduate and High School Students:

2022	Tyler Smith (Clarkson University) – co-mentored with Dr. Matthew Hoffman (NIDCR)
2022	Ian Poe (University of Rochester)
2019	Emily Vollmer (Indiana University-Bloomington)
2018	Eowyn Pak (Dartmouth).
2018	Zahin Islam (Case-Western)
2018	Paul Boyd (St. Bonaventura)
2018	Alex Diaz Kirkpatrick (University of Texas)
2017-2018	Brian Ho (UGSP Scholar; Miami Intl Univ)
2017	Chenyu Zhang (UC Berkley)
2017	Vignesh Rajasekaran (UVA).
2016, 2017	Tolulope Awosika (UMD)
2015, 2016	Mehtap Cabus (Bioqual Inc)
2016	Sangavi Manickavel (Emory)
2015	Amber Liu (Dartmouth)
2012-2013	Rahul Patel (Rutgers)
2009-2010	David Cuthbert (Rutgers)

Sponsored Sabbatical Research:

2021	Victoria Virador PhD, Montgomery Community College
2017	Theresa Ward PhD, Associate Professor, London School of Hygiene and Tropical Medicine.
2015-2016	Geoff Holm PhD, Associate Professor. Colgate University.

Scientific Meeting Organization

2023	Scientific Program Committee for the 2023 Cell Bio-an ASCB|EMBO meeting.
2021	Co-Chair "Stronger Together: Co-transmission of Multiple Viral Genomes" American Society of Virology, Annual Meeting
2020	NIH-FDA Immunology Interest Group (IIG) committee member
2020	Chair -22nd Annual Norman P. Salzman Memorial Awards in Basic and Clinical Virology.
2020	Organizing Committee, American Society of Exosomes and Microvesicles Annual Meeting.
2019	21st Annual Norman P. Salzman Memorial Award and Symposium in Basic and Clinical Virology committee member.
2019	Co-Chair, Immunology of Infectious Disease, Immunology Interest Group Retreat, NIH.
2018	Co-Chair, Pathogens Mini Symposia, American Society for Cell Biology.
2018	Chair, Phospholipids in Host-Pathogen interactions for FASEB meeting on Phospholipids
2017	Chair, Session on Transmission, Europic
2015	Co-Chair, Special Interest Subgroup on "Autophagy in Disease and Survival". American Society for Cell Biology Annual Meeting, San Diego, CA.
2015	Discussion Chair, Gordon Research Conference on Viruses and Cells. Girona, Spain.
2014	Chair, Symposium on "Role of the Autophagic and Endo/Lysosomal Membrane Systems in Disease and Survival". NIH Research Festival, Bethesda, MD.
2013	Chair, Mini symposium on "Systems Biology." Keystone Meeting Positive Strand RNA Virus Replication, Boston, MA.
2011	Chair, Mini symposium on "Cell-Pathogen Interactions". American Society for Cell Biology, Annual Meeting, Denver, CO.

Faculty Recruitment Activities

2015-2020	Member of search committee for Earl Stadtman Investigator Program/NIH, Faculty recruitment.
2018	Member of search committee for NIAID/RML Laboratory of Virology, Faculty recruitment.
2007-2013	Member of search committee for faculty recruitment,

Federated Department of Biological Sciences.
Rutgers University, Newark, NJ.

Service/Training

2018-present Member of ASEMV viral infectious disease group
2014-present Women Scientists Advisory Committee, NIH.
2014-2017 Light Microscopy Steering Committee, NHLBI/NIH.
2014-2017 Electron Microscopy Steering Committee, NHLBI/NIH

Teaching

2023 Faculty of Advanced Training Course Frontiers in Emerging, Re-Emerging, and Zoonotic Diseases and Diversity (FrERZD²)
2019 Lecturer on Exosome Biology at Johns Hopkins University.
2018 Lecturer in Virology at Uniformed Services University of Health Sciences.
2018 Lecturer on Exosome Biology in Bio-Trac Training Programs.
2016 Lecturer: Physiology Course, Woods Hole Marine Biological Laboratory.
2015-2017 Lecturer: FAES Cell Biology Course, National Institutes of Health.
2006-2013 Lecturer: Undergraduate Cell Biology course, Rutgers University.
2006-2013 Lecturer: Graduate Cell Biology course, Rutgers University.
2008-2013 Course Creator and Director: Virology. Advanced Undergraduate course, Rutgers University.
2000-2010 Course Creator and Director: Applications of Imaging to Cell Physiology, Laboratory course, Rutgers University.

