

CURRICULUM VITAE

A. Personal information

Name: Alexander Ploss

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Department of Molecular Biology
Princeton University
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B. Education/Training

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of Tübingen, Germany	B.S.	1999	Biochemistry
University of Washington, Seattle		1999-2000	Biochemistry/Immunology
Memorial Sloan-Kettering Cancer Center		2001	Immunology
University of Tübingen, Germany	M.S.	2001	Immunology/Biochemistry
Weill Graduate School of Medical Sciences of Cornell University/Memorial Sloan-Kettering Cancer Center	Ph.D.	2004	Immunology
The Rockefeller University	Postdoc	2005-2008	Virology/Immunology

C. Positions and Honors.

1999-2000 Visiting Ph.D. Student, Howard Hughes Medical Institute, University of Washington, Seattle, WA, Department of Immunology (Alexander Rudensky)

2000 Graduate Research Associate, German Cancer Research Center, Heidelberg, Germany, Department of Applied Tumor Virology (Harald zur Hausen)

2001-2004 Ph.D. Student, Weill Graduate School Medical Sciences of Cornell University/Memorial Sloan-Kettering Cancer Center, NY, NY, Immunology Program, Laboratory of Antimicrobial Immunity (Thesis advisor: Eric G. Pamer)

2005-2008 Postdoctoral Associate/Fellow, Laboratory of Virology & Infectious Disease, Center for the Study of Hepatitis C, The Rockefeller University (Charles M. Rice)

2008-2009 Research Associate, Laboratory of Virology & Infectious Disease, Center for the Study of Hepatitis C, The Rockefeller University (Charles M. Rice)

2009-2013 Research Assistant Professor, Laboratory of Virology & Infectious Disease, Center for the Study of Hepatitis C, The Rockefeller University

01/13-06/13 Research Associate Professor, Laboratory of Virology & Infectious Disease, Center for the Study of Hepatitis C, The Rockefeller University

2013-2018 Assistant Professor, Department of Molecular Biology, Princeton University

2013-present Member, Cancer Institute of New Jersey (CINJ)

2013-present Faculty Affiliate, Program in Global Health and Health Policy, Princeton University

2014-present Member of the Executive Committee, Center for Health and Wellbeing, Princeton University

2018-2022 Associate Professor (with tenure), Department of Molecular Biology, Princeton University

2021-present Member, Center of Excellence for Cancer Immunology and Metabolism Working Group, CINJ/Princeton

2022-present Full Professor, Department of Molecular Biology, Princeton University

2023-present Endowed Harry C. Wiess Professor in the Life Sciences, Princeton University

2024-present Scientist, Southwest National Primate Research Center, San Antonio, Texas

2025-present Co-Director, Program in Global Health and Health Policy, Princeton University

2025-present Affiliate Faculty, High Meadows Environmental Institute, Princeton University

Other Professional Activities

Ad hoc reviewer for (selection): Nature Medicine, Nature Microbiology, Nature Communications, Science, Science Translational Medicine, Cell Host & Microbe, PNAS, Journal of Experimental Medicine, Journal of Hepatology, Journal of Virology, Hepatology

2013-2014	Guest Editor, Journal of Immunological Methods
2014-2015	Section Editor, Current Opinion of Virology
2015-2017	Reviews Editor, Viruses
2017-present	Associate Editor, Viruses
2017-present	Associate Editor, The Journal of Virology
2017-present	Editorial Board, Gastroenterology
2019-2024	Editorial Board, Journal of Hepatology
2022-present	Editorial Board, PLoS Pathogens
2010-2013	Consultant, APATH LLC.
2014	Member of the PCSK9 - Inhibition HCV Scientific Advisory Board, Regeneron Pharmaceuticals/Sanofi
2014-2016	Member of the HBV Cure Scientific Advisory Board, Gilead Sciences
2016-2017	Consultant, Bristol-Myers Squibb
2016-present	Instructor for summer courses, Torhea Education Group/Neoscholar Education group
2017-2021	Member of the Scientific Advisory Board, Hurel Corporation
2019-present	Founder & President, Acurasset Therapeutics Inc.
2020-2022	Consultant, PharmaSeq
2021-2022	Consultant, Lycia Therapeutics
2022-present	Chair/Member of the Scientific Advisory Board, TWINCORE, Center for Experimental and Clinical Infection Research GmbH, Hannover, Germany
2023-2024	Consultant, Roche Pharma
2024	Helmholtz Health Strategic Advisory Board, Germany
2024-present	Member, International Coalition to Eliminate HBV (ICE-HBV), Working Group for outreach to HBV/HDV researchers in under-resourced regions
2024-present	Consultant, Moderna Therapeutics
2025-present	Member of the Scientific Advisory Board, Helmholtz Centre for Infection Research GmbH, Braunschweig, Germany
2025-present	Consultant, Vir Biotechnology
2013	Member of the organizing committee for the 2013 IOM Neuroscience Forum workshop on "Speeding Therapeutics towards First-in-Human Trials for Nervous System Disorders", Washington, D.C.
2013	Co-organizer for the 2013 symposium on "HCV animal models and vaccine development" sponsored by European Union, Tallinn, Estonia.
2015-2016	Member of the International Scientific Committee for the 5 th International Workshop on Humanized Mice in 2016, Zurich, Switzerland
2016-2017	Member of the Local Organizing Committee of the 24 th International Symposium on Hepatitis C Virus and Related Viruses, Cape Cod, MA
2017	Chair of the "Cell culture Systems and Animal Models" workshop at the 24 th International Symposium on Hepatitis C Virus and Related Viruses, Cape Cod, MA
2021	Session chair "Animal Models, Organoids and Replication Systems" at the 27 th International Symposium on Hepatitis C Virus and Related Viruses, Montreal, Canada (virtual)
2021	Session chair "Application of new technologies and advances in models for the study of HBV" at the 2021 International HBV Meeting
2023	Member of the Local Organizing Committee of the 29 th International Symposium on Hepatitis C, Flaviviruses and Related Viruses, Atlanta, GA
2023	Session chair "Drug discovery in preclinical models" at the 2023 International HBV Meeting
2022-2024	Organizer of the 2024 International HBV Meeting, Chicago, IL

2024-2025 Co-organizer of the “Quantitative Immunology Workshop”, Princeton Center for Theoretical Science, Princeton NJ

Grant Review

2011-2021 Grant reviewer for National Research Agency (Agence National de la Recherche), France
2011 Reviewer for the IOM&NRC of the National Academies report on “Chimpanzees in Biomedical and Behavioral Research: Assessing the Necessity”

2011-present Adhoc grant reviewer for the National Institute for Allergy and Infectious Disease (NIAID)
2013-present Adhoc grant reviewer for the German Research Foundation (Deutsche Forschungsgemeinschaft)

2014 Adhoc grant reviewer for Ghent University (Belgium) Industrial Research Fund
2014-2015 Adhoc grant reviewer for the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

2015-2016 Adhoc grant reviewer for the Wellcome Trust (U.K.) and India Alliance System (India)
2016 Grant Reviewer for the Israeli Science Foundation and NC3Rs (UK)

2016-2019 Member Microbial Pathogenesis and Cancer Grant Review Section, American Cancer Society
2019-2022 Co-chair Microbial Pathogenesis and Cancer Grant Review Section, American Cancer Society
2020-2021 Adhoc grant reviewer for the Swiss National Science Foundation
2020 Adhoc grant reviewer for the Science Foundation Ireland
2020-2021 Adhoc grant reviewer for the Collaborative Research Fund, Hong Kong
2022-2023 Adhoc grant review for the German Center for Infection Research (Deutsches Zentrum für Infektionsforschung, DZIF)

2022-present Member of the Medicine and Biology Panel, University Grants Committee, Hong Kong
2023 Member of the review board “Research Topics Immunology and Cancer & Inflammation, Infection and Cancer” at the German Cancer Research Center (DKFZ)

2023-present Alternate Chair/Standing Member of the NIAID “Viral Dynamics & Transmission” study section

Professional memberships

2010-present American Association for the Advancement of Science (AAAS)
2011-2013 The Society for Clinical and Translational Science (CTS)
2011-present Infectious Diseases Society of America (IDSA)
HIV Medicine Association (HIVMA)
New York Academy of Science
American Association for the Study of Liver Diseases

2012-present American Association of Immunologists
2014-present American Society of Virology
American Society of Microbiology

2015-present German Society for Virology (Gesellschaft für Virologie)
Theobald Smith Society

Honors

1999-2002 Studienstiftung des deutschen Volkes (German National Merit Foundation)
2002 Prize for the best Diplomthesis (MS equivalent) awarded by the Association of Biochemists of Tübingen, Germany

2003-2004 Cancer Research Institute pre-doctoral fellowship
2005-2006 Kimberly Lawrence-Netter Cancer Research Discovery Fund Award
2009 Best poster presentation during Rockefeller University graduate student recruitment

2010-present Contributing member of the Faculty of 1000 (Biology)
2011-2012 Astellas Young Investigator Award by the Infectious Disease Society of America
2012-2013 American Liver Foundation Gregg Allman Liver Scholar Award
2015 Viruses Young Investigator Award, Runner-up
2015 Princeton University Princeton “New Ideas in the Natural Sciences” Award (with Jared Toettcher)

2015 Löffler-Frosch Prize of the German Society of Virology

2015	Young Investigator Award, Theobald Smith Society
2015	Merck Irving S. Sigal Memorial Award of the American Society of Microbiology
2015-2020	American Cancer Society Research Scholar Award
2016	Princeton University Intellectual Property Accelerator Fund Award
2016	Burroughs Wellcome Fund Investigator in the Pathogenesis of Infectious Disease Award
2017	Web of Science™ Highly Cited Researcher: highly cited researchers demonstrated significant and broad influence reflected in their publication of multiple highly cited papers over the last decade. These highly cited papers rank in the top 1% by citations for a field or fields and publication year in the Web of Science™
2018	Princeton University Intellectual Property Accelerator Fund Award
2018	Web of Science™ Highly Cited Researcher
2019	Princeton University Intellectual Property Accelerator Fund Award
2019	Web of Science™ Highly Cited Researcher
2020	Princeton Catalysis Initiative Grant, with Ralph Kleiner
2020	Web of Science™ Highly Cited Researcher
2021	First Prize, BioNJ Pitch Presentation Competition, 11 th Annual Biopartnering Conference
2023	Princeton University Intellectual Property Accelerator Fund Award
2023	Elected Fellow to the American Academy of Microbiology
2023	Endowed Harry C. Wiess Professor in the Life Sciences, Princeton University
2024	Elected Fellow to the American Association for the Advancement of Science (AAAS)

D. Publications

D.1. Prior to graduate school

1. Reuss F.U., Heber R., **Ploss A.**, Berdel B. (2001) Amphotropic murine leukemia virus replication in human mammary epithelial cells and the formation of cytomegalovirus-promoter recombinants, *Virology* 291: 91-100.

D.2. Graduate work (Memorial Sloan Kettering Cancer Center)

D.2.1. Research Articles

2. Kerksiek K.M., **Ploss A.**, Leiner I., Busch D.H., Pamer E.G. (2003) H2-M3 restricted T cells: persistence and activation without expansion, *The Journal of Immunology*, 170: 1862-9.
3. **Ploss A.**, Lauvau G., Contos B., Kerksiek K.M., Lenz L.L., Bevan M.J., Pamer E.G. (2003) Promiscuity of MHC class Ib restricted T cell responses, *The Journal of Immunology*, 171: 5948-55. PMID: PMC2791464
4. Wong P., Lara-Tejero M., **Ploss A.**, Pamer E.G. (2004) Rapid development of T cell memory, *The Journal of Immunology*, 172: 7239-45.
5. Dao T., Guo D., **Ploss A.**, Stolzer A., Saylor C., Boursalian T., Im J.S., Sant'Angelo D. (2004) Development of CD1d-restricted NKT cells in the mouse thymus, *European Journal of Immunology* 34: 3542-52.
6. **Ploss A.**, Tran A., Menet E., Leiner I., Pamer E.G. (2005) Cross-recognition of N-formyl methionine peptides is a general characteristic of H2-M3 restricted CD8+ T cells, *Infection and Immunity*, 73: 4423-6. PMID: PMC1168546
7. **Ploss A.**, Leiner I., Pamer E.G. (2005) Distinct regulation of H2-M3 restricted memory T cell responses in lymph node and spleen, *Journal of Immunology*, 175: 5998-6005.
8. Biswas P.S., Pedicord V., **Ploss A.**, Menet E., Leiner I., Pamer E.G. (2007) Pathogen-specific CD8 T cell responses are directly inhibited by IL-10, *Journal of Immunology*, 179: 4520-8.

D.2.2. Review articles/book chapters

9. **Ploss A.**, Pamer E.G. (2004) Memory, in S.H.E. Kaufmann (Ed.) Novel Vaccination Strategies, WILEY-VCH, Weinheim, New York, pp.73.
10. **Ploss A.**, Pamer E.G. (2005) Immunologic Memory. *In*: Meyers, R.A., ed. Encyclopedia of Molecular Cell Biology and Molecular Medicine, WILEY-VCH Verlag GmbH & Co., Weinheim. p. 383.

D.3. Postdoc

D.3.1. Research Articles

11. Lindenbach B.D., Meuleman P., **Ploss A.**, Vanwolleghem T., Syder A.J., McKeating J.A., Lanford R.E., Feinstone S.M., Major M.E., Leroux-Roels G., Rice C.M. (2006) Cell culture-grown hepatitis C virus is infectious *in vivo* and can be re-cultured *in vitro*, *Proc Natl Acad Sci*, 103: 3805-9. PMID: PMC1533780
12. **Ploss A.**, Evans M.J., Gaysinskaya V.A., Panis M., You H., de Jong Y.P., Rice C.M. (2009) Human occludin is a hepatitis C virus entry factor required for infection of mouse cells, *Nature*, 457: 882-6. PMID: PMC2762424
13. Strowig T., Gurer C., **Ploss A.**, Liu Y.F., Arrey F., Sashihara J., Koo G., Rice C.M., Young J.W., Chadburn A., Cohen J.I., Münz C. (2009) Priming of protective T cell responses against virus-induced tumors in mice with human immune system components. *Journal of Experimental Medicine*, 206: 1423-34. PMID: PMC2715061
14. Akondy R.S., Monson N.D., Miller J.D., Edupuganti S., Teuwen D., Wu H., Quyyumi F., Garg S., Altman J.D., Del Rio C., Keyserling H.L., **Ploss A.**, Rice C.M., Mulligan M.J., Orenstein, W.A., Ahmed R. (2009) The yellow fever virus vaccine induces a broad and polyfunctional human memory CD8+ T Cell response. *Journal of Immunology*, 183: 7919-30. PMID: PMC3374958
15. **Ploss A.**, Khetani S.K., Jones C.T., Syder A.J., Trehan, K., Gaysinskaya, V.A., Mu, K.M, Ritola, K., Rice C.M., Bhatia S.N. (2010), Persistent hepatitis C virus infection in microscale primary human hepatocyte cultures. *Proc Natl Acad Sci U S A.*, 107: 3141-5. PMID: PMC2840339
16. Jones C.T., Catanese M.T., Law L.M.J., Khetani S.R., Syder A.J., **Ploss A.**, MacDonald M.R, Bhatia S.N., Rice, C.M. (2010) Real-time imaging of hepatitis C virus infection using a fluorescent cell-based reporter system, *Nature Biotechnology*, 28: 167-71. PMID: PMC2828266
17. Kohaar I., **Ploss A.**, Korol E., Mu K., Schoggins J.W., O'Brien T., Rice C.M., Prokunina-Olsson L. (2010). Splicing diversity of human *OC4N* gene and its biological significance for hepatitis C virus (HCV) entry. *Journal of Immunology*, 84: 6987-94. PMID: PMC2898237

