

Curriculum Vitae – Leonidas Stamatatos

1. Personal Background

Address: Fred Hutchinson Cancer Research Center
Vaccine and Infectious Disease Division
1100 Fairview Ave. N, Room E5-420
Seattle, WA 98109-1024
Telephone: (206) 667-2995
Email: Istamata@fredhutch.org

2. Educational Background

1984-1988 Ph.D. Department of Biochemistry, McGill University, Montreal, Canada
Ph.D. Thesis: 'Development of Cationic Liposomes to Transfer Proteins between Membranes'
1982-1983 M.Sc. Synthetic Organic Chemistry University of Paris XI, Paris, France
1978-1982 B.Sc. Biochemistry University of Orleans, Orleans, France

3. Postdoctoral Training

1992-1994 UCSF, Cancer Research Institute, School of Medicine
Mentors: Cecilia Cheng-Mayer and Jay A. Levy
Topic: Structure/Function Analysis of the HIV-1 Envelope glycoproteins
1990-1992 UCSF, Cancer Research Institute, School of Medicine
Mentors: Nejat Düzgünes and Demetrios Papahadjopoulos
Topics: a) Role of Membrane Lipids during Virus-Cell Fusion
b) Mechanisms of Liposome-Opsonization and Clearance from the Blood Circulation

4. Positions Held

2015-Present AIDS Vaccine Research Subcommittee (AVRS), NIH, NIAID
2014-Present Member, Fred Hutchinson Cancer Research Center, Vaccine and Infectious Disease Division (VIDD)
2014-Present Associate Head, VIDD Immunology and Vaccine Development Program
2014-Present Member, VIDD Executive Committee
2014-2016 Affiliate Professor, Seattle Biomedical Research Institute
2013-2014 Member, Institute Leadership Team, Seattle Biomedical Research Institute
2013-2014 Scientific Director, Seattle Biomedical Research Institute
2008-Present Affiliate Professor, Department of Global Health, University of Washington
2008-Present Research Affiliate, Washington National Primate Research Center, Seattle, WA
2008-2014 Member, Institute of Translational Health Science
2007-2008 Affiliate Associate Professor, Department of Global Health, University of Washington
2007-Present Faculty Member, Viral Pathogenesis Program, Fred Hutchinson Cancer Research Center
2007-Present Member, Fred Hutchinson/University of Washington Cancer Consortium
2006-Present Professor, Seattle Biomedical Research Institute, Seattle, WA
2006-2013 Viral Vaccines Program Director, Seattle Biomedical Research Institute, Seattle, WA
2001-2006 Associate Professor, Seattle Biomedical Research Institute, Seattle, WA
2001-2008 Associate Professor, Department of Pathobiology, University of Washington, Seattle, WA
2003-Present Member, Molecular & Cellular Biology Program, University of Washington, Fred Hutchinson Cancer Research Center
2002-Present University of Washington Graduate Faculty
1996-2001 Assistant Professor, Rockefeller University, New York, NY
1996-2001 Staff Investigator, Aaron Diamond AIDS Research Center, New York, NY

1994-1996 Research Scientist, Aaron Diamond AIDS Research Center, New York, NY
1985-1988 Teaching Assistant in Biochemistry, McGill University, Montreal, Canada

5. Scientific Committee Membership and Organization of meetings/seminar series

1999-Present Scientific Advisory Committee Member, American Foundation for AIDS Research
1998-2001 Grant Review Committee Member, Elizabeth Glaser Pediatric AIDS Foundation
2004-2008 Member, NIH Study Section, AIDS Immunology and Pathogenesis
2006 Member, Scientific committee for the 24th Annual Symposium on Nonhuman Primate Models for AIDS, Atlanta, Georgia
2006 Member, External Review Panel, Nanobiology Program and Structural Biophysics Laboratory, NCI
2007-2009 Co-organizer of the CFAR/UW seminar series
2007 Organizer and moderator of a round table discussion of neutralizing antibodies during the AIDS Vaccine 2007 International Conference, Seattle Washington, 2007
2007 Member, Organizing committee for 'The AIDS Vaccine 2007 International Conference', Seattle Washington
2007 Abstract reviewer for the 4th IAS Conference on HIV Pathogenesis, Treatment and Prevention, Sydney, 2007
2006 Member, NIH Site Visit of Chiron Co.'s NIH HIV Vaccine Design and Development Team project
2008 Abstract reviewer for the XVII International AIDS Conference IAS Mexico City 3-8 August 2008
2008 aids2031 Science and Technology Working Group, Seattle, WA, November 17-18, 2008
2009 Abstract reviewer for the 5th IAS Conference on HIV Pathogenesis, Treatment and Prevention - Cape Town 19-22 July 2009
2009 Global HIV Vaccine Enterprise, Member 'Immunogens and Antigen Processing' Working Group, New York, NY, July 15-16, 2009
2010 Co-organizer of the Meeting on "Optimizing HIV Envelope Immunogens", NIH, NIAD, Rockville, MD May 3, 2010
2011 Member, Scientific organizing committee for the 2011, NHP AIDS meeting in Seattle. Co-chair of the Vaccines and Immunology session.
2012 Abstract reviewer for the XIX International AIDS Conference Washington DC, 22-27 July 2012
2012 Convener of Session on the 'Ontogeny of a protective immune response to HIV'. CROI 2012, March 5-8, 2012, Seattle, WA.
2013-Present Member, Scientific Advisory Group, Dr. Pamela Bjorkman's HIV Vaccine Research and Design grant (HIVRAD)
2014-Present Member, Scientific Advisory Group, Dr. Dan Barouch's B&MGF CAVD grant
2015 Co-Organizer of the Keystone 2015 meeting on HIV Vaccines
2015 Member, Scientific Advisory Group, Dr. Richard Wyatt's NIAD/HIVRAD grant
2016 Abstract reviewer for the 21st International AIDS Conference, Durban, South Africa, 18-22, July 2016

6. Editorial Boards and Journal Reviews

2015- Present Editorial Board of Oncotarget (Immunology and Microbiology section)
2011- 2015 Editorial Board of Frontiers in Immunology, HIV and AIDS section
2015 - Present Associate Editor, Frontiers in Immunology, HIV and AIDS section
2005- Present Editorial Board J. Virology
2005 - 2015 Editorial Board Virology
Ad Hoc reviewer: AIDS, AIDS Research and Human Retroviruses, J. Immunol. Methods and Expert Opinion on Biological Therapy, PLoS, Vaccine, Retrovirology, The Journal of