Invited Talks at Scientific Meetings

2024 Gordon Conference, Lysosomes and Endocytosis
2023 American Association of Extracellular Vesicles
2023 Biophysical Society, Membrane Fusion and Budding
2023 Parseghian Conference for Niemann-Pick Type C Research, **Keynote lecture**
2023 International Society for Stem Cell Research Annual Meeting
2023 International Conference on Antiviral Research /Gates Foundation
2023 Caliciviruses Meeting
2023 Gordon Research Conference on Salivary Glands

2022 Keystone Symposia on Extracellular vesicles
2022 Philippine Society of Cell Biology, **Keynote lecture**
2022 American Society of Exosomes and Microvesicles
2022 4th International dsRNA Virus Symposium, **Keynote Lecture**
2022 Institute Mathematica, Cargese Annual meeting
2022 FASEB Phospholipids Meeting
2022 Gordon Research Conference, Protein trafficking and Processing
2022 JCS Cell Dynamics: Host Pathogen Interface Meeting

2021 American Society for Cell Biology Annual meeting
2021 ASMB Annual Meeting
2021 Emerging Infectious Diseases and Related Environmental, Clinical and Translational Challenges
2021 Cold Spring Harbor Laboratory COVIDR3
2021 Keystone Symposia: Lipidomics of Health and Disease
2021 Keystone Symposia: Exosomes, Microvesicles and Other Extracellular Vesicles

2020 Exosomes in Human Infectious Diseases (ISEV)
2020 Israeli Microscopy Society Annual Meeting

2020 Winter q-bio-UCSD, Kona HI

2019 Casa Matematica
2019 Emerging Concepts and Technologies in Virology Symposium- Univ. Michigan
2019 Gordon Research Conference: Molecular Membrane Biology. Plenary Lecture.
2019 Gordon Research Conference: Lipids. Plenary Lecture.
2019 Exosomes, Microvesicles, and Infectious Disease meeting, **Keynote Lecture**

2018 American Society for Cell Biology Annual meeting, Co-chair Pathogens Mini Symposia
2018 15th National Smogen Symposium on Virology, Sweden, **Keynote Lecture**.
2018 9th International Meeting on Virus Structure and Assembly, Plenary Lecture.
2018 Pittsburgh Membrane Traffic Meeting, **Keynote Lecture**.
2018 Keystone Symposia on Intrinsic Defenses and Counter defenses, Plenary Lecture.
2018 Keystone Symposia on Phosphoinositide Biology, Plenary Lecture.
2018 FASEB meeting: Phospholipids, Plenary Lecture.
2018 International Virus Assembly Symposium, Plenary Lecture.

2017 Swedish National Infection Biology Meeting, Plenary Lecture.
2017 Gordon Research Conference: Molecular and Cellular Biology of Lipids, Plenary Lecture.
2017 American Society of Virology, Annual Meeting, **Keynote Lecture**.
2017 FASEB meeting: From Unfolded Proteins in the ER to Disease, Plenary Lecture.
2017 Scialog Annual Meeting

2016 Rocky Mountain Labs/NIAID: Metabolism and Pathogens Symposium
2016 Keystone Symposia on RNA Virus Replication. Plenary Lecture
2016 FASEB Summer Research Conference on Virus Assembly and Structure. Plenary Lecture
2016 Europic Meeting, Switzerland. **Keynote Lecture.**
2016 Gordon Research Conference: Endosomes and Lysosomes.
2016 US-Japan Medical Collaborative Meeting, NIH.