D.3.2. Review articles/book chapters

18. Legrand N., **Ploss A.** Balling R., Becker P.D., Borsotti C., Brezillon N., Debarry J., de Jong Y., Deng H., Di Santo J.P., Eisenbarth S., Eynon E., Flavell R.A., Guzman C.A., Huntington N.D., Kremser D., Manns M.P., Manz M.G., Mention J.J., Ott M., Rathinam C., Rice C.M., Rongvaux A., Stevens S., Spits H., Strick-Marchand H., Takizawa H., van Lent A.U., Wang C., Weijer K., Willinger T., Ziegler P. (2009) Humanized mice for modeling human infectious disease: challenges, progress, and outlook. *Cell Host Microbe*, 6: 5-9.
19. **Ploss A.** and Rice, C.M. (2009) Towards a small model for Hepatitis C. *EMBO Reports*, 10: 1220-7. PMID: PMC2775186

D.4. Faculty position at The Rockefeller University

D.4.1. Research Articles

20. Billerbeck, E., Barry W.T., Mu, K., Dorner, M., Rice, C.M., **Ploss, A.** (2011), Development of human CD4+FoxP3+ regulatory T cells in human stem cell factor-, granulocyte-macrophage colony-stimulating factor-, and interleukin-3-expressing NOD-SCID IL2Rγ(null) humanized mice, *Blood*, 117: 3076-86, PMID: PMC3062310
21. Washburn M.L., Bility M.T., Kovalev G.I., Zhang L., Jiang Q., Buntzman A., Frelinger J., Barry W.T., **Ploss A.**, Rice C.M., Su L. (2011) A humanized mouse model to study hepatitis C virus infection, immune response, and liver disease, *Gastroenterology*, 40: 1334-44. PMID: PMC3066273
22. Dorner, M., Horwitz, J.A., Robbins, J., Barry, W.T., Mu, K., Jones, C.T., Schoggins, Catanese, M.T., J.W., Burton, D.R., Law, M., Rice, C.M., **Ploss, A.** (2011) A genetically humanized mouse model for hepatitis C virus infection, *Nature*, 474: 209-211. PMID: PMC3159410
23. Andrus L., Marukian S., Jones C.T., Catanese M.T., Sheahan T.P., Schoggins J.W., Barry W.T., Dustin L.B., Trehan K., **Ploss A.**, Bhatia S.N., Rice C.M. (2011) Expression of paramyxovirus V proteins promotes replication and spread of hepatitis C virus in cultures of primary human fetal liver cells. *Hepatology*, 54: 1901-12. PMID: PMC3233237
24. Marukian S., Andrus L., Sheahan T.P. Charles E.D., **Ploss A.**, Rice C.M., Dustin L.B. (2011), Hepatitis C virus induces interferon-λ and interferon-stimulated genes in primary liver cultures, *Hepatology*, 54: 1913-23. PMID: PMC3219820

25. Schwartz R.E.*, Trehan K*, Andrus L., **Ploss A.**, Rice C.M., Duncan S.A., Bhatia S.N. (2012) Modeling hepatitis C Virus infection using human induced pluripotent stem cells, *Proceedings of the National Academy of Science.*, 109: 2544-8. PMID: PMC3289320
26. Meng X., Schoggins J.W., Rose L., Cao J., **Ploss A.**, Rice C.M., Xiang Y. (2012) C7L family of poxvirus host-range genes inhibit antiviral activities induced by 2 Type I interferons and interferon regulatory factor 1, *Journal of Virology*, 86: 4538-47. PMID: PMC3318637
27. Giang E., Dorner M., Dreux M., Evans M.J., Chisari F.V., Rice C.M., **Ploss A.**, Burton D.R., Law M. (2012), Human broadly neutralizing antibodies to the envelope glycoprotein complex of hepatitis C virus, *Proceedings of the National Academy of Science*, 109: 6205-10. PMID: PMC3341081
28. Pietzsch J., Gruell H., Bournazos A., Donovan B.M., Seaman M.S., Ravetch J.V., **Ploss A.**, Nussenzweig M.C. (2012) A mouse model for HIV-1 entry, *Proceedings of the National Academy of Science*, 109: 15859-64. PMID: PMC3465400
29. Klein F., Halper-Stromberg A., Horwitz J.A., Gruell H., Scheid J.F., Bournazos S., Mouquet H., Spatz L.A., Diskin R., Abadir A., Dorner M., Billerbeck E., Labitt R.N., Gaebler C., Marcovecchio P., Incesu R.B., Eisenreich T.R., Bieniasz P.D., Seaman M.S., Bjorkman P.J., Ravetch J.V., **Ploss A.**, Nussenzweig M.C. (2012), HIV therapy by a combination of broadly neutralizing antibodies in humanized mice, *Nature*, 492: 118-22. PMID: PMC3809838
30. Schoggins J.W., Dorner M., Feulner M., Imanaka N., Murphy M.Y., Pouzol S., Panis M., **Ploss A.**, Rice C.M. (2012) Dengue reporter viruses reveal viral dynamics in interferon receptor-deficient mice and sensitivity to interferon effectors *in vitro*, *Proceedings of the National Academy of Science*, 109: 14610-5. PMID: PMC3437900
31. Vaughan A.M., Mikolajczak S.A. Wilson E.M. Grompe M., Kaushansky A., Camargo N. Bial J., **Ploss A.**, Kappe S.H.I. (2012) Complete *Plasmodium falciparum* liver-stage development in liver-chimeric mice, *Journal of Clinical Investigation*, 122: 3618-28. PMID: PMC3461911
32. Dorner M., Rice C.M., **Ploss A.** (2013) Study of hepatitis C virus entry in genetically humanized mice, *Methods*. 59: 249-57. PMID: PMC3652663
33. Horwitz* J.A., Dorner M.*, Friling T., Donovan B.M., Vogt A., Loureiro J., Oh T., Rice C.M., **Ploss A.** (2013) Expression of heterologous proteins flanked by NS3-4A cleavage sites within the hepatitis C virus polyprotein, *Virology*, 439: 23-33. PMID: PMC3620014
34. Gueronprez P., Helft J., Claser C., Deroubaix S., Karanje H., Gazumyan A., Darasse-Jèze G., Telerman S.B., Breton G., Schreiber H.A., Frias-Staheli N., Billerbeck E., Dorner M., Rice C.M., **Ploss A.**, Klein, F., Swiecki, M., Colonna, M., Kamphorst, A.O., Meredith, M., Niec, R., Takacs, C., Mikhail, F., Hari, A., Bosque, D., Eisenreich, T., Merad, M., Shi, Y., Ginhoux, F., Rénia, L., Urban, B.C., Nussenzweig, M.C. (2013) Inflammatory FIt3l is essential to mobilize dendritic cells and for T cell responses during *Plasmodium* infection, *Nature Medicine*, 2013 Jun;19(6): 730-8. doi: 10.1038/nm.3197. PMID: PMC3914008.
35. Vogt A., Scull M.A., Friling T., Horwitz J.A., Donovan B.M., Dorner M., Gerold G., Labitt R.N., Rice C.M., **Ploss A.** (2013) Recapitulation of the hepatitis C virus life-cycle in engineered murine cell lines. *Virology*, 444(1-2):1-11, PMID: PMC3755106
36. Gruell H., Bournazos S., Ravetch J.V., **Ploss A.**, Nussenzweig M.C., Pietzsch J. (2013) Antibody and antiretroviral pre-exposure prophylaxis prevent cervicovaginal HIV-1 infection in a transgenic mouse model. *The Journal of Virology*, 87(15):8535-44. PMID: PMC3719827
37. Dorner M., Horwitz J.A.*, Donovan B.M.*, Labitt R.N., Budell W.C., Friling T., Vogt A., Catanese M.T., Satoh T., Kawai T., Akira S., Law M., Rice C.M.**, **Ploss A.****. (2013) Completion of the entire hepatitis C virus life-cycle in genetically humanized mice, *Nature*, 501(7466):237-41, PMID: PMC3858853
38. Billerbeck E., Horwitz J.A., Labitt R., Vega K., Budell W.C., Friling T., Koo G.C., Rice C.M., **Ploss A.** (2013), Characterization of Human Antiviral Adaptive Immune Responses during Hepatotropic Virus Infection in HLA-Transgenic Human Immune System Mice, *The Journal of Immunology*, 191:1753-1764. PMID: PMC3735836
39. Anggakusuma, Colpitts, C.C., Schang L.M., Rachmawati H., Frentzen A., Pfaender S., Behrendt P., Brown R.J., Bankwitz D., Steinmann J., Ott M., Meuleman P., Rice C.M., **Ploss A.**, Pietschmann T., Steinmann E. (2013) Turmeric curcumin inhibits entry of all hepatitis C virus genotypes into human liver cells. *Gut*. 63(7):1137-49
40. Horwitz, J.A., Halper-Stromberg, A., Mouquet, H., Gitlin, A.D., Tretiakova, A., Eisenreich, T.R., Gravemann, S. Buning, H., Kaiser, R., Seaman, M.S., Wlison, J., Billerbeck, E., Dorner, M., Rice, C.M., **Ploss, A.**

Bjorkman, P., Klein F., Nussenzweig, M.C. (2013) Enhanced HIV-1 suppression and sustained viremic control by combining broadly neutralizing antibodies and antiretroviral drugs, *Proc Natl Acad Sci U S A*.110(41):16538-43. PMID: PMC3799352

41. Sheahan, T.P., Imanaka, N., Marukian, S., Dorner, M., **Ploss, A.**, Rice, C.M. (2014) Transcriptomic Analysis of Primary Human Hepatocytes Infected with Hepatitis C Virus Reveals Distinct Defects in the Antiviral Program Associated with IL28B Polymorphisms, *Cell Host & Microbe*, 15(2):190-202, PMID: PMC4104123

D.4.2. Review articles/book chapters

42. De Jong Y.P., Rice C.M., **Ploss A.** (2010), New horizons for studying human hepatotropic infections, *Journal of Clinical Investigation*, 120: 650-3. PMID: PMC2827969
43. Sheahan T., Jones C.T., **Ploss A.** (2010) Advances and challenges in studying hepatitis C virus in its native environment, *Expert Review of Gastroenterology and Hepatology*, 4: 541-50.
44. Gerold, G., Rice, C.M., **Ploss, A.** (2010) Teaching new tricks to an old foe: murinizing Hepatitis C virus, *Hepatology*, 52: 2233-6.
45. De Jong, Y.P., Rice, C.M., **Ploss, A.** (2010) Evaluation of combination therapy against hepatitis C virus infection in human liver chimeric mice, *Journal of Hepatology*, 54: 848-50.
46. Dorner M. **Ploss A.** (2011) Deconstructing hepatitis C virus infection in humanized mice, *Annals of the New York Academy of Sciences*, 1245: 59-62.
47. Scull M.A., **Ploss A.** (2012) Exiting from uncharted territory: Hepatitis C virus assembles in mouse cell lines, *Hepatology*, 55: 645-8. PMID: PMC3270883
48. **Ploss A.**^{*,**}, Evans M.^{*,**} (2012) Hepatitis C virus entry, *Current Opinion in Virology*, 2: 14-9. PMID: PMC3311996
49. **Ploss A.**^{*,**}, Dubuisson J.^{*,**} (2012) New advances in the molecular biology of hepatitis C virus infection: towards the identification of new treatment targets, *Gut*. 61 Suppl 1:i25-i35.
50. Vaughan A.M., Kappe S.H.I., **Ploss A.**, Mikolajczak S. (2012) Development of humanized mouse models to study human malaria parasite infection. *Future Microbiology*, 2012 May;7(5) 657-65. doi: 10.2217/fmb.12.27. PMID: PMC3848604.
51. **Ploss A.** (2012) Hepatitis C virus and use of reverse genetics in drug design, in A. Bridgen (Ed.) Chapter 3: *Reverse Genetics of RNA Viruses: Applications and Perspectives*, pages 64-90, Wiley-Blackwell
52. Sandmann L., **Ploss A.** (2013) Barriers of hepatitis C virus interspecies transmission, *Virology*, 435: 70-80. PMID: PMC3523278
53. Shi C. **Ploss A.** (2013) Hepatitis C virus vaccines in the era of new direct-acting antivirals, *Expert Reviews in Hepatology and Gastroenterology*, 7: 171-85.
54. Billerbeck E., de Jong Y. P., Dorner M., de la Fuente C, **Ploss A.** (2013) Animal models for hepatitis C, in *Current Topics in Microbiology and Immunology: Hepatitis C Virus: From molecular virology to antiviral therapy*, ed. Ralf Bartenschlager, 369: 49-86. doi: 10.1007/978-3-642-27340-7 3.

D.5. Faculty positions at Princeton University

D.5.1. Research Articles

55. Frias-Staheli N., Dorner M., Marukian S., Billerbeck E., Labitt R.N., Rice C.M., **Ploss A.** (2014) Characterization of dengue virus-induced immunity and disease in humanized BLT mice, *The Journal of Virology*, 88(4):2205-18, PMID: PMC3911540
56. von Schaeuwen, M., Ding, Q., **Ploss, A.** (2014) Visualization of hepatitis C virus infection in humanized mice *Journal of Immunological Methods*, 410:50-9, PMID: PMC4163068
57. Billerbeck, E., Labitt, R.N., Vega, K., Frias-Staheli, N., Dorner, M., Xiao, J., Rice, C.M., **Ploss, A.** (2014) Insufficient IL-12 signaling favors differentiation of human CD4⁺ and CD8⁺ T cells into GATA-3⁺ and GATA-3⁺T-bet⁺ subsets in humanized mice, *Immunology*, 143(2):202-18, PMID: PMC4172137
58. de Jong, Y.P., Dorner, M., Mommersteeg, M.C., Xiao, J.W., Balazs, A.B., Robbins, J.B., Vega, K., Labitt, R.N., Donovan, B.M., Giang, E., Krishnan, A., Chiriboga, L., Charlton, M.R., Burton, D.R., Baltimore, D., Law, M., Rice, C.M., **Ploss, A.** (2014) Broadly neutralizing antibodies abrogate established hepatitis C virus infection, *Science Translational Medicine*, 6(254):254ra129, PMID: PMC4312107
59. Lacek, K., Urbanowicz, R.A., Troisea, F., De Lorenzo, C., Severino, V., Di Maro, A., Tarr, A.W., Ferrara, F., Hollmann, A., **Ploss, A.**, Santos, N.C., Temperton, N., Ball, J.K., Nicosia, A., Cortese, R., Pessi, A. (2014)

Engineered Polyreactivity dramatically potentiates antiviral activity in HIV, but not Influenza antibodies, *Journal of Biological Chemistry*, 289(50):35015-28, PMID: PMC4263897