Experimental Medicine, Nature Medicine, PNAS, Science, Nature, Cell, Immunity and other

7. Ad Hoc Grant Reviews

- 2016 NIAID, HIV Vaccine Research and Design (HIVRAD) Program (P01), November 2016
- 2016 WellcomeTrust
- 2016 NIH/NIAID Innovation for HIV Vaccine Discovery, October 2016 (served as Chair)
- 2016 NIH/NIAID HIV/AIDS Vaccine Scholars Program (K01), April 2016
- 2015 NIH, NIAID ZAI1-JBS-A-J1 HIV Research and Design Program (P01), November 2015 (served as Acting Chair)
- 2015 NIH, NIAID, Special Emphasis Panel/ Scientific Review Panel, August 2015
- 2015 NIH Director's Early Independence Award (DP5)
- 2014 WellcomeTrust
- 2014 French National Research Agency
- 2014 Aids Fonds Netherlands
- 2014 NIH Director's Early Independence Award (DP5)
- 2013 California HIV/AIDS Research Program; Training in basic biomedical sciences study section, 2013
- 2013 MRC, South Africa
- 2012 California HIV/AIDS Research Program; Training in basic biomedical sciences study section, 2012
- 2012 NIAID, HIV Vaccine Research and Design (HIVRAD) Program (P01), September 2012
- 2012 NIAID, Special Emphasis Panel, Integrated Preclinical/Clinical AIDS Vaccine Development (IPCAVD), February-March 2012
- 2011 NIAID, Special Emphasis Panel, ZRG1 AARR-E, November 2011
- 2011 NIH, Molecular AIDS and Related Research, ZRG1 AARR-K, April 2011
- 2010 Aids Fonds Netherlands
- 2010 NIH, Special Emphasis Panel/Scientific Review, Small Business Innovation Research Contract Proposals
- 2010 The Wellcome Trust, Research Fellowship, February 2010
- 2009 NIH, Special Emphasis Panel/Scientific Review Group, August 2009
- 2009 NIH, Challenge Grants in Health and Science Research
- 2009 Gates Foundation
- 2008 Israel Science Foundation
- 2004 AmFAR Letters of Intent, Basic Science, Grant Cycle 36, March 2004
- 2004 NIH/NIAID, Integrated preclinical/Clinical AIDS Vaccine Development, ZAI1 EC-A, February 2004
- 2003 NIH/NIAID, AIDS Vaccine Grant Applications, ZRG1 Vacc 03, December 2003
- 2003 AmFAR Letters of Intent, Basic Science, Grant Cycle 35, October 2003
- 2003 Vaccines of Infectious Diseases Study Section, NIH, NIAID, July 2003
- 2003 American Foundation for AIDS Research, Letters of Intent, March 2003
- 2003 Minority Biomedical Research Support Program/ University of Puerto Rico/ Support for Continuous Research Excellence Grants, February 2003
- 2003 NIH/NIAID, Special Emphasis Panel, HIV Research and Design Program, January 2003
- 2003 NIH/NIAID, Special Emphasis Panel, Integrated Preclinical/Clinical AIDS Vaccine Development Program, January 2003
- 2003 NIH/NIAID, ZAI1 YL-A, Primate Core Immunology-Virology Laboratories, January 2003
- 2002 NIH/NIAID, AIDS and Related Research Study Section ZRG1, Vaccine-development emphasis
- 2002 Elizabeth Glaser Pediatric AIDS Foundation, Cycle 27 Review Grants

- 2000 NIH, NIAID, Special Emphasis Panel, Integrated Preclinical/Clinical AIDS Vaccine Development
- 2000 AmFAR, Targeted Grant Cycle 28: Vaccine Development and Immune Reconstitution
- 1999 AmFAR, Targeted Grant Cycle 28: Biomedical Methods to Prevent the Sexual Transmission of HIV
- 1999 AmFAR, Targeted Grant Cycle 26: Vaccine Development and Immune Reconstitution
- 1999 NIH, HIV Vaccine Trial Network Leadership Group
- 1998 Elizabeth Glaser Pediatric AIDS Foundation, Basic Research Grants

8. Membership in Professional Organizations

- American Society for Microbiology
- The American Association of Immunologists
- American Association for the Advancement of Science
- Faculty 1000 Medicine, Member of the 'HIV infection & AIDS: vaccines' Section, part of the INFECTIOUS DISEASES Faculty

9. Financial Support:

Current Funding

- NIH **2R01AI081625 L. Stamatatos (PI)**
"Monitoring the development of anti-Env Abs during HIV-infection" (2/5/16-1/31/21)
Direct Costs: \$372K (1st year); \$3.3M (Total)
- NIH **P01 AI094419 / HIVRAD L. Stamatatos (PI)**
"Optimizing HIV immunogen-BCR interactions for vaccine development" (05/01/2011 - 04/30/2016)
Direct Costs: \$1.4M (1st year); \$ 7.95 M (Total)
- NIH **R01 AI104384 L. Stamatatos (PI)**
"Defining BCR Evolution during Immunization" (12/01/2012 - 11/30/2017)
Direct Costs: \$386K (1st year); \$2M (total)
- NIH **U19 AI109632 Integrated Preclinical/Clinical AIDS Vaccine Development (IPCAVD) L. Stamatatos (PI)**
"Eliciting VRC01-like bNAbs by Specifically Designed Env Immunogens" (03/05/2014 – 02/28/2021)
Direct Costs: \$1.3M (1st year); \$9.9M (total)
- NIH **U19 AI109632—Administrative Supplement / Integrated Preclinical/Clinical AIDS Vaccine Development (IPCAVD) L. Stamatatos (PI)**
"Eliciting VRC01-like bNAbs by Specifically Designed Env Immunogens" (09/01/2015 – 02/28/2017)
Direct Costs: \$4.4M; \$5.4M (total)
- B&MGF **OPP1114725** "Generation/Isolation of Novel bNAbs from Lymph Node B cells" (11/5/14-10/31/16)
Direct Costs: \$403K awarded to date

Past Funding:

- NIH **NIH Center for AIDS Research: AIDS Immunology Core (UW-CFAR) P30 AI27757 (King Holmes, PI; Stamatatos, Co-Investigator in the Immunology Core)** (03/01/03 - 07/31/16)
Total direct costs to Stamatatos Lab: \$41K per year
- NIH **R01AI081625 L. Stamatatos (PI)**
"Monitoring the development of anti-Env Abs during HIV-infection" (01/01/10 - 12/31/15)
Direct costs: \$ 332 K (1st year); \$1.7M (Total)