2015 American Liver Foundation, 25th Annual Irwin M. Arias Symposium. **Keynote Lecture.**
2015 Gordon Research Conference: Molecular Membrane Biology. Plenary Lecture
2015 Gordon Research Conference: Apoptotic Cell Clearance and Inflammation. Plenary Lecture
2015 International Society on Extracellular Vesicles. Plenary Lecture

2014 ICGEB/EMBO Workshop on Human RNA viruses. Plenary Lecture
2014 Pasteur-Weizmann Symposium. **Keynote Lecture.**

2013 American Society for Cell Biology Annual Meeting.
2013 Gordon Research Conference: Viruses and Cells. Plenary Lecture
2013 ASM Defense and Emerging Diseases Workshop.

2011 American Society for Cell Biology Annual Meeting.
2011 American Society for Virology Annual Meeting.
2011 Society for General Microbiology Annual Meeting.

2010 CellNetworks- Heidelberg, Germany. Plenary Lecture
2010 FASEB Conference Arf GTPases.
2010 Plus Strand RNA virus Annual Meeting. Plenary Lecture

2008 American Society for Cell Biology Annual Meeting.

2007 American Society for Cell Biology Annual Meeting.
2007 FASEB Conference Arf GTPases.
2007 Gordon Research Conference: Viruses and Cells.

2005 American Society for Human Genetics Annual Meeting.

2004 Zeiss Advanced Imaging Symposium.

2003 Gordon Research Conference: Molecular Membrane Biology.

2002 American Society for Cell Biology Annual Meeting.

2001 American Society for Cell Biology Annual Meeting.

Invited Talks at Universities and Institutions

2023 University of Toronto
2023 Brown University
2023 University of North Carolina Chappell Hill- Infectious Diseases
2023 University of North Carolina Chappell Hill- Cell Biology and Physiology Retreat- **Keynote Speaker**
2023 University of Vermont
2023 UT Southwestern (Department of Microbiology)
2023 UT Southwestern (Department of Physiology)
2023 University of Heidelberg
2023 Washington University St. Louis
2023 Advanced Training Course Frontiers in Emerging, Re-Emerging, and Zoonotic Diseases and Diversity (FrERZD^2)
2022 Harvard Medical School
2022 St. Jude Children's Research Hospital
2022 The Rockefeller University- Cell Biology Lectures
2022 UCSF/Gladstone
2022 George Washington University
2022 Princeton University
2021 Penn State
2021 Vanderbilt University
2021 Yale University
2020 Indiana University- Bloomington
2020 University of Maryland
2019 Bloomberg School of Public Health/Johns Hopkins University
2019 George Mason University
2019 University of Michigan, Ann Arbor
2019 McGill University
2019 Cornell University
2018 University of Texas Medical Branch
2018 Rutgers Center for Lipid Research Symposium
2018 University of West Virginia
2018 University of Florida
2017 Karolinska Institute
2017 Umea University
2017 Memorial Sloan Kettering Cancer Center
2017 Harvard Medical School
2017 University of Arizona

2017 Vanderbilt University
2017 UCSF
2017 Novartis
2017 University of Iowa and Iowa State
2017 University of New Mexico
2016 Virginia Tech
2016 University of Kentucky
2016 Duke University
2016 Yale University, Department of Immunobiology.
2016 Rutgers University.
2015 Mt. Sinai-Icahn School of Medicine
2015 Washington University St. Louis, Department of Molecular Microbiology.
2015 Institute Curie.
2015 University of Maryland, Department of Veterinary Medicine.
2014 University of Nebraska Medical Center, Department of Cell Biology.
2014 London School of Hygiene and Tropical Medicine.
2014 Institute Monod.
2013 The Rockefeller University.
2013 Rocky Mountain Labs, NIAID, NIH.
2012 University of Michigan, Department of Microbiology.
2012 University of Notre Dame, Department of Chemistry and Biochemistry.
2011 University of Utah, Department of Biochemistry.
2010 National Children's Medical Center.
2010 Public Health Research Institute.
2010 GlaxoSmithKline.
2009 Yale University.
2009 Penn State, Department of Biochemistry.
2009 Cornell University,
2007 EMBL
2007 University of Heidelberg
2006 Albert Einstein College of Medicine.
2005 Rutgers University.
2005 Memorial Sloan Kettering Cancer Center.
2004 Stony Brook University.
2004 Hunter College, CUNY.
2004 University of California at San Francisco.
2004 National Cancer Institute.
2002 Catholic University.
2002 National Heart Lung and Blood Institute.
2001 Institute Curie.
2001 The Rockefeller University.
1999 Weizmann Institute of Science.