60. Gardner, M.R*, Kattenhorn, L.M.*, Kondur, H.R, von Schaewen, M., Dorfman, T., Chiang, J.J., Haworth, K.G., Decker, J.M., Alpert, M.D., Bailey, C.C, Fellingner, C.H., Joshi, V.R, Fuchs, S.P., Martinez-Navio, J.M., Quinlan, B.D., Yao, A.Y., Mouquet, H., Gorman, J., Zhang, B., Pognard, P., Nussenzweig, M.C., Burton, D.R., Kwong, P.D., Piatak Jr., M., Lifson, J.D., Gao, G., Desrosiers, R.C., Evans, D.T., Hahn, B.H., **Ploss, A.**, Cannon, P.M., Seaman, M.S., Farzan, M. (2015) AAV-expressed eCD4-Ig durably protects rhesus macaques from multiple SHIV challenges, *Nature*, 519(7541):87-91. Doi: 10.1038/nature14264. PMID: PMC4352131.
61. Stoddard, M. Li, H., Wang, S., Saeed, M., Andrus, L., Ding, W., Jiang, X., Learn, G., von Schaewen, M., Wen, J., Goepfert, P., Hahn, B., **Ploss, A.**, Rice, C.M., Shaw, G. (2015) Identification, Molecular Cloning, and Analysis of Full-Length Hepatitis C Virus Transmitted/Founder Genotypes 1, 3, and 4, *MBio* 2015 Feb 24;6(2) pii: e02518-14. doi: 10.1128/mBio.02518-14. PMID: PMC4358020.
62. Scull, M.A., Shi, C., de Jong, Y.P., Gerold, G., von Schaewen, M., Donovan, B.M., Labitt, R.N., Horwitz, J.A., Hrebikova, G., Xiao J.W., Flatley, B., Fung, C., Chiriboga, L., Walker, C.M., Evans, D., Rice, C.M., **Ploss A.** (2015) Suppression of the Host Immune Response Enables Persistent HCV Infection in Rhesus Macaque Hepatocytes and Simianized mice, *Hepatology* 62(1):57-67. doi: 10.1002/hep.27773. PMID: PMC4482775.
63. Perin, P.M.S., Haid, S., Brown, R., Schulze, K., Colpitts, C.C., Zeilinger, C., von Schaewen, M., Heller, B., Vercauteren, K., Luxenburger, E., Andoadis, Y., Kirschning, A., Schang, L.M., Müller, R., Guzmán, C.A., Randall, G., Meuleman, P., **Ploss, A.**, Pietschmann, T. (2015) Flunarizine, a clinically approved T-type calcium channel inhibitor, prevents Hepatitis C Virus (HCV) membrane fusion in a genotype-dependent manner, *Hepatology* 2016 Jan; 63(1):49-62. doi: 10.1002/hep.28111. PMID: PMC4688136.
64. von Schaewen M, Hrebikova G, **Ploss A.** (2016) Generation of Human Liver Chimeric Mice for the Study of Human Hepatotropic Pathogens, *Methods Mol Biol.* 2016;1438:79-101. Doi: 10.1007/978-1-4939-3661-8_5.
65. Basta, N.E., Mahmoud, A., **Ploss, A.**, Heller, B., Hanna, S., Johnsen, P., Izzo, R., Grenfell, B., Findlow, J., Bai, X., Borrow, R (2016) Immunogenicity of a Meningococcal B Vaccine during a University Outbreak. *New England Journal of Medicine*, 2016 Jul 21;375(3):220-8, doi: 10.1056/NEJMoa1514866. PMID: PMC4992664.
66. Li, D., von Schaewen, M., Wang, X., Tao, W., Zhang, Y., Li, L., Heller, B., Hrebikova, G., Deng, Q., Sun, Q., **Ploss, A**.**, Zhong, J.**; Huang, Z.** (2016) Altered Glycosylation Patterns Increase Immunogenicity of a Subunit Hepatitis C Virus Vaccine, Inducing Neutralizing Antibodies Which Confer Protection in Mice, *The Journal of Virology*, 2016 Nov 14;90(23):10486-10498. Doi: 10.1128/JVI.01462-16. PMID: PMC5110194.
67. von Schaewen, M., Dorner, M., Hüging, K., Horwitz, J.A., Gerold, G., Rice, C.M., Meuleman, P., Pietschmann, T., **Ploss, A.** (2016) Expanding the host range of hepatitis C virus through viral adaptation, *mBio*, 7(6):e01915-16. Doi: 10.1128/mBio.01915-19. PMID: PMC5101358.
68. Ding, Q., von Schaewen, M., Hrebikova, G., Heller, B., Sandmann, L., Plaas, M., **Ploss, A.** (2016) Mice expressing minimally humanized CD81 and occludin support hepatitis C virus uptake in vivo, *The Journal of Virology*. 91(4). pii: e01799-16. PMID: PMC5286898
69. Winer, B.Y., Huang, T., Low, B., Avery, C., Pais, M.A., Doty, R., Hrebikova, G., Siu, E., Chiriboga, L., Wiles, M., **Ploss, A.** (2016) Recapitulation of treatment response patterns in a novel humanized mouse model for chronic hepatitis B virus infection, *Virology*, 502:63-72. PMID: PMC5414730
70. Ding, Q, Heller, B., Capucino, J.M.V., Song, B., Nimgaonkar, I., Hrebikova, G., Contreras, J.E, **Ploss, A.** (2017) Hepatitis E virus ORF3 is a functional ion channel required for release of infectious particles, *Proc Natl Acad Sci U S A*, 114(5):1147-1152. PMID: PMC5293053
71. Douam, F., Hrebikova, G., Soto Albrecht, Y.E., Sellau, J., Sharon, Y., Ding, Q., **Ploss, A.** (2017) Single-cell tracking of flavivirus RNA uncovers species-specific interactions with the immune system dictating disease outcome. *Nature Communications*, 8:14781. doi: 10.1038/ncomms14781. PMID: PMC5424064
72. Shirvani-Dastgerdi E., Winer B.Y., Celià-Terrassa T., Tabernero D., Rodríguez-Frías F., Yagmur E., Luedde T., Trautwein C., **Ploss A.**, Tacke F (2017) Selection of the highly replicative and partially multidrug resistant rtS78T polymerase mutation in two patients with chronic hepatitis B virus infection during tenofovir-entecavir combination therapy, *Journal of Hepatology*, 67(2):246-254. PMID: PMC6016549
73. Li, D., Wang, X., von Schaewen, M., Tao, W., Zhang, Y., Heller, B., Hrebikova, G., Deng, Q., Sun, Q., **Ploss, A.***, Zhong, J.*; Huang, Z.* (2017) Immunization with a subunit hepatitis C virus vaccine elicits pan-genotypic

neutralizing antibodies and intra-hepatic T-cell responses in non-human primates, *The Journal of Infectious Disease*, 215(12):1824-1831, PMID: PMC5853543

74. Winer, B.Y., Huang, T.S., Pludwinski, E., Wojcik, F., Lipkowitz, G., Parekh, A., Cho, C., Shrirao, A., Muir, T., Novik, E., **Ploss, A.** (2017) Long-term persistent hepatitis B virus infection in a scalable micro-well primary hepatocyte coculture system, *Nature Communications*, 8(1):125, PMID: PMC5527081
75. Douam, F., Soto-Albrecht, Y.E., Hrebikova, G., Sadimin, E., Davidson, C., Kottenko, S., **Ploss, A.** (2017), Type III interferon mediated signaling is critical for controlling live-attenuated yellow fever virus *in vivo*, *mBio*, 8(4) pii: e00819-17, PMID: PMC5559630
76. Douam, F., Fusil, F., Enguehard, M., Dib, L., Schwaller, L., Mancip, J., Maily, L., Verhoeyen, E., Baumert, T.F., **Ploss, A.**, Carbone, A.**., Cosset, F.-L.**., Lavillette, D.** (2018) A protein coevolution method uncovers critical features of the Hepatitis C Virus fusion mechanism, *PLoS Pathogens*, 14(3):e1006908, PMID: PMC5854445
77. Dragovic SM, Agunbiade TA, Freudzon M, Yang J, Hastings AK, Schleicher TR, Zhou X, Craft S, Chuang YM, Gonzalez F, Li Y, Hrebikova G, Tripathi A, Mlambo G, Almeras L, **Ploss A**, Dimopoulos G, Fikrig E (2018) Immunization with AgTRIO, a Protein in Anopheles Saliva, Contributes to Protection against Plasmodium Infection in Mice, *Cell Host & Microbe*, 23(4):523-535.e5, PMID: PMC5998332
78. Ding, Q., Nimgaonkar, I. Archer, N., Bram, Y., Heller, B., Schwartz, R.E., **Ploss, A.** (2018) Identification of the intragenomic promoter controlling hepatitis E virus subgenomic RNA transcription, *mBio*, 9(3). pii: e00769-18, PMID: PMC5941075
79. Ding, Q., Gaska, J.M., Heller, B., **Ploss, A.** (2018) Species-specific disruption of the STING-dependent antiviral cellular defenses by the Zika virus NS2B3 protease, *Proc Natl Acad Sci U S A*. pii: 201803406. doi: 10.1073/pnas.1803406115. PMID: PMC6142274
80. Winer, B.Y., Shirvani-Dastgerdi, E., Bram, Y., Sellau, J., Low, B.E., Johnson, H., Huang, T., Hrebikova, G., Heller, B., Sharon, Y., Giersch, J., Gerges, S., Seneca, K., Pais, M.A., Frankel, A.S., Lipkowitz, G., Chiriboga, L., Cullen, J., Nahass, R.G., Lutgehetmann, M., Toettcher, J.E., Wiles, M.V., Schwartz, R.E., **Ploss, A.** (2018) Preclinical assessment of antiviral combination therapy in a genetically humanized mouse model for persistent hepatitis delta virus infection, *Science Translational Medicine*, 10(447). pii: eaap9328. doi: 10.1126/scitranslmed.aap9328. PMID: PMC6337727
81. Douam, F., Ziegler, C.G.K, Hrebikova, G., Fant, B., Leach, R., Parson, L., Wang, W., Gaska, J.M., Winer, B.Y., Heller, B., Shalek, A.K., **Ploss, A.** (2018) Selective expansion of myeloid and NK cells in humanized mice yields human-like host responses to vaccination, *Nature Communications*, 28;9(1):5031, PMID: PMC6262001
82. Gaska, J., Ding, Q., **Ploss, A.** (2019) Mouse models for studying HCV vaccines and therapeutic antibodies, *Methods in Molecular Biology*, 911:481-503. PMID: PMC6699619
83. Gaska, J., Balev, M., Ding, Q., Heller, B., **Ploss, A.** (2019) Species-specific differences across cyclophilin A orthologs contribute to the host range restriction of hepatitis C virus, *eLIFE*, 8. pii: e44436. doi: 10.7554/eLife.44436. PMID: PMC6510530
84. Winer, B.Y., Gaska, J.M., Lipkowitz, G., Bram, Y., Parekh, A., Parsons, L., Leach, R., Jindal, R., Cho, C.H., Shrirao, A., Novik, E., Schwartz, R.E., **Ploss, A.** (2019) Analysis of host responses to hepatitis B and delta viral infections in a micro-scalable hepatic co-culture system, *Hepatology*, 71(1):14-30, PMID: PMC6917996
85. Gaska, J.M., Parsons, L., Balev, M., Cirincione, A., Wang, W., Schwartz, R.E., **Ploss, A.** (2019) Conservation of cell-intrinsic immune responses in diverse non-human primate species, *Life Science Alliance*, 2(5). pii: e201900495, PMID: PMC6814850
86. Winer, B.Y., Edgel, K., Zou, X., Sellau, J., Hadiwidjojo, S., Garver, L., McDonough, C.E., Kelleher, N.L., Thomas, P.M., Villasante, E., **Ploss, A.****., Gerbasi, V.** (2019) Identification of Plasmodium falciparum Proteoforms from Liver Stage Models, *Malaria Journal*, 19(1):10, PMID: PMC6947969
87. Chen, C.Y., Winer, B.Y., Chavez, D., Guerra, B., Brasky, K.M., Eng, S., Salas, E., Tam, D., Simmons, J.H., Abee, C.R., Delaney, W.E., **Ploss, A.**, Lanford, R.E.**., Voitenleitner, C.** (2019) Squirrel Monkeys as a Nonhuman Primate Model of HBV Infection, *Hepatology Communications*, 4(3):371-386, PMID: PMC7049680
88. Wei, L., **Ploss, A.** (2020) Core components of DNA lagging strand synthesis machinery are essential for the reconstitution of hepatitis B virus cccDNA formation, *Nature Microbiology*, 5(5):715-726 PMID: PMC7190442

89. Ramanathan, H.N., Zhang, S., Douam, F., Mar, K.B., Chang, J., Yang, P.L., Schoggins, J.W., **Ploss, A.**, Lindenbach, B.D.L. (2019) A Sensitive Yellow Fever Virus Entry Reporter Identifies Valosin-Containing Protein (VCP/p97) as an Essential Host Factor for Flavivirus Uncoating, *mBio*, pii: e00467-20. doi: 10.1128/mBio.00467-20, PMID: PMC7157815
90. Brown, R.J.P., Tegtmeyer, B., Sheldon, J., Khera, T., Anggakusuma, Todt, D., Vieyres, G., Weller, R., Joecks, S., Zhang, Y., Sake, S., Bankwitz, D., Welsch, K., Ginkel, C., Engelmann, M., Gerold, G., Steinmann, E., Yuan, Q., Ott, M., Vondran, F.W.R., Krey, T., Ströh, L.J., Miskey, C., Ivics, Z., Herder, V., Baumgärtner, W., Lauber, C., Seifert, M., Tarr, A.W., McClure, C.P., Randall, G., Baktash, Y., **Ploss, A.**, Dao Thi, V.L., Michailidis, E., Saeed, M., Verhoeye, L., Meuleman, P., Rice, C.M., Pietschmann, T. (2020) Liver expressed Cd302 and Cr1l 1 limit hepatitis C virus cross species transmission to mice, *Science Advances*, 6(45):eabd3233. doi: 10.1126/sciadv.abd3233, PMID: PMC7673688
91. Nimgaonkar, I., Archer, N.F., Becher, I., Shahradi, M., Mateus, A., Caballero-Gómez, J., Berneshawi, A.R., Ding, Q., Douam, F., Gaska, J.M., Savitski, M.M., Kim, H.K., **Ploss, A.** (2021) Inhibition of heat shock protein 90 suppresses hepatitis E virus replication, *Antiviral Research*, 185:104997. doi: 10.1016/j.antiviral.2020.104997. Epub 2020 Dec 14.
92. Wei, L., **Ploss, A.** (2021) Hepatitis B virus cccDNA is formed through distinct repair processes of each strand, *Nature Communications*, 12(1):1591. doi: 10.1038/s41467-021-21850-9.
93. Saunders, D., Jumper C. C., Ackerman, P., Bracha, D., Donlic, A., Kim, H., Suzuki, S., Tamura, T., Castello-Serrano, I., Kenney, D., **Ploss, A.**, Levental, I., Douam, F., Holehouse, A.S., Padera, R.F., Levy, B.D., Brangwynne, C.P. (2021) SARS-CoV-2 Requires Cholesterol for Viral Entry and Pathological Syncytia Formation, *eLIFE*, 10:e65962. Doi:10.7554/eLife.65962. PMID: PMC8104966
94. Zakh, R., Churkin, A., Bietsch, W., Lachiany, M., Cotler, S.J., **Ploss, A.**, Dahari, H., Barash, D. (2021) A mathematical model for HBV-HDV interaction during antiviral treatment, *Mathematics*, 9(24), 3323; <https://doi.org/10.3390/math9243323>
95. Tamura, T., Zhang, J., Madan, V., Biswas, A., Schwoerer, M.P., Cafiero, T.R., Heller, B.L., Wang, W., **Ploss, A.** (2022) Generation and characterization of genetically and antigenically diverse infectious clones of dengue virus serotypes 1-4. *Emerg. Microbes Infect.* 11(1):227-239. doi: 10.1080/22221751.2021.2021808
96. Shekhtman, L., Cotler, S.J., **Ploss, A.**, Dahari, H. (2022) Mathematical modeling suggests that entry-inhibitor Bulevirtide may interfere with hepatitis D virus clearance from circulation., *J Hepatol.* S0168-8278(21)02307-2. doi: 10.1016/j.jhep.2021.12.030.
97. Kenney, D.J.* , O'Connell, A.K.* , Turcinovic, J.* , Montanaro, P.* , Hekman, R.M.* , Tamura, T.* , Berneshawi, A., Cafiero, T., Al Abdualatif, S, Blum, B., Goldstein, S.I., Heller, B.L., Gertje, H.P., Bullitt, E., Trachtenberg, A., Chavez, E., Tuekam Nono, E., Morrison, C., Tseng, A., Sheikh, A., Kurnick, S., Grosz, K., Bosmann, M., Ericsson, M., Huber B.R., Saeed, M., Balazs, A.B., Francis, K.P., Klose, A., Paragas, N., Campbell, J.D., Connor, J.H., Emili, A., Crossland, N.** , **Ploss, A.****, Douam, F.** (2022) Humanized mice reveal a macrophage-enriched gene signature defining human lung tissue protection during SARS-CoV-2 infection, *Cell Reports*, 39(3):110714. doi: 10.1016/j.celrep.2022.110714. PMID: PMC8977517
98. Buksh, B.F., Knutson, S.D., Oakley, J.V., Oblinsky, D.G., Bissonnette, N., Schwoerer, M.P., Seath, C.P., Geri, J.B., Scholes, G.D., **Ploss, A.**, MacMillan, D.W.C. (2022) μ Map-Red: Proximity Labeling by Red Light Photocatalysis, *J. Am. Chem. Soc.* 144(14):6154-6162. doi: 10.1021/jacs.2c01384. Epub 2022 Apr 1
99. Biswas, S., Rust, L.N., Wettengel, J.M., Yusova, S., Fischer, M., Carson, J.N., Johnson, J., Wei, L., Thode, T., Kaadige, M., Sharma, S., Agbaria, M., Bimber, B.N., Tu, T., Protzer, U., **Ploss, A.**, Smedley, J., Golomb, G., Sacha, J.B., Burwitz, B.J. (2022), Long-term hepatitis B virus infection of rhesus macaques requires suppression of host immunity, *Nature Communications*, 13(1):2995. Doi: 10.1038/s41467-022-30593-0, PMID: PMC9151762
100. Wei, L., Cafiero, T., Tseng, A., Gertje, H.P., Berneshawi, A., Crossland, N.A., **Ploss, A.** (2022) Conversion of hepatitis B virus relaxed circular to covalently closed circular DNA is supported in mice, *Journal of Hepatology Reports*, 4(9):100534. PMID: PMC9403495
101. Liu, Y., Park, D., Cafiero, T., Bram, Y., Chandar, V., Tseng, A., Gertje, H.P., Crossland, N.A., Su, L., Schwartz, R.E., **Ploss, A.** (2022) Molecular clones of genetically distinct hepatitis B virus genotypes reveal distinct host and drug treatment responses, *Journal of Hepatology Reports*, 4(9):100535. PMID: PMC9403497