- WAVA** Washington Vaccine Alliance L. Stamatatos (PI)
“Panning a randomly mutagenized Env library to identify novel HIV immunogens”
(11/01/2013-9/30/2014)
Direct costs: \$16k
- NIH** **R01 AI47708 L. Stamatatos (PI)**
“Vaccine Efficacy of Modified HIV Envelopes” (06/30/00 - 02/28/10; non-cost extension until 02/28/2012; R56 Bridge funding 09/24/2012-08/31/2013) Budget Period: 06/01/05 – 02/28/10 Direct Costs: \$401,054 (5th year); \$3,115K (Total for years 5-10)
- NIH** **P01 AI078064/ HIVRAD N. Haigwood (PI); L. Stamatatos (Project Leader)**
“Programming HIV Immune Response for Broadly Neutralizing Antibodies by Vaccination” (7/07/16/09 - 06/30/14)
Direct costs: \$282K (1st year); \$1.4M (Total)
- B&MGF** **Collaboration for AIDS Vaccine Development Center grant OPP38660 L. Stamatatos (PI)**
“Discovery of Novel HIV Neutralizing Epitopes and their Optimal Presentation through Computational Design of Small Protein Immunogens” (08/01/06 – 07/31/11; non-cost extension until 01/30/2012)
Direct costs: \$3.96M (1st year); \$19.4M (Total)
- NIH** **P01 AI054564 S. -L. Hu (PI); L. Stamatatos (Project Leader)**
“Combined Approach to Broadly Protective AIDS Vaccines” (09/01/03 - 02/28/09)
Direct costs: \$168K (1st year); \$917K (Total)
- NIH** **R01 AI051217 L. Stamatatos (PI)**
“Protection from SHIV-infection by CTL and antibodies” (01/01/02 - 12/31/06; Non-cost extension until 12/31/2007)
- NIH** **R21 AI053810 L. Stamatatos (PI)**
“Neutralizing MAbs elicited by modified HIV envelopes” (09/01/02-08/31/04)
- NIH** **R21 AI044309 L. Stamatatos (PI)**
“Antigenicity of HIV-1 Modified Envelopes” (09/01/99-08/31/01)
- NIH** **R01 CA72822 C. Cheng-Mayer (Stamatatos, Co-PI)**
“Structure/Function Relationship of HIV-1” (04/01/00-03/31/05)
- NIH** **P30 AI42848 J. Luban (Stamatatos, Co-Director)**
Columbia-Rockefeller Center for AIDS research (09/01/98-08/31/03)
- NIH** **R44 AI40551 B. P. Burnett (Stamatatos, Lead Investigator)**
“Designer DNA Binding proteins targeting HIV Genes” (04/01/98-03/31/00)
- NIH** **R21 AI42670 L. Stamatatos (PI)**
“A Novel Strategy to Deliver Antigens to Dendritic Cells” (09/30/97-09/29/99)
- AmFAR** **02572 L. Stamatatos (PI)**
“Antibody Responses to Oligomeric HIV Envelope Forms” (10/01/98-09/30/99)
- PAF** **50617 L. Stamatatos (PI)**
“Antibody-Mediated Enhancement of HIV-1 Infection” (03/01/96-02/28/98)
- AmFAR** **70479 L. Stamatatos (PI)**
“Structure-Function Relation of HIV-1 virion-gp120” (10/01/95-09/30/98)

Scholarships

Graduate Scholarship Award, Public Benefit Foundation “Alexandros Onassis” 1984-1986

10. Major Research Interests

- Structure-based vaccine design
- Preclinical and clinical evaluation of vaccine-induced humoral responses
- Development of reagents and methodologies to guide the evolution of vaccine-elicited humoral responses towards desired pathways of maturation

- Preclinical evaluation of immunotherapeutic reagents (emphasis on antibody-based therapies)

11. Patents and Inventions

1. "Hetero-oligomeric HIV envelope proteins as vaccines", European (05855755.4) and Hong Kong (08101693.0) Patents issued December 2008; Inventors: Stamatatos

12. Refereed Research Articles

1. **Stamatatos, L.**, P. Sinay, and J.R. Pougny. 1984. Synthesis of (4S,5R)-(+)-L-factor, a proposed autoregulator of anthracycline biosynthesis. *Tetrahedron* **40**:1713-1719.
2. Gagné, J., **L. Stamatatos**, T. Diacovo, S.W. Hui, P.L. Yeagle, and J.R. Silvius. 1985. Physical properties and surface interactions of bilayer membranes containing N-methylated phosphatidylethanolamine. *Biochem.* **24**:4400-4408.
3. **Stamatatos, L.** and J.R. Silvius. 1987. Effects of cholesterol on the divalent cation-mediated interactions of vesicles containing amino and choline phospholipids. *Biochem. Biophys. Acta* **905**:81-90.
4. **Stamatatos, L.**, R. Leventis, M.J. Zukerman, and J.R. Silvius. 1988. Interactions of cationic lipid vesicles with negatively charged phospholipid vesicles and biological membranes. *Biochemistry* **27**:3917-3925.
5. Konopka, K., **L. Stamatatos**, C.E. Larsen, B. Davis, and N. Düzgünes. 1991. Enhancement of HIV-1 infection by cationic liposomes: the role of CD4, serum and liposome-cell interactions. *J. Gen. Virol.* **72**:2685-2696.
6. Düzgünes, N., M.C. Pedroso de Lima, **L. Stamatatos**, D. Flasher, D. Alford, D.S. Friend, and S. Nir. 1992. Fusion activity and inactivation of influenza virus: kinetics of low pH-induced fusion with cultured cell. *J. Gen. Virol.* **73**:27-37.
7. **Stamatatos, L.** and N. Düzgünes. 1993. Simian immunodeficiency virus (SIVmac251) membrane lipid mixing with human CD4+ and CD4- cell lines *in vitro* does not necessarily result in internalization of the viral core proteins and productive infection. *J. Gen. Virol.* **74**:1043-1054.
8. **Stamatatos, L.** and C. Cheng-Mayer. 1993. Evidence that the structural conformation of envelope gp120 affects human immunodeficiency virus type 1 infectivity host range, and syncytium-forming ability. *J. Virol.* **67**:5635-5639. PMID: PMC237967.
9. **Stamatatos, L.**, A. Werner, and C. Cheng-Mayer. 1994. Differential regulation of cellular tropism and sensitivity to sCD4 neutralization by the envelope gp120 of human immunodeficiency virus type 1. *J. Virol.* **68**: 4973-4979. PMID: PMC236438
10. **Stamatatos, L.** and J.A. Levy. 1994. CD26 is not involved in infection of peripheral blood mononuclear cells by the human immunodeficiency virus type 1. *AIDS* **8**:1727-1728.
11. Koito, A., **L. Stamatatos**, and C. Cheng-Mayer. 1995. Small amino acid sequence changes within the V2 domain can affect the function of a T-cell line tropic human immunodeficiency virus type 1 envelope glycoprotein gp120. *Virology* **206**:878-884.
12. **Stamatatos, L.** and C. Cheng-Mayer. 1995. Structural modulations of the envelope gp120 glycoprotein of HIV-1 upon oligomerization and differential V3 loop-epitope exposure of isolates displaying distinct tropism upon virion-soluble receptor binding. *J. Virol.* **69**:6191-6198. PMID: PMC189516.
13. Cheng-Mayer, C., R. Liu, N.R. Landau, and **L. Stamatatos**. 1997. Macrophage tropism of human immunodeficiency virus type 1 and utilization of the CC-CKR5 coreceptor. *J. Virol.* **71**:1657-1661. PMID: PMC191226.
14. **Stamatatos, L.**, S. Zolla-Pazner, M.K. Gorny, and C. Cheng-Mayer. 1997. Binding of antibodies to virion-associated gp120 molecules of primary-like human immunodeficiency virus type 1 (HIV-1) isolates: effect on HIV-1 infection of macrophages and peripheral blood mononuclear cells. *Virology*. **229**:360-369.