Publications

1. Contreras PS, Tapia PJ, Jeong E, Ghosh S, Altan-Bonnet N, Puertollano R. (2023) β-coronaviruses exploit cellular stress responses by modulating TFEB and TFE3 activity. ***iScience*** 26(3):106169

2. Dahmane S, Kerviel A, Morado DR, Shankar K, Ahlman B, Lazarou M, Altan-Bonnet N, Carlson LA (2022) Membrane-assisted assembly and selective autophagy of enteroviruses. ***Nature Communications*** 13(1):5986

3. Zhang M, Ghosh S, Li M, Altan-Bonnet N*, Shuai D* (*equal senior corresponding authors) (2022) Vesicle-Cloaked Rotavirus Clusters are Environmentally Persistent and Resistant to Free Chlorine Disinfection. ***Environ Sci Technol.*** 56, 8475-8484

4. Ghosh S, Kumar M, Santiana M, Mishra A, Zhang M, Labayo H, Chibly AM, Nakamura H., Tanaka T, Henderson W, Lewis E, Voss O, Su Y, Belkaid Y, Chiorini JA, Hoffman PM, Altan-Bonnet N (2022) Enteric viruses replicate in salivary glands and infect through saliva. ***Nature*** 607, 345-350
News and Views in Nature, Discussed in This Week in Virology (TwiV), profiled in Cell Host and Microbe, New Scientist, scientific and popular press (The Atlantic, National Geographic).

5. Zhang M, Altan-Bonnet N, Shen Y, Shuai D (2022) Waterborne human pathogenic viruses in complex microbial communities: environmental implications on virus infectivity, persistence, and disinfection. ***Environ Sci Technol***. 56, 5381-5389

6. Kerviel A, Zhang M, Altan-Bonnet N. (2021) A new infectious unit: extracellular vesicles carrying virus populations. ***Annual Rev Cell and Developmental Biology*** doi: 10.1146/annurev-cellbio-040621-032416

7. Kumar M and Altan-Bonnet N (2021) Viral pores are everywhere. ***Molecular Cell*** 81, 2061-2063

8. Ilnytska O, Lai K, Gorshkov K, Schultz ML, Tran BN, Jeziorek M, Kunkel TJ, Azaria RD, McLoughlin HS, Waghalter M, Yang X, Schlame M, Altan-Bonnet N, Zheng W, Lieberman AP, Dobrowolski R, Storch J. (2021) Enrichment of NPC1 deficient cells with LBPA stimulates autophagy, improves lysosomal function, and reduces cholesterol accumulation. ***J Biol Chem*** 100813. doi: 10.1016/j.jbc.2021.100813

9. Zhang M, Ghosh S, Kumar M, Santiana M, Bleck C, Chaimongkol N, Altan-Bonnet N*, Shuai D* (equal senior corresponding authors) (2021). Emerging Pathogenic Unit of Vesicle-Cloaked Murine Norovirus Clusters are Resistant to Environmental Stresses and UV_{254} Disinfection. ***Environ Sci Technol*** 55, 6197-6205 *Highlighted by the National Science Foundation*
https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=302606&org=NSF&from=news