102. Suzuki, S.* , Geri, J.B.* , Knutson, S.B.* , Bell-Temin, H., Tamura, T., Fernandez, D.F., Lovett, G.H., Till, N.A., Heller, B.L., Guo, J., MacMillan, D.W.C.** , **Ploss, A.**** (2022) Photochemical Identification of Auxilliary SARS-Cov-2 Host-Entry Factors using μ Map, *Journal of the American Chemical Society*, 144(36):16604-16611, PMID: PMC9469761
103. LeDesma, R.A., Biswas, A., Maya, S., Gili, S., Higgins, J., **Ploss, A.** (2023) Structural features stabilized by divalent cation coordination within hepatitis E virus ORF1 are critical for viral replication, *eLIFE*, 2:e80529. doi: 10.7554/eLife.80529, PMID: PMC9977285
104. Liu, Y., Cafiero, T.R., Park, D., Biswas, A., Winer, B.Y., Cho, C.H., Bram, Y., Chandar, V., O'Connell, A.K., Gertje, H.P., Crossland, N.A., Schwartz, R.E., **Ploss, A.** (2023), Targeted viral adaptation generates a simian-tropic hepatitis B virus that infects marmoset cells, *Nature Communications*, 14(1):3582. doi: 10.1038/s41467-023-39148-3d, PMID: PMC10276007
105. Hogan, G.* , Winer, B.Y.* , Ahodantin, J.* , Sellau, J., Huang, T., Douam, F., Funaki, M., Chiriboga, L., Su, L.** , **Ploss, A.**** (2023) Persistent hepatitis B virus and HIV coinfections in dually humanized mice engrafted with human liver and immune system, *Journal of Medical Virology*, 95(7):e28930. doi: 10.1002/jmv.28930
106. Maya, S.* , Hershkovich, L.* , Cardozo-Ojeda, E.F.* , Shirvani-Dastgerdi, E., Srinivas, J., Shekhtman, L., Uprichard, S.L., Berneshawi, A.R., Cafiero, T.R., Dahari, H** , **Ploss, A.**** (2023) Hepatitis delta virus RNA decline post inoculation in human NTCP transgenic mice is biphasic, *mBio*, e0100823. doi: 10.1128/mbio.01008-23. PMID: PMC10470517
107. Mesev, E.V., Guare, E., **Ploss, A.****, Toettcher, J.E.** (2023) Heterodimeric type III interferon receptors require TYK2 for STAT activation, *Journal of Interferon and Cytokine Research*, 43(9):414-426. doi: 10.1089/jir.2023.0039, PMID: PMC10517332
108. Johnson, M.R., Li, S., Guerrero-Juarez, C.F., Brack, B.J., Miller, P., Mereby, S.A., Feigin, C., Gaska, J.M., Nie, Q., Rivera, J., **Ploss, A.**, Shvartsman, S.Y., Mallarino, R. (2023) A multifunctional Wnt regulator underlies the evolution of rodent stripe patterns, *Nature Evolutionary Biology and Ecology*, doi: 10.1038/s41559-023-02213-7. Online ahead of print
109. Mesev, E.V., Lin, A.E., Guare, E.G., Heller, B.L., Douam, F., Adamson, B., Toettcher, J.E.** , **Ploss, A.**** (2023) Membrane-proximal motifs are the primary determinants of signaling strength differences between type I and III interferon receptors, *Science Signaling*, 16(806):eadf5494, doi: 10.1126/scisignal.adf5494
110. Ciupe, S., Dahari, H., **Ploss, A.** (2024) Mathematical models of early hepatitis B virus dynamics in humanized mice, *Bulletin of Mathematical Biology*, 86(5):53. doi: 10.1007/s11538-024-01284-2, PMID: PMC11003933
111. Moreno, J.A., Dudchenko, O., Feigin, C.Y., Mereby, S.A., Li, S., Johnson, M.R., Wang, W., Gaska, J.M. Sen, H., **Ploss, A.**, St.Leger, J., Mena, A., Flanagan, J.P., Keller, G., Sanger, T., Ostrow, B., Lieberman Aiden, E., Mallarino, R. (2024) Regulatory convergence in the Emx2 locus underlies the independent evolution of mammalian gliding membranes, *Nature*, 629(8010):127-135. doi: 10.1038/s41586-024-07305-3. PMID: PMC11062917
112. Hartmann, J.A., Cardoso, M.R., Ramiro Talarico, M.C., Kenney, D.J., Turcinovic, J., O'Connell, A.K., Gertje, H.P., Marino, C., Ojeda, P.E., De Paula, E.V., Orsi, F.A., Velloso, L.A., Cafiero, T.R., Ploss, A., Hoelzemer, A., Carrington, M., Barczak, A.K., Crossland, N.A., Douam, F., Boucau, J., Garcia-Beltran, W.F. (2024), Evasion of NKG2D-mediated cytotoxic immunity by sarbecoviruses, *Cell*, 187(10):2393-2410.e14. doi: 10.1016/j.cell.2024.03.026 PMID: PMC11088510
113. Liu, Y., Maya, S., Carver, S., O'Connell, A.K, Zen, A., Gertje, H.P., Seneca, K., Nahass, R., Crossland, N.A., **Ploss, A.** (2024) Preclinical assessment of a dual channel detection system for pan-genotypic simultaneous detection of hepatitis B and delta viruses, *Emerg Microbes Infect.* 2024 Dec;13(1):2350167. doi: 10.1080/22221751.2024.2350167. PMID: PMC11095294
114. Wißing, M.H., Meister, T.L., Nocke, M.K., Gömer, A., Masovic, M., Kneindorf, L., Bader, V., Siddharta, A., Bock, C.T., **Ploss, A.**, Kenney, S.P., Winklhofer, K.F., Behrendt, P., Wedemeyer, H., Steinmann, E.* , Todt, D.* (2024), Genetic determinants of host-and virus-derived insertions for hepatitis E virus replication, *Nature Communications*, Jun 6;15(1):4855. doi: 10.1038/s41467-024-49219-8. PMID: PMC11156872
115. Berggren, K.A., Sinha, S., Lin, A.E., Schwoerer, M.P., Maya, S., Biswas, A., Cafiero, T.R., Liu, Y., Gertje, H.P., Suzuki, S., Berneshawi, A.R., Carver, S., Heller, B., Hassan, N., Ali, Q., Beard, D., Wang, D., Cullen, J.M., Kleiner, R.E., Crossland, N.A., Schwartz, R.E., **Ploss A.** (2024) Liver-specific Mettl14 deletion induces nuclear heterotypia and dysregulates RNA export machinery, *bioRxiv*. Jun 17:2024.06.17.599413. doi: 10.1101/2024.06.17.599413, PMID: PMC11212911

116. Zhang, J., Chavez, E.C., Winkler, M., Liu, J., Carver, S., Lin, A.E., Biswas, A., Tamura, T., Tseng, A., Wang, D., Benhamou, A., O'Connell, A.K., Matsuo, M., Norton, J.E., Kenney, D., Adamson, B., Kleiner, R.E., Burwitz, B., Crossland, N.A., Douam, F., **Ploss, A.** (2025) Amino acid changes in two viral proteins drive attenuation of the yellow fever 17D vaccine, *Nature Microbiology*, 10(8):1902-1917. PMID: PMC12313524
117. Kulakova, L, Li, K.H., Chiang, A.W.T., Schwoerer, M.P., Schoffelen, S., Elkholy, K., Chao, K.L., Shahid, S.L., Kumar, B., Murray, M.B., Archer-Hartmann, S., Azadi, P., Voldborg, B.G., Marin, A., Mariuzza, R.A., Andrianov, A., **Ploss, A.**, Lewis, N.E., Toth, E.A., Fuerst, T.R.(2025) Glycoengineering of the hepatitis C virus E2 glycoprotein leads to improved biochemical properties and enhanced immunogenicity, *npj Vaccines*, 10(1):121. PMID: PMC12159149
118. Xiang, J., McLinden, J.H., Chang, Q., Fosdick, M., Haim, H., **Ploss, A.**, Hottel, W., Bhattarai, N., Tamura, T., Zhang, J., Houtman, J.C.D., Stapleton, J.T. (2025) Specific dengue virus envelope protein amino acid residues determine serotype-specific inhibition of T cell receptor signaling, *Journal of Infectious Diseases*, jiaf241. doi: 10.1093/infdis/jiaf241. Online ahead of print.
119. Nelson, A.N., Mullin, S.J., LeDesma, R.E., Carver, S., Cafiero, T.R., Sinha, S., Schwartz, R.E., **Ploss, A.** (2025) Type I and III interferon signaling competency in the hematopoietic system is critical for control Usutu virus infection in vivo, *PLoS Trop. And Neglected Dis.*, 19(7):e0013317. PMID: PMC12282914
120. Schwoerer, M.P., Carver, S., Cafiero, T.R., Joyce, B., Berggren, K.A., Suzuki, S., Heller, B., O'Connell, A.K., Gertje, H.P., Crossland, N.A., Posfai, E., **Ploss, A.** (2025) Assessment of hepatitis C virus permissiveness in iteratively genetically humanized mice, *Journal of Virology*, 99(9):e0079325. doi: 10.1128/jvi.00793-25. Epub 2025 Sep 3.
121. Schwoerer, M., Carver, S., Suzuki, S., Cafiero, T., Berggren, K., Heller, B., **Ploss, A.** (2025) Genetic and molecular characterization of species-specific receptor transport protein 4 (RTP4)-mediated HCV repression, *PLoS Pathogens*, 21(9):e1013412., PMID: PMC12431671

D.5.2. Review articles/commentaries/book chapters

122. von Schaeuwen, M., **Ploss, A.** (2014) Animal models of hepatitis C: What can we look forward to, *Antiviral Research*, 104:15-22, PMID: PMC4068254
123. **Ploss, A.** (2014) Mouse models for human infectious diseases, *Journal of Immunological Methods*, 2014 Aug; 410:1-2. Doi: 10.1016/j.jim.2014.07.002. PubMed-indexed for MEDLINE.
124. Strowig, T, **Ploss, A.** (2014) Plasmodium falciparum parasite development in humanized mice: liver and blood stages, in Humanized mice for HIV Research, Poluektova, L.Y., Garcia-Martinez, J.V., Koyanagi, Y., Manz, M.G., Tager, A.M. (Eds.), Springer
125. Strick-Marchand, H., **Ploss, A.** (2016) Dual reconstituted mice for hepatotropic pathogens, in Humanized mice for HIV Research, Poluektova, L.Y., Garcia-Martinez, J.V., Koyanagi, Y., Manz, M.G., Tager, A.M. (Eds.), Springer
126. Ding, Q., von Schaeuwen, M., **Ploss, A.** (2014) Hepatitis C virus entry and implications for host tropism, *Cell Host & Microbe*, 2014 Nov 12; 16(5):562-8. doi: 10.1016/j.chom.2014.10.009. PMID: PMC4272444.
127. Gaska, J., **Ploss, A.** (2015) Analysis of viral pathogenesis in humanized mice, *Current Opinion in Virology* 2015 Apr; 11-14-20. doi: 10.1016/j.coviro.2015.01.002. PMID: PMC4456257.
128. Siu, E., **Ploss, A.** (2015) Generation of humanized mouse models for human malaria, *Annals of the New York Academy of Sciences*, 2015 Apr 1342:29-36. doi: 10.1111/nyas.12618.
129. Douam F, **Ploss A** (2015) Proteomic approaches to analyzing Hepatitis C Virus Biology. *Proteomics*. 2015 Jun;15(12):2051-65. doi: 10.1002/pmic.201500009. PMID: PMC4559851.
130. Winer, B.Y., **Ploss, A.** (2015) Determinants of hepatitis B virus species tropism, *Current Opinion in Virology*, 2015 Aug;13:109-16. doi: 10.1016/j.conviro.2015.06.004. PMID: PMC4550528.
131. **Ploss, A.**, Walker, C. (2015) Editorial overview: Progress and challenges in modeling human viral diseases in vivo. *Current Opinion Virology*, 2015 Aug; 13:v-vii. doi: 10.1016/j.conviro.2015.07.004.
132. von Schaeuwen, M., **Ploss, A.** (2015) Novel biomarkers associated with the outcome of interferon-based HCV therapy, *Cell. & Mol. Gastro. & Hepatology*, 1(3):257
133. Winer, B.Y., **Ploss A.** (2015) Breaking the species barrier for hepatitis delta virus, *Hepatology*, 2016 Jan; 63(1):334-6. doi: 10.1002/hep.28129. PMID: PMC4899507.