15. Mo, H., **L. Stamatatos**, J.E. Ip, D.R. Burton, J.P. Moore, and D.D. Ho. 1997. Characterization of human immunodeficiency virus type 1 neutralization escape mutants to human monoclonal antibody IgG1b12. *J. Virol.* 71:6869-6874. PMID: PMC191968.
16. **Stamatatos, L.**, M. Wiskerchen, and C. Cheng-Mayer. 1998. Effect of major deletions in the V1 and V2 loops of a macrophage-tropic HIV-1 isolate on viral envelope structure, cell-entry and replication. *AIDS Res. and Hum. Retroviruses* 14:1129-1139.
17. **Stamatatos, L.** and C. Cheng-Mayer. 1998. An envelope modification that renders a primary, neutralization resistant, clade B HIV-1 isolate highly susceptible to neutralization by sera from other clades. *J. Virol.* 72:7840-7845. PMID: PMC110102.
18. **Stamatatos, L.**, M. Lim and C. Cheng-Mayer. 2000. Generation and structural analysis of soluble oligomeric envelope proteins derived from neutralization-resistant and neutralization-susceptible primary HIV-1 isolates. *AIDS Res. and Hum. Retroviruses.* 16; 981-994.
19. Ly, A and **L. Stamatatos**. 2000. V2 loop-glycosylation of the HIV-1SF162 envelope facilitates the interaction of this protein with the CD4 and CCR5 receptors and protects the virus from neutralization by anti-V3 loop and anti-CD4-binding site antibodies. *J. Virol.* 74; 6769-6776. PMID: PMC112193.
20. Ignatius, R., K. Mahnke, M. Rivera, K. Hong, F. Isdell, R. M. Steinman, M. Pope, and **L. Stamatatos**. 2000. Presentation of proteins encapsulated into sterically-stabilized liposomes by dendritic cells initiates CD8+ T cell responses in vivo. *BLOOD.* 96; 3505-3513.
21. Cherpelis, S., I. Shrivastava, A. Gettie, X. Jin, D. D. Ho, S. W. Barnett and **L. Stamatatos**. 2001. DNA vaccination with the human immunodeficiency virus type 1SF162ΔV2 envelope elicits immune responses that offer partial protection from simian/human immunodeficiency virus infection to CD8+ T cell-depleted rhesus macaques. *J. Virol.* 75; 1547-1550. PMID: PMC114060.
22. Barnett, S. W., S. Lu, I. Srivastava, S. Cherpelis, A. Gettie, J. Blanchard, S. Wang, I. Mboudjeka, L. Leung, Y. Lian, A. Fong, C. Buckner, A. Ly, S. Hilt, J. Ulmer, C. Wild, J. Mascola and **L. Stamatatos**. 2001. The ability of an oligomeric HIV-1 envelope antigen to elicit neutralizing antibodies against primary HIV-1 isolates is improved following the partial deletion of the second hypervariable region. *J. Virol.* 75; 5526-5540. PMID: PMC114265.
23. Cherpelis, S., X. Jin, A. Gettie, D. D. Ho, S. W. Barnett, I. Srivastava and **L. Stamatatos**. 2001. DNA-immunization with a V2 deleted HIV envelope elicits protective antibodies in macaques. *J. Immunol. Letters.* 79; 47-55.
24. Srivastava, I. K., **L. Stamatatos**, A. Fong, H. Legg, E. Kan, S. Coates, L. Leung, M. Winingger, J. Donnelly, J. B. Ulmer and S. W. Barnett. 2002. Purifications and characterization of oligomeric envelope glycoprotein from a primary R5 subtype B human immunodeficiency virus. *J. Virol.* 76; 2835-2847. PMID: PMC135995.
25. Srivastava, I., K. VanDorsten, L. Vojtech, S. W. Barnett and **L. Stamatatos**. 2003. Changes in the immunogenic properties of soluble gp140 HIV envelope constructs upon partial deletion of the second hypervariable region. *J. Virol.* 77; 2310-2320. PMID: PMC141106.
26. Srivastava, I, K., **L. Stamatatos**, E. Kan, M. Vajdy, Y. Lian, S. Hilt, L. Martin, C. Vita, P. Zhu, K. H. Roux, L. Vojtech, D. Montefiori, J. Donnelly, J. B. Ulmer and S. W. Barnett. 2003. Purification, characterization and immunogenicity of a soluble trimeric envelope protein containing a partial deletion of the V2 Loop derived from SF162, an R5-tropic primary HIV-1 isolate. *J. Virol.* 77; 11244-11259. PMID: PMC224963.
27. Gummuluru, S., M. Rogel, **L. Stamatatos**, and M. Emerman. 2003. Binding of human immunodeficiency virus type 1 to immature dendritic cells can occur independently of DC-SIGN and mannose binding C-type lectin receptors via a cholesterol dependent pathway. *J. Virol.* 77; 12865-12874. PMID: PMC262553.
28. Buckner, C., L. G. Gines, C. J. Saunders, L. Vojtech, I. Srivastava, A. Gettie, R. Bohm, J. Blanchard, S. W. Barnett, J. T. Safrit and **L. Stamatatos**. 2004. Priming of B anti-HIV envelope responses by vaccination is essential for the long lasting containment of viral replication in macaques infected with an R5-tropic SHIV isolate. *Virology.* 320; 167-180.