10. Ilnytska O, Jeziorek M, Lai K, Altan-Bonnet N, Dobrowolski R, Storch J (2021) Lysobisphosphatidic acid (LBPA) enrichment promotes cholesterol egress via exosomes in Niemann Pick type C1 disease. ***BBA - Molecular and Cell Biology of Lipids*** 866, 158916

11. Flynn J, Langner CA, Baker PJ, Pei L, Gorfu EG, Bochart R, Santiana M, O'Connell EM, Nutman TB, Altan-Bonnet N, Rosinger SE, Brenchley JM, Ortiz AM. (2021) Luminal microvesicles uniquely influence translocating bacteria after SIV infection. ***Mucosal Immunology*** 14, 937-948

12. Ghosh S, Dellibovi-Ragheb T, Pak E, Fisher M, Hsu V, Bleck C, Takvorian P, Fehr A, Perlman S, Altan-Bonnet G, Altan-Bonnet N. b-Coronaviruses use lysosomes for egress instead of the biosynthetic secretory pathway. ***Cell*** 183, 1520-1535(2020) *Highlighted by Nature, Nature Reviews, Reuters, The Scientist, Faculty of 1000 must read.*

13. Roth AN, Helm EW, Kirsche E, Smith JC, Mirabelli C, Eurell LB, Ghosh S, Kennedy E, Hernandez A, Baldridge MT, Altan-Bonnet N, Wobus CE, Karst SE (2020) A Novel Mouse Model of Norovirus Diarrhea. ***Nature Communications*** 11, 2968

14. Ziegler C, Kim J, Piersanti K, Oyler-Yaniv A, Argyropoulos KV, Van den Brink MRM, Palomba L, Altan-Bonnet N, Altan-Bonnet G. (2019) Constitutive Activation of the B Cell Receptor Underlies Dysfunctional Signaling in Chronic Lymphocytic Leukemia. ***Cell Reports*** 28, 923-93

15. Altan-Bonnet N, Perales C and Esteban Domingo. (2019) Extracellular vesicles: Vehicles of en bloc viral transmission. ***Virus Research.*** 265,143-149

16. Altan-Bonnet N and Santiana M (2019) Insane in the Membrane: Glial Extracellular Vesicles Transmit Polyomaviruses. ***mBio*** 10(3). pii: e01024-19

17. Santiana M., Ghosh S., Du WL., Rajasakaran V., Ho, BA., Mutsafi Y., Corcelli A., Jesus-Diaz DA., Sosnovtsev S., Levenson EA., Parra GI., Takvorian P., Cali A., Bleck C., Vlasova A., Saif L., Patton J., Green KY., Altan-Bonnet N. (2018) Vesicle-cloaked virus clusters are the optimal units for inter-organismal viral transmission. ***Cell Host and Microbe*** 24, 208-220 *Cover article, Highlighted by Nature Reviews, NPR, BBC, BBC World News, Faculty of 1000/Must read*

18. Doms A, Sanabria T, Hansen JN., Altan-Bonnet N, Holm, GH. (2018) 25-hydroxycholesterol production by interferon stimulated gene cholesterol-25-hydroxylase restricts mammalian reovirus infection. ***Journal of Virology*** pii: JVI.01047-18

19. Sekhar V, Pollicino T, Diaz G,Engle RE, Melis M, Alayli F, Kubat J, Tice A, Altan-Bonnet N, Zamboni F, Lusso P, Emerson SU, Farci P. (2018) Identification of TACSTD2 as a novel host cofactor for hepatitis C virus entry. ***Plos Pathogens*** 4, e1006916

20. Mutsafi Y and Altan-Bonnet N (2018) Viral Exit by Secretory Autophagy. ***Viruses*** 10, pii: E139

21. Oyler-Yaniv J, Oyler-Yaniv A, Shakiba M, Min NK, Chen YH, Cheng SY, Krichevsky O, Altan-Bonnet N, Altan-Bonnet G (2017). Catch-and-release of cytokines mediated by tumor phosphatidylserine converts transient exposure into long-lived inflammation. ***Molecular Cell*** 66, 635-647.