134. Douam, F., Gaska, J., Winer, B.Y., Ding, Q., von Schaewen, M., **Ploss, A.** (2015) Genetic dissection of the host tropism of human tropic pathogens, *Annual Reviews in Genetics*, 2015; 49:21-45. doi: 10.1146/annurev-genet-112414-054823. PMID: PMC5075990.
135. Douam F, Ding Q, **Ploss A.** (2016) Recent advances in understanding hepatitis C. *F1000Research*, 5. Pii: F1000 Faculty Rev-31. Doi: 10.12688/f1000research.7354.1, PMID: PMC4755394.
136. Winer B.Y., Ding Q., Gaska J., **Ploss A.** (2016) In vivo models of hepatitis B and C virus infection. *FEBS Lett.* 590(13):1987-99. Doi: 10.1002/1873-3468. 12157. PMID: PMC4945464.
137. Bartucci, M., Ferrari, A.C., Kim, I.Y., **Ploss, A.**, Yarmush, M., Sabaawy, H.E. (2016) Personalized Medicine Approaches in Prostate Cancer Employing Patient Derived 3D Organoids and Humanized Mice, *Front Cell Dev Biol.*, 4:64. Doi: 10.3389/fcell.2016.00064. PMID: PMC4917534.
138. Shirvani-Dastgerdi, E., Schwartz, R.E., **Ploss, A.** (2016) Hepatocarcinogenesis associated with hepatitis B, delta and C viruses, *Curr. Opin. Virol.* 20:1-10, PMID: PMC5508050
139. von Schaewen, M., **Ploss, A.** (2016) New Animal Models of Hepatitis C, ed. Christopher Walker, Stanley Lemon, Takaji Wakita, Tatsuo Miyamura, *Springer*
140. Nimgaonkar, I., **Ploss, A.** (2017) A porcine model for chronic hepatitis E, *Hepatology*, 67(2):787-790
141. Nimgaonkar, I., Ding, Q., Schwartz, R.E., **Ploss, A.** (2018) Hepatitis E virus: Advances and Challenges, *Nature Reviews Hepatology & Gastroenterology*, 15(2):96-110
142. Douam, F., **Ploss, A.** (2018) The use of humanized mice for studies of viral pathogenesis and immunity, *Current Opinion in Virology*, 29:62-71
143. Douam, F., **Ploss, A.** (2018) Yellow fever virus: Knowledge gaps impeding the fight against an old foe, *Trends in Microbiology*, 26(11):913-928, PMID: PMC6340642
144. Mesev, E.*, Ledesma, R.*, **Ploss, A.** (2019) Decoding type I and III interferon signaling during viral infection, *Nature Microbiology*, 4(6):914-924. PMID: PMC6554024
145. LeDesma, R.*, Nimgaonkar, I., **Ploss, A.** (2019) Hepatitis E virus replication, *Viruses*. 2019 Aug 6;11(8). pii: E719. doi: 10.3390/v11080719. PMID: PMC6723718
146. Maya, S., **Ploss, A.** (2019) Master of disguise: hepatitis delta virus packaging and spread facilitated by diverse viral envelope proteins, *Hepatology*. 2019 Aug 29. doi: 10.1002/hep.30922. [Epub ahead of print]
147. **Ploss, A.****, Kapoor, A.** (2020) Animal Models of Hepatitis C Virus Infection, *CSH Perspectives in Medicine: Hepatitis C virus*, editors Pawlotsky, Randall, Grakoui, 10(5):a036970. PMID: PMC7197424
148. Akkina, R., Barber, D.L., Bility, M.T., Bissig, K.D., Burwitz, B.J., Eichelberg, K., Endsley, J.J., Garcia, J.V., Hafner, R., Karakousis, P.C., Korba, B.E., Koshy, R., Lambros, C., Menne, S., Nuernberger, E.L., **Ploss, A.**, Podell, B.K., Poluektova, L.Y., Sanders-Bear, B.E., Subbian, S., Wahl, A. (2020) *Curr HIV Res.* 18(1):19-28. PMID: PMC7403688
149. Berggren, K.*, Suzuki, S.*, **Ploss, A.** (2020) Animal model systems used in HCV research, *Journal of Molecular Sciences*, 29;21(11):3869. doi: 10.3390/ijms21113869. PMID: PMC7312079
150. **Ploss, A.**, Strick-Marchand, H., Li, W. (2021) Animal models for hepatitis B: does the supply meet the demand, *Gastroenterology*, 160(5):1437-1442, PMID: PMC8035324
151. Liu, Y.*, Maya, S.*, **Ploss, A.**, (2021) Animal model of hepatitis B virus infection – success, challenges and future directions, *Viruses*, 13(5):777. Doi: 10.3390/v13050777. PMID: PMC8146732
152. Wei, L., **Ploss, A.** (2021) Mechanisms of Hepatitis B Virus cccDNA Formation, *Viruses*, 13(8):1463. <https://doi.org/10.3390/v13081463>
153. Wei, L., **Ploss, A.** (2022) Rise above the stress – ER stress and autophagy enhance the release of hepatitis B virus sub particles, *Hepatology*, 75(2):248-251
154. LeDesma, R., **Ploss, A.** (2022) Hepatitis E virus. In *Field's Virology, Volume 3: RNA Viruses*, Editors Peter Howley & David M. Knipe
155. Schwoerer, M.P., **Ploss, A.** (2022) Barriers to Hepatitis C Virus Infection in Mice, *Current Opinion in Virology*, 56:101273. doi: 10.1016/j.coviro.2022.101273.
156. Douam, F., **Ploss, A.** (2022), A humanized "new-trophil" mouse to study early inflammatory processes. *Proc Natl Acad Sci U S A.*, 119(49):e2216699119. DOI: [10.1073/pnas.2216699119](https://doi.org/10.1073/pnas.2216699119)
157. Testoni, B., **Ploss, A.** (2023) Cracking the host functional network involved in hepatitis B virus cccDNA biology, *Gut*, [gutjnl-2022-329185](https://doi.org/10.1136/gutjnl-2022-329185). doi: 10.1136/gutjnl-2022-329185. Online ahead of print
158. Berggren, K.A., Schwartz, R.E., Kleiner, R.E., Ploss, A. (2024) The impact of epitranscriptomic modifications on liver disease, *Trends in Endocrinology and Metabolism*, 0:S1043-2760(23)00272-2. doi: 10.1016/j.tem.2023.12.007. Online ahead of print.

159. Gomez-Moreno, A.* , Guo, J.* , Temple, H., **Ploss, A.** (2024) Mechanisms of hepatitis B virus cccDNA formation/transcription, *Journal of Hepatology*, May 22:S0168-8278(24)00159-4. doi: 10.1016/j.jhep.2024.03.008.
 160. HBV2023; Allweiss, L., Cohen, C., Dias, J., Fumagalli, V., Guo, H., Harris, J.M., Hu, J., Iannacone, M., Isogawa, M., Jeng, W.J., Kim, K.H., Kramvis, A., Li, W., Lucifora, J., Muramatsu, M., Neuveut, C., **Ploss, A.**, Pollicino, T., Protzer, U., Tan, A., Tanaka, Y., Tu, T., Tsukuda, S., Thimme, R., Urban, S., Watashi, K., Yuan, Z., Yeh, S.H., McKeating, J.A., Revill, P.A. (2024) Highlights from the 2023 International Meeting on the Molecular Biology of Hepatitis B virus, *J Gen Virol.* May;105(5).doi: 10.1099/jgv.0.001978
 161. Gomez-Moreno, A., **Ploss, A.** (2024) Mechanisms of hepatitis B virus cccDNA and minichromosome formation and HBV gene transcription, *Viruses*, Apr 15;16(4):609. PMID: PMC11054251
 162. Lin, A.E., Mesev, E.V., Toettcher, J.E., **Ploss, A.** (2024) Engineered chimeric receptors for dissecting interferon signaling, *Journal of Virology*, Sep 18:e0168023. doi: 10.1128/jvi.01680-23. Online ahead of print.
 163. Gomez-Moreno, A., Bradley, D., **Ploss, A.** (2025) Building hepatitis B virus gene transcription from the bottom up, *Hepatology*, Jun 16:10.1097/HEP.0000000000001437
 164. Muenz, C., **Ploss, A.** (2025) Immunity to Oncogenic Viruses, in *Encyclopedia of Immunobiology*, in press
 165. LeDesma, R., **Ploss, A.** (2026) Hepatitis E virus. In *Field's Virology, Volume 3: RNA Viruses*, Editors Peter Howley & David M. Knipe, in press
- * these authors contributed equally; ** co-senior/corresponding authors

Patent applications

1. **Ploss A.**, Ding, Q. (2016) Methods and Compositions for Inhibiting Hepatitis E virus, provisional patent application filed, U.S. Patent Application No.: 62/398,297
2. **Ploss, A.**, Wei, L. (2017) Methods and Compositions for Inhibiting Hepatitis B virus, provisional patent application filed
3. **Ploss, A.**, Douam, F. (2018) MicroRNA-based therapeutics for the treatment of flavivirus infections, U.S. Patent Application No.: 62/702,471
4. **Ploss, A.**, Liu, Y. (2024) Development of a dual channel detection system for pan-genotypic simultaneous quantification of hepatitis B and delta viruses. U.S. Patent Application No.: 63/574,983
5. Myhrvold, C., Kang, B., **Ploss, A.** (2025) Multiplex RNA quantification using Crispr/Cas13. U.S. Patent Application No.: 19/302,644

Granted patents

1. **Ploss A.**, Nimgaonkar, I., Kim, H. (2020) Small molecule inhibitors of viral replication: WO2020/231979
2. **Ploss A.**, Evans M.J., Rice C.M. (2009) New Entry Factor, occludin, US patent number: US 12/299,439
This patent claims the use of occludin as a target to prevent, mitigate or inhibit HCV infection. It further covers the development of a genetically modified rodent rendered permissive to HCV glycoprotein mediated entry or infection by expression of human occludin.
3. **Ploss A.**, Khetani S.R., Jones C.J., Rice C.M., Bhatia S.N. (2008) Micropatterned co-culture systems as infectious disease analysis platforms. US patent application number: US 61/78,683
This invention is based on the development and optimization of micropatterned primary hepatocyte culture systems for pharmacological and toxicological analysis as well as for drug efficacy test against human pathogens, including hepatitis A, B, C, δ , E viruses and Plasmodium spp.)

D. (Invited) oral presentations:

1. **Promiscuity of MHC class Ib restricted T cell responses**, The 2nd Immunology Meeting for Graduate Students, Northeast Region, Cornell University, Ithaca, NY, USA, September, 2002
2. **T cell memory potential is programmed by thymic development**, Annual Meeting of the American Association of Immunologist, Denver, CO, USA, May 2003
3. **Memory T cell expansion upon Re-encountering Antigen: Differences between MHC Class Ia and Ib Restricted CD8+ T cells**, 23rd Vincent DuVigneaud Symposium, New York, NY, USA, May 2004
4. **Creation of small animal models for Hepatitis C virus infection and immunity**, Center for the Study of Hepatitis C, The Rockefeller University, New York, USA, February 13, 2007

5. **Creation of small animal models for Hepatitis C virus infection and immunity**, The Children's Hospital of Philadelphia, Gene and Cell Therapy Affinity Group Research Seminar Series, Philadelphia, USA, April 28, 2008
6. **Generation of patient-specific hepatocytes for the genetic analysis of susceptibility to hepatitis C virus infection**, Center for the Study of Hepatitis C, The Rockefeller University, New York, USA, May 13, 2008
7. **Generation of human liver chimeric mice and its applications for human hepatotropic infections**, Bill & Melinda Gates Foundation, Grand Challenges in Global Health #4, Scientific Progress Meeting, Versailles France, May 27, 2008
8. **Novel Insight into Hepatitis C virus infection**, 19th Annual Meeting of the "Gesellschaft für Virologie" (GfV, Society for Virology), Leipzig, Germany, March 21, 2009
9. **Human occludin is a Hepatitis C virus entry factor required for infection of mouse cells**, 2nd International Workshop on Humanized Mice, Amsterdam, The Netherlands, April 5, 2009
10. **Creation of humanized mice for the study of human infectious diseases**, Aaron Diamond AIDS Research Center, New York, NY, USA, August 31, 2009
11. **Breaking species barriers: New models for studying pathogenesis of human infectious diseases**, The Rockefeller University, New York, NY, USA, September 17, 2009
12. **Creation of humanized mouse models for human hepatotropic infections**, Bill & Melinda Gates Foundation, Grand Challenges in Global Health, 5th Annual Meeting, Arusha, Tanzania, October 19-21, 2009
13. **Impact of alternative splicing of human occludin on hepatitis C virus entry**, 16th International Symposium on Hepatitis C and related viruses, Nice, France, October 4, 2009
14. **Persistent HCV infection in microscale primary human hepatocyte cultures**, 16th International Symposium on Hepatitis C and related viruses, Nice, France, October 6, 2009
15. **Prospects for a Small Animal Model for HCV**, HEPDART 2009 Frontiers in Drug Development for Viral Hepatitis, Big Island, Hawaii, USA, December 7, 2009
16. **Studying hepatitis C virus infection and immunity in humanized mouse models**, 3rd Workshop Humanized SCID Mouse Models: Stem Cells, Cancer, & Viral Pathogenesis, Belhurst Castle, Geneva NY, May 13, 2010
17. **Breaking species barriers: Studying hepatitis C virus infection in small animal models**, Hannover Medical School, Hannover, Germany June 9, 2010
18. **Humanized mice for the liver**, 3rd International Workshop for Humanized Mice, Hannover, Germany, June 12, 2010
19. **A genetically humanized, immunocompetent mouse model for Hepatitis C virus infection**, 17th International Meeting on Hepatitis C Virus and Related Viruses, Yokohama, Japan, September 10, 2010
20. **Dissecting Hepatitis C virus infection and immunity in vivo**, Heidelberg Virology Seminars, German Cancer Research Center/University of Heidelberg, Heidelberg, Germany, December 7th, 2010
21. **Breaking species barriers: Studying human viral infections in small animal models**, Department of Microbiology, Mount Sinai School of Medicine, New York, NY, USA, January 4th, 2011
22. **Analysis of Hepatitis C virus entry in vivo**, TargetMeeting: Pathogenesis mechanisms of virus entry and replication, Online conference, February 5th, 2011
23. **Analysis of Hepatitis C virus infection in primary hepatocytes and small animal models**, Gastroenterology Unit, Massachusetts General Hospital/Harvard Medical School, Boston, MA, USA, February 15th, 2011
24. **Analysis of Hepatitis C Virus Infection and Immunity in Small Animal Models**, Division of Viral Diseases Seminar Series, National Institutes of Health, Bethesda, MD, February 17th, 2011