29. McCaffrey, A.R., C. Saunders, M. Hensel, and **L. Stamatatos**. 2004. N-linked glycosylation of the V3 loop and the immunologically silent face of gp120 protects human immunodeficiency virus type 1 SF162 from neutralization by anti-gp120 and anti-gp41 antibodies. *J. Virol.* 78: 3279-3295. PMID: PMC371088.
30. Gorny, M.K., **L. Stamatatos**, B. Volsky, K. Revesz, C. Williams, X. –H. Wang, S. Cohen, R. Staudinger, and S. Zolla-Pazner. 2005. Identification of a new quaternary neutralizing epitope on HIV-1 virus particles. *J. Virol.* 79: 5232- 5237. PMID: PMC1069558.
31. Witvrow, M., V. Fikkert, A. Hantson, C. Pannecouque, B. R. O’Keefe, J. McMahon, **L. Stamatatos**, E. de Clercq, and A. Bolmstedt. 2005. Resistance of human immunodeficiency virus type 1 to the high-mannose binding agents cyanovirin N and concanavalin A. *J. Virol.* 79: 7777-7784. PMID: PMC1143621.
32. Saunders, C.J., R.A. McCaffrey, I. Zharkikh, Z. Kraft, S. Malembaum, B. Burke, C. Cheng-Mayer, and **L. Stamatatos**. 2005. The V1, V2, and V3 regions of the HIV-1 envelope differentially affect the viral phenotype in an isolate-dependent manner. *J. Virol.* 79: 9069-9080. PMID: PMC1168758.
33. Li, M., F. Gao, J.R. Mascola, **L. Stamatatos**, V.R. Polonis, M. Koutsoukos, G. Voss, P. Goepfert, P. Gilbert, K.M. Greene, M. Bilska, D. L. Kothe, J.F Salazar-Gonzalez, X. Wei, J. M. Decker, B.H. Hahn, and D.C. Montefiori. 2005. Human immunodeficiency virus type 1 *env* clones from acute and early subtype B infections for standardized assessments of vaccine-elicited neutralizing antibodies. *J. Virol.* 79: 10108-10125. PMID: PMC1182643.
34. Xu, R., I.K. Srivastava, L. Kuller, I. Zarkikh, Z. Kraft, Z. Fagrouch, N. L. Letvin, J. L. Heeney, S. W. Barnett, and **L. Stamatatos**. 2006. Immunization with HIV-1 SF162-derived Envelope gp140 proteins does not protect macaques from heterologous simian-human immunodeficiency virus SHIV89.6P infection. *Virology.* 349: 276-289.
35. Bolesta, E., A. Kowalczyk, A. Wierzbicki, C. Eppolito, Y. Kaneko, M. Takiguchi, **L. Stamatatos**, P.A. Shrikant, D. Kozbor. 2006. Increased level and longevity of protective immune responses induced by DNA vaccine expressing the HIV Env glycoprotein when combined with IL21 and IL15 gene delivery. *J. Immunol.* 177: 177-191. PMID: PMC2504682.
36. Derby, N. R., Z. Kraft, E. Kan, E. T. Crooks, S. W. Barnett, I. K. Srivastava, J. M. Binley, and **L. Stamatatos**. 2006. Antibody responses elicited in macaques immunized with human immunodeficiency virus type 1 (HIV-1) SF162-derived gp140 Envelope immunogens: comparison with those elicited during homologous simian/human immunodeficiency virus SHIV_{SF162P4} and heterologous HIV-1 infection. *J. Virol.*80: 8745-8762. PMID: PMC1563892.
37. Sharma, VA., E. Kan, Y. Sun, Y. Lian, J. Cistro, V. Frasca, S. Hilt, **L. Stamatatos**, J. J. Donnelly, J. B. Ulmer, S. W. Barnett, and I. K. Srivastava. 2006. Structural characteristics correlate with immune responses induced by HIV envelope glycoprotein vaccines. *Virology.* 352: 131-144.
38. Xu, R., I. K. Srivastava, C. E. Greer, I. Zarkikh, Z. Kraft, L. Kuller, J. M. Polo, S. W. Barnett, and **L. Stamatatos**. 2006. Characterization of immune responses elicited in macaques immunized sequentially with chimeric VEE/SIN alphavirus replicon particles expressing SIVGag and/or HIVEnv and with recombinant HIVgp140Env protein. *AIDS Research and Human Retroviruses.* 22: 1022-1030.
39. Burke, B., N. R. Derby, Z. Kraft, C. J. Saunders, C. Dai, N. Llewellyn, I. Zharkikh, L. Vojtech, T. Zhu, I K. Srivastava, S. W. Barnett, and **L. Stamatatos**. 2006. Viral evolution in macaques co-infected with CCR5- and CXCR4-tropic SHIVs in the presence or absence of vaccine-elicited anti-CCR5 SHIV neutralizing antibodies. *Virology.* 355: 138-151.
40. Kraft, Z*, N. R. Derby*, R. A. McCaffrey, R. Niec, W. M. Blay, N. L. Haigwood, E. Moysi, C. J. Saunders, T. Wrin, C. J. Petropoulos, M. J. McElrath, and **L. Stamatatos**. 2007. Macaques infected with a CCR5-tropic Simian/Human Immunodeficiency Virus develop broadly reactive anti-HIV neutralizing antibodies. *J. Virol.* 81: 6402-6411. PMID: PMC1900107.
41. Derby, N. R., S. Gray, E. Wayner, D. Campogan, G. Vlahogiannis, Z. Kraft, S. W. Barnett, I. K. Srivastava, and **L. Stamatatos**. 2007. Isolation and characterization of monoclonal antibodies elicited by trimeric HIV-1 Env gp140 protein immunogens. *Virology.* 366: 433-445. PMID: PMC2048818.