22. Altan-Bonnet N (2016) Lipid Tales of Viral Replication and Transmission. ***Trends in Cell Biology*** (16)30153-2.

23. Altan-Bonnet N (2016) Extracellular vesicles are the Trojan horses of viral infection. ***Curr Opin Microbiol***. 32, 77-81

24. Klionsky DJ…..Altan-Bonnet N.., et al. (2016) Guidelines for the use and interpretation of assays for monitoring autophagy. Autophagy 12, 1-222.

25. Altan-Bonnet N and Chen YH (2015). Intercellular transmission of viral populations with vesicles. ***Journal of Virology***, 89,12242-12244.

26. Chen YH, Du WL, Takvorian PM, Pau C, Cali A, Brantner C, Stempinski ES, Connelly PS, Ma CH, Jiang P, Wimmer E, Altan-Bonnet G, Altan-Bonnet N. (2015) Phosphatidylserine vesicles enable efficient *en bloc* transmission of enteroviruses. ***Cell*** 160, 619-630. *Highlighted by Faculty of 1000/must read, Journal of Virology*

27. Santiana M, Takvorian P, Altan-Bonnet N, Cali A (2015). A Novel Fluorescent Labeling Method Enables Monitoring of Spatio-Temporal Dynamics of Developing Microsporidia. ***Journal of Eukaryotic Microbiology*** doi: 10.1111/jeu.12281.

28. Altan-Bonnet N, Ilnytska O (2015). Making more with less: how viruses with limited genetic repertoire generate complex replication organelles. ***Enteroviruses: Omics, Molecular Biology and Control.***

29. Lakdawala SS, Wu Y, Wawrzusin P, Kabat J, Broadbent AJ, Lamirande EW, Fodor E, Altan-Bonnet N, Shroff H, Subbarao K. (2014) Influenza a virus assembly intermediates fuse in the cytoplasm. ***PLOS Pathogens*** 10, e1003971.

30. Ma HC, Liu Y, Wang C, Strauss M, Rehage N, Chen YH, Altan-Bonnet N, Hogle J, Wimmer E, Mueller S, Paul AV, Jiang P. (2014) An interaction between glutathione and the capsid is required for the morphogenesis of C-cluster enteroviruses. ***PLOS Pathogens*** 10, e1004052.

31.Ilnytska O, Santiana M, Belov G, Storch J, Dixon J, Brinker A, Altan-Bonnet N (2013). Enteroviruses harness the cellular endocytic machinery to remodel the host cell cholesterol landscape for effective viral replication. ***Cell Host and Microbe*** 14, 281-293 *Highlighted by Trends in Microbiology*

32. Banerjee A, Chakraborty S., Altan-Bonnet N., Grebel H. (2013) Monitoring bound HA1(H1N1) and HA1(H5N1) on freely suspended graphene over plasmonic platforms with infrared spectroscopy. ***Chemical Physics Letters*** 582, 134-140

33. Altan-Bonnet N, Balla T (2012). Phosphatidylinositol 4 kinases: Hostages forced to build panviral replication platforms. ***Trends in Biochemical Sciences*** 37, 293-302.

34. Hsu, N., Ilnytska, O., Belov, G., Santiana, M., Chen, Ying-Han, Takvorian, P., Pau, C. van der Schaar, H., Kauhsik-Basu, N., Balla, T., Cameron, C., Ehrenfeld, E., van Kuppeveld, F, Altan-Bonnet, N (2010**).** Viruses Reorganize Secretory Pathway to form Organelles with Specific Lipid Microenvironment for RNA Replication. ***Cell*** 141, 799-811. *Faculty of 1000/Must read; F1000 Top 10 most read papers in Microbiology, Physiology; Highlighted by National Science Foundation. Inclusion in "Cell Biology 2011" by American Society of Cell Biology and cited in ASCB "Novel & Newsworthy Top Picks.*

35. Altan-Bonnet N**,** Altan-Bonnet G (2009) Fluorescence correlation spectroscopy in living cells: a practical approach. ***Current Protocols in Cell Biology***. 4.24.