25. **Analysis of Hepatitis C Virus Infection and Pathogenesis in Small Animal Models**, 3rd JCA-AACR Special Joint Conference, Tokyo, Japan, March 2nd, 2011
26. **Animal models for Hepatitis C**. 46th Annual Meeting of the European Association for the Study of the Liver, Berlin, Germany, March 31st, 2011
27. **Development of in vivo Models for the Pre-Clinical Assessment of Hepatitis C Virus Therapeutics**, Cambridge Healthcare Institute's 6th Annual Drug Discovery Chemistry meeting, San Diego, CA, USA, April 13th, 2011
28. **Development of humanized mice for human malaria**, Research Advances in Malaria: Resistance to Existing Drugs and New Drug Development, Tres Cantos, Spain, June 3rd, 2011
29. **Analysis of hepatitis C virus infection in small animal models**, National Institutes of Health, Bethesda, MD, USA, July 6th, 2011
30. **Genetic dissection of hepatitis C virus infection**, FASEB Summer Research Conference, Saxton River, VT, USA, July 19th, 2011
31. **Humanized mice for the study of human infectious diseases**, National Academy of Science, Washington, DC, USA, August 11th, 2011
32. **Modeling human hepatotropic infections in vivo: hepatitis C and malaria**, Seattle Biomed, Seattle, WA, USA, September 12th, 2011
33. **A Comparison of Genetic Modification and Transplantation Approaches to Study Hepatitis C in Humanized Mouse Models**, New York Academy of Sciences, New York, NY, USA, September 16th, 2011
34. **Analysis of hepatitis C virus infection in primary cell culture systems and animal models**, The Rockefeller University Infectious Disease Biology retreat, Chappaqua, NY, USA, September 17th, 2011
35. **Drug discovery for hepatitis C virus**, Mercy Medical Center, Baltimore, MD, USA, September 23rd, 2011
36. **Breaking species barriers: Studying human infectious diseases in small animal models**, The Rockefeller University, Seminars in Clinical Research, New York, NY, USA, October 12th, 2011
37. **Development of a humanized mouse model for human malaria infection**, 3rd International Workshop on Humanized Mice, Pittsburgh, PA, USA, October 29, 2011
38. **New systems to study hepatitis C virus**, Annual meeting of the American Association for the Study of Liver Diseases, San Francisco, CA, USA, November 6th, 2011
39. **Dissection of hepatitis C virus infection in humanized mice**, The Scripps Research Institute, San Diego, CA, November 8th, 2011
40. **Modeling human infectious disease in humanized mice for basic biology and preclinical applications**, Life Sciences Summit, New York, NY, USA, November 16th, 2011
41. **Modeling Human Infectious Diseases In Vivo: Opportunities and Challenges of Human-Animal Chimeras**, Grand Rounds Department of Health Evidence and Policy, Mount Sinai School of Medicine, New York, NY, USA, January 10th, 2012
42. **Modeling human hepatotropic infections in vivo: hepatitis C and malaria**, Signature Interdisciplinary Program in Allergy, Immunology and Infectious Disease, University of South Florida, Tampa, FL, USA, June 1st, 2012
43. **Modeling human hepatotropic infections by animal engineering**, Vaccine and Infectious Disease Division's (VIDD) Faculty Seminar Series, Fred Hutchinson Cancer Research Center, Seattle, WA, USA, June 19th, 2012
44. **Genetically humanized mice for hepatitis C virus infection**, 14th International Symposium on Viral Hepatitis and Liver Disease, Shanghai, China, June 25th, 2012
45. **Pre-clinical genetically humanized animal models for hepatitis C infection**, Liver and Digestive Health Seminar Series, University College of London, London, Great Britain, September 25th, 2012
46. **Analysis of human hepatotropic infections in humanized mice**, 4th Twincore Symposium "Innovative animal models in infection research and immunology", Hannover, Germany, September 27th, 2012

47. **Studying hepatitis C virus infection and immunity in genetically humanized mice**, Karolinska Institute, Stockholm, Sweden, October 1st, 2012
48. **Characterizing human hepatotropic pathogens in humanized mice**, University of Zurich, Zurich, Switzerland, October 2nd, 2012
49. **Genetically humanized mouse models for hepatitis C virus infection**, University of Tartu, Tartu, Estonia, October 3rd, 2012
50. **Analysis of human hepatotropic infections in humanized mice**, SUNY Downstate Medical Center, Molecular and Cellular Biology Seminar Series, November 14th, 2012
51. **Breaking species barriers: Studying human hepatotropic infections in humanized mice**, Princeton University, Princeton, NJ, November 26th, 2012
52. **HCV virology and animal models**, 2012 Penn Center for Viral Hepatitis Symposium on HCV and Co-infections: New Insights and Emerging Therapies, Philadelphia, November 28th, 2012
53. **Breaking species barriers: analysis of human hepatotropic infections in humanized mice**, Columbia University, New York, NY, January 10th, 2013
54. **Study of human hepatotropic pathogens in humanized mice**, The Scripps Research Institute, Jupiter, FL, January 18th, 2013
55. **Development of humanized mouse model for the study of human hepatotropic pathogens**, The Jackson Laboratory, Bar Harbor, ME, January 24th, 2013
56. **Analysis of hepatitis C virus infection in humanized mice**, State University of New York, Syracuse, NY, April 25, 2013
57. **Breaching species barriers: development of animal models for hepatitis C virus infection and pathogenesis**, Symposium on HCV animal model and vaccine development, Tallinn, Estonia, May 17th, 2013
58. **Humanized mouse models**, 8th HepCAM Meeting, Cambridge, MA, June 28th, 2013
59. **Genetically humanized mice for the study of Hepatitis C**. 5th Israeli Molecular Liver Conference, Tel Aviv, Israel, July 10th, 2013
60. **Determinants of hepatitis C virus interspecies tropism**. The Weizmann Institute, Rehovot, Israel, July 14th, 2013
61. **Analysis of Liver Diseases in Humanized mice**. Humanized Mice in Translational Biomedical Research, The Jackson Laboratory, Bar Harbor, Maine, September 23rd, 2013
62. **Challenges with the development of immune competent mouse models for hepatitis C**. EASL Monothematic Conference, Lyon, France, November 29, 2013
63. **Feasibility of Producing a Fully Immunocompetent Animal Model for HCV Infection**. HEPDART 2013 Frontiers in Drug Development for Viral Hepatitis, Big Island, Hawaii, USA, December 9, 2013
64. **Breaking species barriers: Studying human infectious diseases in humanized mice**, Princeton University, Department of Ecology and Evolutionary Biology, February 19, 2014
65. **Analysis of viral hepatitis in humanized mice**, Zhejiang University, Hangzhou, China, February 25, 2014
66. **Characterization of viral and parasitic pathogens in humanized mice**, Naval Medical Research Unit 6, Lima, Peru, March 27, 2014
67. **Generation of mouse models for viral hepatitis**, Gilead Sciences, Foster City, CA, March 31, 2014
68. **Breaching species barriers of HCV: Lessons for HBV?**, Baruch Blumberg Institute, Doylestown, PA, April 3, 2014
69. **Development of preclinical models for hepatitis C**, Rosalind Franklin University Medical School, Chicago, IL, April 15, 2014
70. **Generation of humanized mouse models for malaria**. New York Academy of Sciences, New York, NY, April 25, 2014.
71. **Defining and overcoming barriers of hepatitis C virus species tropism**. (Plenary talk) American Society for Microbiology 114th General Meeting, Boston, MA, May 19th 2014
72. **Generation of Animal Models for Hepatitis C**. Determinants of Elimination and Persistence of Hepatitis Viruses, German Cancer Research Center, Heidelberg, Germany, May 20th, 2014
73. **Insights in human infectious diseases from humanized mice**. Princeton University, Department of Molecular Biology Reunion seminar, Princeton, NJ, May 30th, 2014
74. **Humanized mouse model for hepatitis C virus infection and immunity**, Division of

Gastroenterology and Liver Diseases, Albert Einstein College of Medicine, New York, NJ, June 11th, 2014

75. **Advances in HCV Virology**, US-Georgia Program-Development Workshop, on HIV/AIDS, TB and Hepatitis, Tbilisi, Georgia, June 17th, 2014
76. **Utility of humanized mouse model for the of study hepatitis C virus infection and immunity**, Center for Inflammation and Immunity, Rutgers University, Newark, NJ, June 20th, 2014
77. **Breaking species barriers: shedding light on the host tropism of hepatitis C virus**, Plenary talk (The Eli Lilly and Company Lecturer), American Society of Virology Annual Meeting, Fort Collins, CO, June 22nd, 2014
78. **Broadening the species tropism of hepatitis C virus through genetic adaptation**, Department of Microbiology & Immunology Seminar Series, Jefferson Medical College, Philadelphia, PA, September 16, 2014
79. **Impact of broadly neutralizing antibodies on hepatitis C virus infection**, Symposium on “Infection and Cancer”, German Cancer Research Center, Heidelberg, Germany, December 12th, 2014
80. **New animal models for studying persistent hepatitis virus infections**, 17th International Conference on Emerging Infectious Diseases (EID), Taipei, Taiwan, January 25th, 2015
81. **HCV animal models in antiviral drug and vaccine development**, Falk workshop: Viral hepatitis – from bench to bedside, Munich, Germany, January 29th, 2015
82. **Dissection of tropical viral and parasitic diseases in humanized mice**, Center for Infectious Disease Dynamics, Pennsylvania State University, PA, February 5th, 2015
83. **Analysis of human infectious diseases in humanized mice**, Zhejiang University, Hangzhou, China, March 10th, 2015
84. **Defining barriers of hepatitis C virus tropism**, Institute Pasteur, Shanghai, China, March 13th, 2015
85. **Analysis of host barriers of human hepatitis viruses**, Tsinghua University, Beijing, China, March 17th, 2015
86. **Restrictions of hepatitis C virus host tropism**, Löffler-Frosch Award Lecture, Annual meeting of the German Society of Virology, Bochum, Germany, March 19th, 2015
87. **Chronic viral infections in humanized mice**, SFB841 Symposium 2015 “Controlling Inflammation”, University Medical Centre Hamburg-Eppendorf, Hamburg, Germany, March 27th, 2015
88. **Dissection of malaria and yellow fever in humanized mice**, Research Seminar Series, Blantyre Malaria Project, Queen Mary Hospital/University of Blantyre, April 7th, 2015
89. **Defining host responses limiting the host range of human-tropic pathogens**, University of Washington, Microbiology Seminar Series, Seattle, WA, May 7th, 2015
90. **Analysis of Host Responses to Human Hepatotropic Pathogens in Humanized Mice**, Penn State University, State College, PA, May 11, 2015
91. **Analysis of human infectious diseases in humanized mice**, Memorial Sloan-Kettering Cancer Center, New York, NY, June 4th 2015
92. **Analysis of host responses limiting the species tropism of human hepatotropic pathogens**, Child Health Institute, Rutgers University, New Brunswick, NJ, June 8th, 2015
93. **Characterization of human hepatotropic infections in humanized mice**, Johns Hopkins School of Public Health, Baltimore, MD, September 11th, 2015
94. **Defining the host range restriction of human hepatotropic viruses**, Plenary lecture at the National Virology Conference, Morelos, Mexico, September 23rd, 2015
95. **Breaking species barriers: dissecting the host tropism of human viral pathogens**, Butler Seminar Series, Princeton University, Princeton, NJ, September 30th, 2015
96. **Modeling human hepatitis virus infections in humanized mice**, Inflammation and Signalling symposium, Fox Chase Cancer Center, Philadelphia, NJ, October 23rd, 2015
97. **Deciphering the Host Range of Human Tropic Pathogen**, Plenary lecture, ASM Theobald Smith Society, Rutgers University, New Brunswick, NJ, November 5th, 2015
98. **Development of animal models to study virus-induced hepatocarcinogenesis**, Cancer Institute of New Jersey, New Brunswick, NJ, December 16th, 2015
99. **Determinants of host range restrictions of human hepatotropic viruses**, Plenary lecture, Viruses: At the Forefront of Virus-Host Interactions, Basel, Switzerland, January 28th, 2016

100. **Development of humanized mouse models to study chronic viral hepatitis**, Plenary lecture, International Workshop on Humanized Mice 5, Zurich, Switzerland, January 29th, 2016
101. **Mouse models to study HCV-specific T cell responses**, Workshop of the European Association for the Study of the Liver, Freiburg, Germany, February 5th, 2016
102. **Towards an immunocompetent animal model for hepatitis B virus infection**, Gilead Sciences, Foster City, CA, March 30th, 2016
103. **Breaking species barriers: Study of Human infectious Diseases in Humanized mice**, Meeting of the Canadian Chapter of the Princeton Alumni Association, Montreal, Canada, April 11th, 2016
104. **Development of pre-clinical animal models for HBV/HDV infections, Plenary talk at the Hepatitis Delta International Network meeting at EASL**, Barcelona, Spain, April 13th, 2016
105. **Analysis of transcriptional responses to RNA viruses across diverse non-human primate lineages**, RNA & Infection Symposium, University of Würzburg/Helmholtz Center for Infection Research, Würzburg, Germany, April 28th, 2016
106. **Determinants of host range restrictions of human hepatotropic pathogens**, 6th Summer School on Infection Research, German Center for Infection Research/Helmholtz Society, Schloss Buchenau, June 8th, 2016
107. **Species-specific differences in virus-immune system interactions dictate outcome of yellow fever virus infection**, Institute Pasteur, Shanghai, China, July 8th, 2016
108. **Deciphering host range restrictions of human-tropic pathogens**, Institute of Virology, Chinese Academy of Sciences, Wuhan, China, July 13th, 2016
109. **Deciphering the species tropism of hepatitis C and yellow fever viruses**, Department of Life Sciences, Wuhan University, Wuhan, China, July 20th, 2016
110. **Deciphering Host Range Restrictions of Human Hepatitis Viruses**, Plenary Lecture, 10th Australasian Conference on Viral Hepatitis, Gold Coast, Australia, September 30th, 2016
111. **Gaps in Experimental Systems Required for Preclinical Testing of HCV Vaccine Candidates**, 10th Australasian Conference on Viral Hepatitis, Gold Coast, Australia, September 30th, 2016
112. **New model systems for hepatitis C**, Keynote lecture, 23rd International Symposium on Hepatitis C Virus and Related Viruses, Kyoto, Japan, October 14, 2016
113. **Animal models of Viral Hepatitis**, Plenary lecture, 6th European Congress of Virology, Hamburg, Germany, October 20th, 2016
114. **Genetically Humanized Mouse Models for Human Hepatitis Viruses**, Plenary lecture, Basic Science Symposium, American Association for the Study of Liver Diseases, The Liver Meeting, Boston, MA, November 12th, 2016
115. **Host Range Restrictions of human (hepatotropic) pathogens**, Department of Microbiology/Immunology, University of North Carolina, Chapel Hill, NC, March 7th, 2017
116. **New insights into acute and chronic hepatitis virus infections**, Pasteur Colloquium, Institute Pasteur Shanghai, Shanghai, China, March 29th, 2017
117. **Development of experimental models for human hepatitis virus infections**, 4th CCID Hangzhou Forum, Hangzhou, China, March 31st, 2017
118. **Experimental models for chronic hepatitis B and delta virus infections**, Cancer Institute of New Jersey, New Brunswick, NJ, April 13th, 2017
119. **Characterization of arthropod-borne flavivirus infections in humanized mice: Towards molecular mechanisms governing viral pathogenesis**, Climate and Disease Conference, Princeton University, Princeton, NJ, May 5th 2017
120. **New Insights into the Molecular Biology of Hepatitis delta and E viruses**, Twincore – Helmholtz Center for Infection Biology, Hannover, Germany, June 19th 2017
121. **New insights into the molecular biology of hepatitis E virus and hepatitis delta virus host tropism**, University of Heidelberg, Heidelberg, Germany, June 20th 2017
122. **New Insights into the Molecular Biology of Hepatitis delta and E viruses**, University of Lausanne, Switzerland, June 21st 2017
123. **Insights into the molecular biology of acute and chronic hepatitis virus infections**, Tsinghua University, Beijing, China, July 31st, 2017
124. **The return of Yellow Jack: new insights into yellow fever virus pathogenesis**, Department of Molecular Biology, Butler Seminar Series, Princeton University, Princeton, NJ, October 11, 2017