42. Ching, K.L., G. Vlachogiannis, K.A. Bosch, and **L. Stamatatos**. 2008. The first hypervariable region of the gp120 Env glycoprotein defines the neutralizing susceptibility of heterologous HIV-1 isolates to neutralizing antibodies elicited by gp140 immunogens. *J. Virol.* 82; 949-956. PMID: PMC2224850.
43. Xu, Y., H. Zhu, C. K. Wilcox, A. van Wout, T. Andrus, N. Llewellyn, **L. Stamatatos**, J. I. Mullins, L. Corey, and T. Zhu . 2008. Blood monocytes harbor human immunodeficiency virus type 1 strains with diversified phenotypes including macrophage-specific CCR5 virus. *J. Inf. Diseases* 177; 309-318.
44. Srivastava, I.K., E. Kan, Y. Sun, V. A. Sharma, J. Cisto, B. Burke, Y. Lian, S. Hilt, Z. Biron, K. Hartog, **L. Stamatatos**, R. H. Cheng. J. B. Ulmer, and S.W. Barnett. 2008. Comparative Evaluation of Trimeric Envelope Glycoproteins Derived from Subtype C and B HIV-1 R5 Isolates. *Virology*. 372; 273-290.
45. Kraft, Z., K. Strouss, W. Sutton, B. Cleveland, F.Y. Tso, P. Polacino, J. Overbaugh, S. L. Hu and **L. Stamatatos**. 2008. Characterization of Neutralizing Antibody Responses Elicited by Clade A Envelope Immunogens Derived from Early Transmitted Viruses. *J. Virol.* 82; 5912-5921. PMID: PMC2395128.
46. Polacino, P., K. Larsen, L. Galmin, J. Suschak, Z. Kraft, **L. Stamatatos**, D. Anderson, S. W. Barnett, R. Pal, K. B. A. H. Bandivdekar, C. J. Miller, and S.-L.Hu. 2008. Differential pathogenicity of SHIVSF162P4 infection in pig-tailed and rhesus macaques. *J. Med. Primatology*. 37 (suppl. 2); 13-23. PMID: PMC2728750.
47. Sather, D.N., J. Armann, L. K. Ching, A. Mavrantoni, G. Sellhorn, Z. Caldwell, X. Yu, B. Wood, S. Self, S. Kalams, and **L. Stamatatos**. 2009. Factors associated with the development of cross-reactive neutralizing antibodies during HIV-1 infection. *J. Virol.* 83; 757-769. PMID: PMC 2612355.
48. Wallace, A., and **L. Stamatatos**. 2009. Introduction of Exogenous Epitopes in the Variable Regions of the HIV-1 Envelope Glycoprotein: Effect on Viral-Infectivity and Neutralization Phenotype. *J. Virol.* 83; 7883-7893. PMID: PMC2715762.
49. Xu, H., L. Song, M. Kim, M. A. Holmes, Z. Kraft, G. Sellhorn, E. L. Reinherz, **L. Stamatatos** and R. K. Strong. 2010. Neutralization by the human anti-HIV antibody 4E10 depends upon MPER extraction from the viral membrane aided by lipid interactions. *J. Virol.* 84; 1076-1088. PMID: PMC2798360.
50. Sellhorn, G., Z. Caldwell, C. Mineart and **L. Stamatatos**. 2010. Improving the expression of recombinant soluble HIV Envelope glycoproteins using pseudo-stable transient transfection. *Vaccine*. 28; 430-436.
51. Blish, C. A., D. N. Sather, G. Sellhorn, **L. Stamatatos**, Y. Sun , I. Srivastava, S. W. Barnett, B. Cleveland, J. Overbaugh, and S-L Hu. 2010. Subtype A Human Immunodeficiency Virus Type 1 Envelope Immunogens That Expose Conserved Neutralization Epitopes Fail to Generate Neutralizing Antibody Breadth. *J. Virol.* 84; 2573-2584.
52. Robinson, J.E#, K. Franco, D. Holton Elliott , M. J. Maher, A. Reyna, D. Montefiori, S. Zolla-Pazner, M K. Gorny, Z Kraft, **L. Stamatatos**. 2010. Quaternary epitope specificities of anti-HIV-1 neutralizing antibodies generated in rhesus macaques infected by the simian/human immunodeficiency virus SHIV_{SF162P4}. *J. Virol.* 84; 3443-3453. PMID: PMC2838135.
53. Sather, D. N., and **L. Stamatatos**. 2010. Epitope Specificities of Broadly Neutralizing Plasmas from HIV-1 Infected Subjects. *Vaccine* 28S; B8-B12. PMID: PMC2879344.
54. Ching, L., and **L. Stamatatos**. 2010. Alterations in the Immunogenic Properties of Soluble Trimeric Human Immunodeficiency Type-1 Envelope Proteins Induced by Deletion or Heterologous Substitutions of the V1 Loop. *J. Virol.* 84; 9932-9946. PMID: PMC2937763.
55. Correia, B. E., Y-E A. Ban, M. A. Holmes, H. Xu, K. Ellingson, Z. Kraft, C. Carrico, E. Boni, D. N. Sather, C. Zenobia, K. Y. Burke, T. Bradley-Hewitt, J. F. Bruhn-Johannsen, O. Kalyuzhnyi, D. Baker, R. K. Strong, **L. Stamatatos**, and W. R. Schief. 2010. Computational design of epitope