36. Naslavsky N, McKenzie J, Altan-Bonnet N, Sheff D, Caplan S. (2009) EHD3 regulates early-endosome-to-Golgi transport and preserves Golgi morphology. ***Journal of Cell Science*****.** 122, 389-400**.**

37. Guan D, Altan-Bonnet N**,** Parrott AM, Arrigo CJ, Li Q, Khaleduzzaman M, Li H, Lee CG, Pe'ery T, Mathews MB. (2008) Nuclear factor 45 (NF45) is a regulatory subunit of complexes with NF90/110 involved in mitotic control. ***Molecular and Cellular Biology*****.** 28, 4629-41.

38. Belov G, Altan-Bonnet N, Kovtunovych G, Jackson CL, Lippincott-Schwartz J, Ehrenfeld E. (2007) Hijacking components of the secretory pathway for replication of poliovirus RNA. ***Journal of Virology*** 81:558-567

39. Altan-Bonnet N, Sougrat R, Liu W, Snapp EL, Ward TH, Lippincott-Schwartz J. (2006) Golgi inheritance in mammalian cells is mediated through endoplasmic reticulum export activities. ***Molecular Biology of the Cell*** 17, 990-1005.

40. Altan-Bonnet N, Rachid Sougrat, Lippincott-Schwartz J. (2004) Molecular basis of Golgi biogenesis as a steady-state system. ***Current Opinions in Cell Biology*.** 16, 364-372.

41. Altan-Bonnet N., Lippincott-Schwartz J. (2004) The Golgi apparatus: structure, function and dynamics. ***The Biology of Cellular Organelles*.** Landes Press**.**

42. Altan-Bonnet N**,** Polishchuk, R., Phair, RD., Weigert R., Lippincott-Schwartz J (2003) A role for Arf1 in mitotic Golgi disassembly, chromosome segregation and cytokinesis. ***Proceedings of the National Academy of Sciences*** 100, 13314-13319.

43. Lippincott-Schwartz J., Altan-Bonnet N**.**, Patterson GH (2003) Photobleaching and photoactivation: following protein dynamics in living cells. ***Nature Cell Biology*** 5, S7-S14.

44. Snapp, E. L., Altan, N, Lippincott-Schwartz, J. (2003) Measuring protein mobility by photobleaching GFP-chimeras in living cells. ***Current Protocols in Cell Biology*** 21.1.1–21.1.23.

45. Griffis E, Altan N**,** Lippincott-Schwartz, J, Powers, M (2002) Nup98 is a mobile nucleoporin with transcription dependent dynamics. ***Molecular Biology of the Cell*** 13, 1282-1297.

46. Zaal, K., Smith, C.L., Polishchuk, R.S., Altan N, Cole, N., Ellenberg, J., Hirschberg,K., Presley, J., Roberts, T., Siggia, E., Phair, R., Lippincott-Schwartz, J. (1999)Golgi membranes are absorbed into and re-emerge from the ER during mitosis. ***Cell*** 99, 589-601.

47. Altan N (1998) Cell Biology of Multidrug Resistance. Ph.D. Thesis. *The Rockefeller University Press.*

48. Altan N, Chen Y, Schindler M, Simon SM (1999) Tamoxifen inhibits acidification in cells independent of the estrogen receptor. ***Proceedings of the National Academy of Sciences*** 96, 4432-4437.

49. Altan N**,** Chen Y, Schindler M, Simon SM (1998) Defective acidification in human breast tumor cells and implications. ***Journal of Experimental Medicine*** 187, 1583-1598.

50. Han W, Yu Y, Altan N**,** Pick L (1993) Multiple proteins interact with the fushi tarazu proximal enhancer. ***Molecular and Cellular Biology*** 13, 5549-555.