125. **Host range restrictions of human viral pathogens**, Zhejiang – Princeton Research Symposium, Zhejiang University, Hangzhou, China, October 17th, 2017
126. **Dissecting the molecular virology of acute and chronic hepatitis viruses**, University of Science and Technology China (USTC), Hefei, China, October 18th, 2017
127. **New Insights into flavivirus host tropism and pathogenesis**, University of Pennsylvania, Department of Microbiology Seminar Series, Philadelphia, PA, November 15th, 2017
128. **Novel in vitro platforms and humanized mouse models to study hepatitis B virus persistence**, Regeneron Pharmaceuticals, Tarrytown NY, December 14th, 2017
129. **Development of experimental models to study hepatitis B virus persistence and immunity**, Novartis Institutes for Biomedical Research, Emeryville, CA, January 17th, 2018
130. **New insights into acute and chronic viral hepatitis**, Genobiotec – 5th International Congress for Biotechnology and Genomics, Monterey, Mexico, June 7th, 2018
131. **Animal models for hepatitis E and C viruses**, 16th International Symposium on Viral Hepatitis and Liver Disease, Global Hepatitis Summit, Toronto, Canada, June 17th, 2018
132. **Multipronged approaches for developing immunocompetent animal models for HBV infection, immunity and pathogenesis**, NIH Workshop on Critical Resources for Hepatitis B Research, Rockville, MD, September 12th, 2018
133. **New experimental platforms to analyze host responses to hepatitis B and delta virus infections**, Baruch Blumberg Institute, Doylestown, PA, November 15th, 2018
134. **Modeling host responses to hepatotropic pathogens in humanized mice**, Regeneron's Workshop on Humanized Immune System Mice, Regeneron Pharmaceuticals, Tarrytown, NY, November 30th, 2018
135. **Utility of self-assembling primary hepatocyte co-cultures for the study of host responses to hepatitis B virus and antiviral drug screening**, Glaxo-Smith-Kline, Collegeville, PA, January 28th, 2019
136. **Host range restrictions of human viral pathogens**, Stanford University, Department and Microbiology and Immunology, Palo Alto, CA, February 6th, 2019
137. **Breaking the species barrier of hepatitis B and delta viruses**, Oregon Health and Science University, Vaccine and Gene Therapy Institute, March 19th, 2019
138. **Deciphering host range restrictions of human viral pathogens**, Yale University, Department of Microbial Pathogenesis Seminar Series, New Haven, CT, May 9th, 2019
139. **Modeling (HIV-exacerbated) viral hepatitis in humanized mice**, NIH/NIAID workshop, Rockville MD, May 30th, 2019
140. **Model Systems to Assess Vaccine-Induced Immune Responses in vivo**, Keystone Symposium Positive Sense RNA Viruses, Killarney, Ireland, June 12th, 2019
141. **Deciphering host range restrictions of human viral pathogens**, 18th Awaji International Forum on Infection and Immunity, Awaji Island, Japan, September 13th, 2019.
142. **New insights into hepatitis E virus**, Institute for Microbiology and Immunology, University of Osaka, Osaka, Japan, September 13th, 2019
143. **Mouse models based on stem cell derived hepatocytes**, 2019 International HBV Meeting. The molecular biology of *hepatitis B* viruses. ICE symposium, Melbourne, Australia, October 1st, 2019
144. **Beyond Hepatitis C Virus: Novel Insights into Acute and Chronic Hepatitis Virus Infections**, Keynote lecture, 26th International Symposium on Hepatitis C virus and Related Viruses, Seoul, South Korea, October 7th, 2019
145. **Hitting viruses where it hurts: New insights in replicative mechanisms of hepatitis B and C viruses**, Department of Infectious Diseases, University of Copenhagen, Copenhagen, Denmark, December 4th, 2019
146. **Hepatitis E virus – molecular virology**, The (digital) International Liver Congress (EASL), August 27th, 2020
147. **New insights into the mechanism of hepatitis B virus persistence**, Memorial Sloan-Kettering Cancer Center, ID Advanced Topics Lecture Series, New York, NY, September 25th, 2020
148. **New insights into the mechanism of hepatitis B virus persistence**, Cancer Institute of New Jersey, New Brunswick, NJ, November 18th, 2020
149. **The making of a killer: new insights in the molecular mechanism of hepatitis B virus**

- persistence**, Schaller eSymposium, Center for Integrative Disease Research, Heidelberg, Germany, April 22nd, 2021
150. **Causing trouble in the liver: New insights in the molecular biology of human hepatitis viruses**, The Catholic University of America, Washington, D.C., September 20th, 2021
 151. **Novel insights into the infectious cycles of human hepatotropic viral pathogens**, International ITU Molecular Biology and Genetics Student Congress, Istanbul Technical University, Istanbul, Turkey, October 1st, 2021
 152. **Looking under the hood of a killer virus: New insights into hepatitis B virus persistence and host tropism**, University of Heidelberg/German Cancer Research Center, Heidelberg, Germany, October 22nd, 2021
 153. **Looking under the hood of a killer virus: New insights into the molecular biology of hepatitis B virus**, Washington University, St. Louis, MO, November 16th, 2021
 154. **Looking under the hood of a killer virus: New insights into the molecular biology of hepatitis B virus**, National Emerging Infectious Disease Laboratory, Boston University, Boston, MA, April 6th, 2022
 155. **New insights into the molecular mechanism of HBV cccDNA formation**, 2nd Annual Chronic HBV Drug Development Summit, Boston, MA, April 25th, 2022
 156. **Utility of Animal Models for Evaluating Preclinically Novel HBV Therapeutics**, 2nd Annual Chronic HBV Drug Development Summit, Boston, MA, April 26th, 2022
 157. **Mechanistic insights into structure and function of hepatitis E virus ORF1 protein**, TRR179 International Conference: Viral Hepatitis and beyond: from basic science to cure, Freiburg, Germany, May 31st, 2022
 158. **cccDNA formation and DNA repair processes**, 9th ANRS HBV Cure Workshop, Lyon, France, July 5th, 2022
 159. **Two stones, one bird: Exploring why two receptors exist for the same antiviral signaling pathway**, Keynote lecture, 14th Twincore Symposium/13th International VPM Days, Hannover, Germany, September 15th, 2022
 160. **HBV cccDNA biogenesis – more questions than answers**, International Hepatitis B Virus Meeting, Paris, France, September 19th, 2022
 161. **Humanized mouse models for the study of HCV and other hepatotropic pathogens**, Keynote lecture at the Joint Canadian Digestive Diseases Week™ and Canadian Liver Meeting Conference 2023, Halifax, Canada, March 3rd, 2023
 162. **Breaking the species barrier of hepatitis B virus infection**, 15th Twincore Symposium, Hannover, Germany, September 14th, 2023
 163. **Breaking the species barrier of hepatitis C virus**, Keynote lecture, 29th International Symposium on Hepatitis C virus, Flaviviruses and related viruses, Atlanta, GA, October 3rd, 2023
 164. **Animal models for efficacy testing of HCV vaccine candidates**, NIH HCV Vaccine Workshop, Emory University, Atlanta, GA, October 5th, 2023
 165. **New insights into the species barriers of human hepatitis viruses**, University of Maryland, Baltimore, MD, October 18th, 2023
 166. **New insights into the replicative cycles and species tropism of human hepatitis viruses**, 23rd International Conference, Korean Society for Molecular and Cellular Biology, Jeju, South Korea, November 8th, 2023
 167. **New tools, techniques and tricks to gain insights into dengue virus biology**, Institute Pasteur Korea, Seoul, November 9th, 2023
 168. **Modeling human hepatitis virus infections *in vivo***, Loyola University, Chicago, IL, December 13th, 2023
 169. **New insights into the species barriers of human hepatitis viruses**, Nationwide Children's Hospital, Columbus, OH, March 28th, 2024
 170. **Breaking species barriers to study human infectious disease *in vivo***, University of Georgia, Athens, GA, April 2nd, 2024
 171. **Breaking the species barrier of hepatitis C virus**, Imperial College London, London, United Kingdom, June 21st, 2024

172. **Updates on animal models for testing preclinically HCV vaccine candidates**, NIH HCV Vaccine Workshop, Oxford, United Kingdom, September 24th, 2024
173. **New insights into the molecular biology of hepatitis B and C viruses**, Keynote lecture, Annual Symposium of the New Jersey Commission on Cancer Research, Princeton, NJ, November 13th, 2024
174. **New insights into the molecular biology of hepatitis B and C viruses**, Cancer Institute of New Jersey, December 18th, 2024
175. **Yellow fever virus: New Lessons Learned from an Old Foe**, Department of Microbiology & Immunology, University of Pittsburgh, March 12, 2025
176. **Genetic approaches to target HBV persistence**, Plenary Talk at the Global Hepatitis Summit, Los Angeles, March 21, 2025
177. **Yellow fever virus: New Lessons Learned from an Old Foe**, Immunology Forum, Johns Hopkins University, April 15th, 2025
178. **New insights into (re-) emerging flavivirus infections**, Keynote lecture, Annual Meeting of the Israel Society of Microbiology, Tel Aviv, July 22nd, 2025
179. **New insights into (re-) emerging flavivirus infections**, Model Animal Research Center, Nanjing University, Nanjing, August 2nd, 2025
180. **What Lurks in the Shadows: Lessons from Emerging and Re-Emerging Flaviviruses**, Department of Biochemistry, Brandeis University, Waltham, MA, November 14th, 2025
181. **Yellow fever virus: New Lessons Learned from an Old Foe**, Center for Virology and Vaccine Research, Harvard Medical School, December 12th, 2025

E. Service

- Committees:
 - 2025-present: Co-Director, Center for Health and Wellbeing
 - 2024-present: Chair of the MolBio Graduate Admissions Committee
 - 2022-present: Member of the Executive Committee of the Center for Health and Wellbeing
 - 2023-2025: Member of the Ludwig Cancer Center – Princeton Branch faculty search committee
 - 2023-present: Chair of the Princeton University Institutional Animal Care and Use Committee (IACUC)
 - 2023-2025: Member of the Princeton Molecular Biology Undergraduate Committee
 - 2022-present: Chair of the Princeton University Institutional Biosafety Committee (IBC)
 - 2022-present: Committee Member for the Rutgers Cancer Institute of New Jersey's Immune Monitoring and Flow Cytometry's Shared Resource Advisory Committee
 - 2021-present: Member of the Academy of Mentors for the New Jersey Alliance for Clinical and Translational Science (NJ-ACTS)
 - 2021-2022: Chair of the MolBio faculty search committee "Immunology"
 - 2021-2023: Vice Chair of the Princeton University Institutional Animal Care and Use Committee (IACUC)
 - 2020-2021: Member of the MolBio faculty search committee "Immunology"
 - 2019-2020: Chair of the MolBio faculty search committee "Virology"
 - 2018-2019: Member of the MolBio faculty search committee "Cryo-EM"
 - 2017: Member of the Institutional Faculty Focus Group on Administrative Workload in Research
 - 2017-present: Member of the Princeton-Rutgers MD PhD admissions committee
 - 2015-2018: Member of the Princeton University Institutional Priorities Committee ("PriComm")
 - 2014-present: Member of the Princeton University Institutional Animal Care and Use Committee (IACUC)
 - 2013-2016 Member of the MolBio committee faculty committee on corporate relations
 - 2013-2016 Member of the MolBio committee on innovation in funding
 - 2013-present: Member of the MolBio graduate admissions committee
 - 2014: Chair of the scientific retreat of the Department of Molecular Biology
 - 2013: Co-chair of the scientific retreat of the Department of Molecular Biology
 - Graduate research thesis committees: Brian Silver (Nelson lab, 2017-2019), Nicolas Morante (Burdine lab, 2013-2017), Oliver Huang (Enquist lab, 2014-2020), Andrew Esteves (Enquist/Schwarzbauer labs, 2017-2022), Cao Fang (Kang lab 2019-present), Jongbeom Park

- (Mallarino/Donia labs, 2021-present), Kimberly Sabsay (te Velthuis/Wingreen lab, 2022-present), Matthew Tyl (Cristea lab, 2024-2025), Alex Bell (Myhrvold lab, 2024-present)
- 2014: Reviewer for the Myhrvold-Havranek Graduate Fellowship for Innovative Thinking in Mathematics, Physics or Molecular Biology
- 2013-present: Examiner for Ph.D. and MD/Ph.D. qualifying exams
- 2014-present: Faculty Advisor, Forbes College, Princeton University
- 2014: Fellow of Forbes College, Princeton University
- 2013-2014 Member of the MolBio faculty search committee “Host & Microbes”
- University teaching
 - Princeton University
 - BNG, MOL 407/507, Faculty Affiliate, spring 2026
 - MOL 465/GHP400, Global Health Challenges: Biology, Disease, and Society, spring 2026
 - MOL 459 Viruses, fall 2024
 - MOL 504B Immunobiology, fall 2023
 - MOL 340 Molecular and Cellular Immunology, fall 2014, 2015, 2016, 2017, spring 2018, 2019, 2020, 2021, 2022, 2023, 2024 (with Prof. Brooks) offered every year
 - GHP 400 / WWS 382 / MOL 499 / EEB 400 Seminar in Global Health and Health Policy (with Profs. Shenk and Mahmoud), spring 2015
 - MOL 516 Genetics of Multicellular Organisms (with Profs. Gavis and Rose), spring 2014
 - Remaining challenges in hepatitis C research, University of Maryland, fall 2023
 - Human hepatotropic viruses; Guest Lectures in Viruses, Cells and Disease (BIOC 5125Q), Rutgers University, spring 2023, 2024, 2025, 2026
 - Human hepatotropic pathogens, Guest professor at Zhejiang University, Hangzhou, China, spring 2015
- Trainees (when known current position is indicated)
 - Postdocs:
 1. Samer Ayoub, Ph.D. (2025-present)
 2. Sukanya Chakravarty, Ph.D. (2025-present) at Princeton
 3. Daniel Bradley, Ph.D. (2024-2025) at Princeton, NJCCR fellowship
 4. Melina Winkler, Ph.D. (2024-present) at Princeton, German Research Foundation (DFG) postdoctoral fellowship recipient
 5. Antton Gomez-Moreno, Ph.D. (2023-present) at Princeton, NJCCR postdoctoral fellowship
 6. Jinchao Guo, Ph.D. (2021-present) at Princeton, NJCCR postdoctoral fellowship
 7. Glenn Hogan, Ph.D. (2021-2023), at Princeton, NJCCR postdoctoral fellowship, research specialist at University of Pennsylvania
 8. Aaron Lin, Ph.D. (2020-present, joint with Adamson Lab), at Princeton, Damon Runyon Fellowship
 9. Saori Suzuki, DVM Ph.D. (2019-2022), at Princeton, Senshin Medical Research Foundation fellowship, Assistant Professor, Kyushu University, Japan
 10. Tomokazu Tamura, DVM Ph.D. (2019-2021), at Princeton, Japanese Society for the Promotion of Science (JSPS) fellowship, Associate Professor, Kyushu University, Japan
 11. Yongzhen Liu, Ph.D. (2019-2024), at Princeton, NJCCR and ACS (declined) postdoctoral fellowship, Assistant Professor at Nanjing University, China
 12. Lei Wei, Ph.D. (2016-2021), at Princeton, NJCCR fellowship recipient, Assistant Professor at West Lake University, Hongzhou, China
 13. Elham Shirvani-Dastgerdi, Ph.D. (2016-2019), at Princeton, DFG fellowship recipient, Precision Medicine Strategy Lead, Regeneron
 14. Florian Douam, Ph.D. (2014-2019), at Princeton, Assistant Professor of Microbiology, Peter Paul Career Development Professor, National Emerging Infectious Disease Laboratory, Boston University, MA