- scaffolds allows induction of antibodies specific for a poorly immunogenic HIV vaccine epitope. *Structure*. 18; 1116-1126.
56. Correia, B.E., Y.-E. A Ban, D. J. Friend, K. Ellingson, H. Xu, E. Boni, T. Bradley-Hewitt; J. F. Bruhn-Johannsen, **L. Stamatatos**, R. K. Strong, and W. Schief. 2010. Computational protein design using flexible backbone remodeling and resurfacing: case studies in structure-based antigen design. *JMB*. 405; 284-297.
 57. Mikell, I., D. N. Sather, S. A. Kalams, M. Altfeld, G. Alter, and **L. Stamatatos**. 2011. Characteristics of the Earliest Cross-Neutralizing Antibody Response to HIV-1. *PLoS Pathogens*. 7(1); e1001251.
 58. Changela, A., X. Wu, Y. Yang, B. Zhang, J. Zhu, G. A. Nardone, S. O'Dell, M. Pancera, M. K. Gorny, S. Phogat, J. E. Robinson, **L. Stamatatos**, S. Zolla-Pazner, J. R. Mascola, and P. D. Kwong. 2011. Crystal structure of human antibody 2909 reveals conserved features of quaternary structure-specific antibodies that potently neutralize HIV-1. *J. Virol.* 85; 2524-35.
 59. Wu, X., A. Changela, S. O'Dell, S. D. Schmidt, M. Pancera. Y. Yang, B. Zhang, M. K. Gorny, S. Phogat, J. E. Robinson, **L. Stamatatos**, S. Zolla-Pazner, P. D. Kwong, J. R. Mascola. 2011. Immunotypes of a Quaternary Site of HIV-1 Vulnerability and Their Recognition by Antibodies. *J Virol.* 85;4578-4585.
 60. Malherbe, D. C., N. Doria-Rose, L. Misher, T. Beckett, W. Blay Puryear, J. O'Malley, M. Mori, I. Srivastava, S. Barnett, **L. Stamatatos**, and N. L. Haigwood. 2011. Sequential immunization with a subtype B HIV-1 Envelope quasispecies partially mimics the in vivo development of neutralizing antibodies. *J. Virol.*85; 5262-5274.
 61. Davenport, T. M, D. Friend, K. Ellingson, H. Xu, Z. Caltwell, G. Sellhorn, Zane Kraft, R. K. Strong, **L. Stamatatos**. 2011. Binding interactions between soluble HIV envelope glycoproteins and quaternary-structure-specific MAbs PG9 and PG16. *J. Virol.* 85; 7095-7107.
 62. Shah A, Verma AS, Patel KH, Noel R, Rivera-Amill V, Silverstein PS, Chaudhary S, Bhat HK, **Stamatatos L**, Singh DP, Buch S, Kumar A. 2011. HIV-1 gp120 induces expression of IL-6 through a nuclear factor-kappa B-dependent mechanism: suppression by gp120 specific small interfering RNA. *PLoS One.*6(6);e21261. Epub 2011 Jun 21.
 63. Sellhorn, G., Z. Kraft, Z. Caldwell, K. Ellingson, C. Mineart, M. S. Seaman and D. C. Montefiori, E. Lagerquist, and **L. Stamatatos**. 2012. Engineering, expression, purification and characterization of stable clade A/B recombinant soluble heterotrimeric gp140 proteins. *J. Virol.* 86; 128-142.
 64. Klein, F., Christian Gaebler, Hugo Mouquet, Noah Sather, Clara Lehmann, Johannes Scheid, Zane Kraft, Yiang Liu, John Pietzsch, Arlene Hurley, Pascal Poignard, Ten Feizi, Lynn Morris, Bruce D. Walker, Gerd Fatkenheuer, Michael S. Seaman, **L. Stamatatos** and M. C. Nussenzweig. 2012. Broad neutralization by a combination of antibodies recognizing the CD4 binding site and a new conformational epitope on the HIV-1 envelope protein. *J. Exp. Med.*209; 1469-1479.
 65. McClure, J., E. Lovelace, S. Elahi, N. J. Maurice, J. Wagoner, J. Dragavon, J. E. Mittler, Z. Kraft, **L. Stamatatos**, H. Horton, S. C. De Rosa, R. W. Coombs, and S. J. Polyak. 2012. Silibinin Inhibits HIV-1 Infection By Reducing Cellular Activation and Proliferation. *PLoS One.* 7(7); e41832.
 66. Pissani, F., D.C. Malherbe, H. Robins, V. R. DeFilippis, B. Park, G. Sellhorn, **L. Stamatatos**, J. Overbaugh, N. L. Haigwood. 2012. Motif-optimized subtype A HIV envelope-based DNA vaccines rapidly elicit neutralizing antibodies when delivered sequentially. *Vaccine.* 30; 5519-5526.
 67. Sather, D. N., S. Carbonetti, J. Kehayia, Z. Kraft, I. Mikell, J. Scheid, F. Klein, and **L. Stamatatos**. 2012. Broadly neutralizing antibodies developed by an HIV+ elite neutralizer exact replication fitness cost to the contemporaneous neutralization-escape virus. *J. Virol.* 86; 12676-12685
 68. Mikell, I., and **L. Stamatatos**. 2012. Evolution of cross-neutralizing antibody specificities to the CD4-BS and the carbohydrate cloak of the HIV Env glycoprotein in an HIV-1-infected subject. *PLoS One.* 7(11); e49610
 69. Hoot, S. J*, A. McGuire*, K. W. Cohen, R. K. Strong, L. Hangartner, F. Klein, R. Diskin, J. F. Scheid, D. N. Sather, D. R. Burton, and **L. Stamatatos**. 2013. Recombinant HIV envelope proteins fail to engage germline versions of anti-CD4bs bNAbs. *PLoS Pathogens*. January 2013. 9; e100316