15. Qiang Ding, Ph.D. (2014-2018), at Princeton, NJCCR fellowship recipient, Professor at Tsinghua University, Beijing, China
 16. Yael Sharon, M.D. (2016-2017), at Princeton, Senior Ophthalmologist, Rabin Medical Center, Israel
 17. Julie Sellau, M.D. (2016), at Princeton, DFG fellowship recipient, Teamlead PS USP @ Norbitec GmbH, Germany,
 18. Markus von Schaewen, M.D. (2013-2015) at Rockefeller & Princeton, DFG fellowship recipient, Senior Physician, Caritas-Klinik Maria Heimsuchung, Gastroenterology,
 19. Natalia Frias-Staheli, Ph.D. (2011-2013), at Rockefeller, Senior Technology Analyst at Trillium Medical Ventures
 20. Markus Dörner, Ph.D. (2009-2013), at Rockefeller, DFG fellowship recipient, Senior Non-Clinical Lecturer at Imperial College London, U.K.
 21. Eva Billerbeck, Ph.D. (2009-2013), at Rockefeller, DFG fellowship recipient, now Assistant Professor at Albert-Einstein College of Medicine
- Graduate students:
 1. Emily Xia (2025-present)
 2. Sreya Sanyal (MD Ph.D. program, 2025-present)
 3. Jenny Ijoma (MD Ph.D. program, 2024-present)
 4. Marcus Curlee (2023-present)
 5. Amy Nelson (2021-present)
 6. Michael Schwoerer (2020-2025), predoctoral HMEI-STEP fellow by the High Meadows Environmental Institute, Princeton University, postdoc at Harvard Medical School
 7. Jiayu Zhang (2020- 2025), China Scholarship Council (CSC), postdoc at the Institute for Molecular Pathology, Vienna, Austria
 8. Keith Berggren (2019-2024), Consultant at McKinsey and Company
 9. Stephanie Maya (2019-2024), NJCCR predoctoral fellowship, postdoc at the Pasteur Institute, Paris, France
 10. Emily Mesev (2018-2023), co-mentored by Jared Toettcher (Princeton University), Senior Copywriter, Heartbeat
 11. Robert LeDesma (2017-2022), NSF predoctoral fellowship, Scientist at Regeneron Pharmaceuticals
 12. Ila Nimgaonkar (M.D. Ph.D. program, 2016-2021), Medical Oncology Fellow at British Columbia Cancer Center
 13. Benjamin Winer (2013-2019), NIH NRSA predoctoral fellowship, NJCCR predoctoral fellowship, postdoc with Morgan Huse (MSKCC), Schmidt Science Fellow, since 2025 Assistant Professor at New York University
 14. Jenna Gaska (2013-2019), now Medical Writer at Nucleus Global, NJ
 - Undergraduate students:
 1. Laura Sabrosa Silva, '27 (2025-2027)
 2. Eileen Zheng, '27 (2025-2027)
 3. Blaise Stone, '26 (2024-2026), junior paper "Identifying Host Factors Governing Hepatitis B Virus Covalently Closed Circular DNA Biogenesis and Transcription"
 4. Sofia Sepulveda Pizarro, '26 (2024-2026), junior paper "Identifying the Protease Responsible for NS1/2A Cleavage in YFV-17D using a CRISPRi Survival Screen"
 5. Jonathan Afework, '26 (2024-2026), junior paper "Fluorescent Reporters and Molecular Recorders for Tracking Serotype-Specific Dengue Virus Infection"
 6. Noah Im, '26 (2024-2026), junior paper "Exploring the therapeutic potential of the bacterial nuclease Wadjet to treat chronic hepatitis B virus infection by topologically targeting viral covalently closed circular DNA"
 7. Arwa Abdelshafi, '26 (2024-2025), junior paper "Characterizing the differential signaling of type I and III interferon (IFN) receptors ex vivo"

8. Mujtuba Yousufi, '25 (2024-2025), senior thesis "A High-Throughput Screen to Identify Small Molecular Inhibiting Yellow Fever Virus Infection"
9. Ronald Anglade, '25 (2024-2025), junior paper "Assessing the ability of hepatitis C virus to evade type I interferon-dependent innate immune in non-human cells" and senior thesis "Investigating HCV Innate Immune Restriction in Non-Human Cells"
10. Fariha Begum, '25 (2024-2025), junior paper and senior thesis "Identification of Host Factors Necessary for Hepatitis B Virus Covalently Closed Circular DNA Biogenesis"
11. Sydney Mullin, '24 (2023-2024), Junior paper and senior thesis "Molecular Characterization of Usutu Virus Infection by Application of Novel Reporter Viruses", currently, currently research specialist at Boston Children's Hospital
12. Heidi Temple, '24 (2022-2024), Junior paper and senior thesis "Novel methods for recombinantly producing hepadnaviral relaxed circular and covalently closed circular DNA", currently research specialist at MIT.
13. Emily Schoeman, '23 (2021-2023), Junior paper and senior thesis "Examining the Role of Envelope Protein Mutations in Promoting the Dengue Viral Life Cycle", Medical student at Columbia University
14. Olivia Sakaguchi, '23 (2020-2022), Junior paper and senior thesis "Assessing Hepatitis B Viral Kinetics Using an Inducible Nuclear Pore Blockade", currently Research Assistant in Anna Nam's lab at Weill Medical College of Cornell University
15. Brian Kang, '22 (2021-2022), co-advised with Cameron Myhrvold, senior thesis "Multiplexed Differential Gene Expression Analysis Using Crispr/Cas Systems", Research Assistant in the Ploss & Myhrvold labs at Princeton University (2022-2023), currently graduate student at Stanford University
16. Mansi Totwani, '22 (2020-2022), junior paper and senior thesis "Breaking the Species Barrier: Examining the Role of Human Factors in HBV Infection in Human and Murine Cells", Medical student at Harvard Medical School
17. Debby Park, '22 (2020-2022), junior paper and senior thesis "Breaking the species barrier of Hepatitis B virus in Small Non-Human Primate", currently Research Assistant in Paul Bieniasz' lab at The Rockefeller University
18. Maricar Almeda, '22 (2020-2022), junior paper and senior thesis "Identification and characterization of positive regulators governing hepatitis C virus host tropism", MS-MD student at Berkeley and UCSF
19. Daniel Beard, '22 (2020-2022), junior paper "Discovering the Effects of Specific m6A Deletions on Interferon β RNA", senior thesis "Analysis of the Impact of Site-specific Demethylation of N6-methyladenosine on Interferon β ",
20. Emma Guare, '21 (2019-2021), junior paper "Investigating Interferon- λ Signaling: A Case for Tyk2", senior thesis "Dual Perspectives of Innate Immunity: Investigation of Interferon Signaling Requirements & Characterization of Antagonism by RNA Viral Proteases", currently medical student at Penn State College of Medicine
21. Vrinda Madan, '21 (2019-2021), junior paper "Characterization of Primary and Secondary Dengue Viral Infection in a Humanized Mouse Model", senior thesis "Characterization and Optimization of Primary Dengue Viral Infection in a Humanized Mouse Model", currently medical student at Johns Hopkins School of Medicine
22. Jacob Stheingart, '20 (2019-2020), Philosophy major, Analyst at ClearView Healthcare Partners
23. Leslie Chan, '20 (2019-2020), junior paper "Role of LIG1 in HBV cccDNA Formation in Infected Human Hepatoma Cells", senior thesis "Identifying the role of DNA ligase I in hepatitis B virus cccDNA formation in human hepatoma cells", currently graduate student at Stanford University
24. Celeste Claudio, '20 (2019-2020), junior paper "Characterization of an Usutu virus infectious clone and its viral protease", senior thesis "Probing the dynamics of USUV infection, replication, and spread using an in vitro cell culture model", currently Strategy Analyst at Marwood Group

25. Raymond Guo, '19 (2017-2019), junior paper "An investigation of the impact of spatial transcriptional differences in the liver on hepatitis delta virus infection", senior thesis "Designing a system to investigate the impact of spatial transcriptional differences in the liver on hepatitis delta virus infection", Medical Student at Baylor College of Medicine, Resident at MGH,
26. Evelyn Wu, '19 (2017-2019), junior paper "Identification of innate immune defense pathways restricting hepatitis delta virus infection *in vivo*", senior thesis "Development of an experimental paradigm for the investigation of innate immune pathways restricting hepatitis delta virus replication"
27. Nicholas Archer, '19 (2017-2019), junior paper "Investigating the Host and Viral Factors Determining the Varied Host Tropism of Hepatitis E Virus"; senior thesis "Investigation of Determinants Governing Hepatitis E Virus (HEV) Host Tropism and Identification and Characterization of Small Molecules Inhibiting HEV Replication", currently research assistant in Jeremy Rock's lab at The Rockefeller University
28. Gabriel Lipkowitz, '19 (2016-2019), junior paper "Simianizing hepatitis B virus: Broadening the species tropism through viral adaptation", senior thesis "Towards *in vitro* and *in vivo* model systems for Hepatitis B and Delta Viruses", MSc student in Applied Computational Science and Engineering at Imperial College, London, UK (Fulbright Fellowship), PhD. student at Stanford, since November 2024, Assistant Professor, National University of Singapore
29. David Kim, '18 (2016-2018), junior paper "SH3BP2: A Novel Host Determinant of Live-Attenuated Yellow Fever Virus Infection", senior thesis "Regulation of Yellow Fever Virus Infection through a Novel Host MicroRNA Dependent Mechanism", Medical Student at UCLA
30. Metodi Balev, '18 (2015-2018), junior paper "Probing the Role of Cyclophilin A in Hepatitis C Virus Replication and Host Tropism", senior thesis "Probing the role of cyclophilin A in hepatitis C virus replication and host tropism", currently Medical Student at Mount Sinai School of Medicine
31. Avanthi Cole, '17 (2016), switched majors, Intellectual Property Litigation Associate at Skadden, Arps, Slate, Meagher & Flom LLP and Affiliates
32. Hulaimato Jalloh, '17 (2015-2017), junior and senior thesis "Identification of positive and negative regulators of hepatitis E virus host tropism", Sigma Xi award, 2018-present, Medical Student at Johns Hopkins
33. Tiffany Huang, '17 (2015-2017), junior paper "Creation and Characterization of a Novel dCas9 DNA Sensory Reporter System for Detection of HBV Covalently Closed Circular DNA Utilizing a Long-term Primary Human Hepatocyte Co-culture", senior thesis "Development of experimental cell culture and animal models to recapitulate persistent hepatitis B infection", Sigma Xi Book Award (for best thesis in department), 2017-2018, research assistant in David Artis' lab at Weill Medical College, New York City, NY, 2018-present, Medical Resident at University of Pennsylvania
34. Michael Chang, '16 (2015-2016), junior and senior thesis "Single-Cell Transcriptomic Characterization of Human Hepatotropic Infections in Human Liver Chimeric Mice", 2016-17 research assistant in Tom Tuschl's lab at the Rockefeller University, New York City, NY, 2017-2021 Medical Student at Harvard Medical School, 2021-present, medical resident at Brigham and Women's Hospital
35. Yentli Soto-Albrecht, '16 (2015-2016), junior and senior thesis "Virological and Immunological Characterization of Yellow Fever Virus 17D Strain In a Humanized Mouse Model", Senior Thesis Prize (awarded to top few theses in department), 2016-2018, research fellow in Alejandro Balazs' lab at the Ragon Institute/Harvard Medical School, Boston, MA, 2018-present MD PhD student at the University of Pennsylvania
36. Alexander Jafari, '16 (2014-2016), 2016-17 postbac researcher in John Mascola's Lab, Vaccine Research Center (VRC), National Institutes of Health (NIH), Bethesda, MD, 2017-present Medical Student at Tulane Medical School

37. Alexander Smith, '15 (2013-2015), junior and senior thesis "Characterize Dengue Virus Infection in Tissue Specific STAT1-/- Mice", 2015-17 research fellow in Ted Pierson's lab at National Institutes of Health (NIH), Bethesda, MD, 2017-present Medical Student at Tufts Medical School
 38. Evelyn Siu, '15 (2013-2015) junior and senior thesis "Characterization of *Plasmodium falciparum* and *Plasmodium vivax* Liver Stage Development in Novel Human Liver Chimeric Mice", 2015-16 Fulbright Scholarship for conducting a research project in Taiwan, 2016-present Life Sciences Consultant at Simon-Kucher & Partners
- Visiting students:
 1. Zi Wang (06/2025-08/2025), Zhejiang University, China
 2. Jianche Liu (06/2024-08/2024), Zhejiang University, China
 3. Javier Caballero-Gomez (09/2019-12/2019), University of Cordoba, Spain
 4. Jiayu Zhang (09/2018-04/2019), Zhejiang University, China
 5. Sam Hibbs (09/2017-01/2018), University of Oxford, UK
 6. Cristiana Banila (9/2016-1/2017), University of Oxford, UK
 7. Ann Cirincione (summer 2015), University of Maryland, now graduate student at Princeton University
 8. Mihai-Alexandru Pais (2014-2015), University of Freiburg, Germany
 9. Alexander Vogt (2012), MD at Hull and East Yorkshire Hospitals NHS Trust, German Medical Doctoral Thesis "Recapitulation Of The Hepatitis C Virus Life Cycle In Engineered Murine Cell Lines", awarded best basic science abstract at the Annual Meeting of the European Association for the Study of the Liver (EASL), 2012, Barcelona
 10. Lisa Sandmann (2012) Hannover Medical School
 11. Qian Feng (2010), now post-doc at ETH Zurich
 - Research Assistants:
 1. Sebastian Carver (2023-present)
 2. Brian Kang (2022-2023), graduate student at Stanford University (2023-present)
 3. Thomas Cafiero (2020-2023) graduate student at Princeton University (2023-present)
 4. Andrew Berneshawi (2018-2020), MD/MS candidate at Stanford University (2020-present)
 5. Gabriela Hrebikova (2013-2018), research specialist, Moderna Therapeutics
 6. Brigitte Heller (2013-present), lab manager
 7. Sherif Gerges (2013-2014), postdoc at Harvard University (2016-present)
 8. Bridget Donovan (2011-2013), medical student at Harvard Medical School (2013-2017), Clinical Fellow in Obstetrics, Gynecology and Reproductive Biology at Brigham and Women's Hospital (2017-present)
 9. Rachael Labitt (2011-2013), veterinary student at Cornell University (2013-2017), Resident, CARE Lab Animal Medicine (2017-2020), Facility Veterinarian at Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) (2020-present)
 10. Tamar Friling (2011-2013)
 11. Joshua Horwitz (2009-2011), graduate student at The Rockefeller University (2011-2016), postdoc at Harvard Medical School (2016-2019), Sr. Scientist, Virology at PureTech Health (2019-present)
 12. Walter Barry (2009-2011), graduate student at The Johns Hopkins University (2011-2018)
 13. Kathy Mu (2009-2011), Tulane School of Architecture, now city planner in New York.
 14. Valeriya Gaysinskaya (2008-2009), graduate student at Carnegie Institution for Science (2009-2016), currently Senior Scientist at Circulomics Inc (2020-present)
 15. Jen Korol (2008-2009), graduate student at NYU (2009-2017), currently scientist at Toxicologykinetics Research (2020-present)
 16. Hana You (2006-2008), currently, Associate Scientist at Pharmacyclics, San Francisco