70. McGuire*, A., S. Hoot*, A. M. Dreyer, A. Lippy, A. Stuart, K. Cohen, J. Jardine, S. Menis, J. F. Scheid, A. P. West, W. R. Schief and **L. Stamatatos**. 2013. Engineering HIV envelope protein to activate germline B cell receptors of broadly neutralizing anti-CD4 binding site antibodies. *J. Exp. Med.* 210: 655-663
71. Jardine, J., J-P. Julien, S. Menis, T. Ota, O. Kalyuzhniy, A. McGuire, D. Sok, P-S. Huang, S. MacPherson, Meaghan Jones, Travis Nieuwma, John Mathison, David Baker, Andrew B. Ward, D. R. Burton, **L. Stamatatos**, D. Nemazee, I. A. Wilson, W. R. Schief. 2013. Rational HIV immunogen design to target specific germline B cell receptors. *Science* 340: 711-716
72. Diskin, R., F. Klein, J. A. Horwitz*, A. Halper-Stromberg*, N. D. Sather*, P. M. Marcovecchio, T. Lee, A. P. West, Jr., H. Gao, M. S. Seaman, **L. Stamatatos**, M. C. Nussenzweig and P. J. Bjorkman. 2013. Restricting HIV Pathways for Escape using Rationally-Designed Anti-HIV Antibodies. *J. Exp. Med.* 210: 1235-1249
73. McGuire, T.A., Glenn, J.A, Lippy, A, and **L. Stamatatos**. 2014. Diverse recombinant HIV-1 Envs fail to activate B cells expressing the germline B cell receptors of known broadly neutralizing anti-HIV-1 antibodies recognizing distinct epitopes. *J. Virol.* 88: 2645-2657.
74. Avnir, Y., Tallarico, A. T, Q. Zhu, A. S. Bennett, Wiklest, J. Sheehan, J. Sui, F. Amr, H. Chiung-yu, G. Cadwell, L. A. Bankston, A. T. McGuire, **L. Stamatatos**, G. Wagner, R. C. Liddington and W. A. Marasco. 2013. Molecular signatures of hemagglutinin stem-directed heterosubtypic human neutralizing antibodies against Influenza A viruses. *PLoS Pathogens* May 2014 10: e1004103
75. Carbonetti, S., B. Oliver, J. Glenn, **L. Stamatatos**, and N. D. Sather. 2014. Soluble HIV-1 Envelope immunogens derived from an elite neutralizer elicit cross-reactive V1V2 antibodies and broad, but low potency neutralizing antibodies. *PLoS One*, 9: e86905
76. Dugast, A-S.,* **L. Stamatatos***, T. J. Suscovich, A. F. Licht, I. Mikell, M. E. Ackerman, H. Streeck, P.J. Klasse, J. P. Moore, G. Alter. 2014. Independent evolution of Fc- and Fab-mediated HIV-1-specific antiviral antibody activity begins during acute infection. *Accepted. Eur. J. Immunol.* 44: 2925-2937.
77. Sather, D. N., S. Carbonetti, D. Malherbe, F. Pissani, A. B. Stuart, A. J. Hessel, I. Mikell, S. A. Kalams, N L. Haigwood, and **L. Stamatatos**. 2014. Emergence of broadly neutralizing anti-HIV-1 antibodies and viral coevolution in two subjects during the early stages of infection with human immunodeficiency virus type 1. *J. Virol.* 88: 12968-12981.
78. Finton, K. A. K., D. Friend, J. Jaffe, M. Gewe, M. A. Holmes, H. B. Larman, A. Stuart, K. Larimore, P. D. Greenberg, Stephen J. Elledge, **L. Stamatatos** and R. K. Strong. 2014. Ontogeny of recognition specificity and functionality for the broadly neutralizing anti-HIV antibody 4E10. *PLoS Pathogens*10: e1004403
79. Cohen, K.W., M. Altfeld, G. Alter and **L. Stamatatos**. 2014. Early preservation of CXCR5+ PD-1+ helper T cells and B cell activation predict the breadth of neutralizing antibody responses in chronic HIV-1 infection. *J. Virol.*88: 13310-13321.
80. McGuire, M. T*, A. M. Dreyer*, S. Carbonetti, A. Lippy, J. Glenn, J. F. Scheid, H. Mouquet, and **L. Stamatatos**. 2014. Antigen-modification regulates competition of broad and narrow neutralizing HIV antibodies. *Science* 346: 1380-1383.
81. Chang, H. W., L. Tartaglia, J. Whitney, S.Y. Lim, S. Sanisetty, C. Lavine, M. Seaman, C. Rademeyer, C. Williamson, K. Ellingson-Strouss, **L. Stamatatos**, J. Kublin, and D. Barouch. 2015. Generation and Evaluation of Clade C Simian-Human Immunodeficiency Virus Challenge Stocks. *J. Virol.* 89: 1965-1974.
82. Bricault, C., J. Kovacs, J. Nkolola, K. Yusim, E. Giorgi, J. Shields, J. Perry, C. Lavine, A. Cheung, K. Ellingson-Strouss, C. Rademeyer, G. Gray, C. Williamson, **L. Stamatatos**, M. Seaman, B. Korber, B. Chen, and D. Barouch. 2015. A Multivalent Clade C HIV-1 Env Trimer Cocktail Elicits a Higher Magnitude of Neutralizing Antibodies than Any Individual Component. *J. Virol.* 89: 2507-2519.

83. Cohen, K.W., A-S. Dugast, A. Galit, and **L. Stamatatos**. 2015. HIV-1 single-stranded RNA induces CXCL13 secretion in human monocytes via TLR7 activation and plasmacytoid dendritic cell-derived type I IFN. *J. Immunol.* 194: 2769-2775.
84. Zhou, T., R. Lynch, L. Chen, P. Acharya, X. Wu, N. A. Doria-Rose, M. Gordon Joyce, D. Lingwood, C. Soto, R. T. Bailer, M. J. Erandes, R. Kong, N. S. Longo, M. K. Louder, K. McKee, S. O'Dell, S. D. Schmidt, L. Tran, Z. Yang, A. Druz, T. S. Luongo, S. Moquin, S. Srivatsan, Y. Yang, B. Zhang, A. Zheng, M. Pancera, T. Kirys, I. S. Georgiev, T. Gindin, H-P. Peng, A-S. Yang, NISC Comparative Sequencing Program, J. C. Mullikin, M. D. Gray, **L. Stamatatos**, D. R. Burton, W. C. Koff, M. S. Cohen, B. F. Haynes, J. P. Casazza, M. Connors, D. Corti, A. Lanzavecchia, Q. J. Sattentau, R. A. Weiss, A. P. West, Jr., P. J. Bjorkman, J. F. Scheid, M. C. Nussenzweig, L. Shapiro, J. R. Mascola and P. D. Kwong. 2015. Structural repertoire of HIV-1-neutralizing antibodies targeting the CD4-binding site in 14 donors. *Cell.* 161: 1280-1292.
85. Dosenovic, P., L. von Boehmer, A. Escolano, J. Jardine, N. Freund, A. D. Gitlin, A. T. McGuire, D. W. Kulp, T. Oliveira, L. Scharf, J. Pietzsch, M. D. Gray, A. Cupo, M. J. van Gils, C. Liu, A. Gazumyan, M. S. Seaman, P. J. Björkman, R. W. Sanders, John P. Moore, **L. Stamatatos**, W. Schief and M. C. Nussenzweig. 2015. HIV-1 Broadly Neutralizing Antibodies in Human Immunoglobulin Knock-In Mice. *Cell.*161: 1505-1515.
86. McGuire, A. T*, M. D. Gray*, P Dosenovic*, A D. Gitlin, N T. Freund, J. Petersen, C. Correnti, W. Johnsen, R. Kegel, A. B. Stuart, J. Glenn, M. S. Seaman, W. R. Schief, R. K. Strong, M. C. Nussenzweig, and **L. Stamatatos**. 2016. Specifically modified Env immunogens activate B-cell precursors of broadly neutralizing HIV-1 antibodies in transgenic mice. *Nature Communications.* 7: 10618.
87. Scharf, L., A. West, S. Sievers, C. Chen, S. Jiang, H. Gao, M. Gray, A. McGuire, J. Scheid, M. Nussenzweig, **L. Stamatatos** and P. Bjorkman. 2016. Structural basis for germline antibody recognition of HIV-1 immunogens. *eLife.* 5:e13783.
88. Hessel, A. J., D. C. Malherbe, F. Pissani, S. McBurney, S. J. Krebs, M. Gomes, S. Pandey, W. F. Sutton, B. J. Burwitz, M. Gray, H. Robins, B. S. Park, J. B. Sacha, C. C LaBranche, D. H. Fuller, D. C. Montefiori, **L. Stamatatos**, D. N. Sather and N. L. Haigwood. 2016. Achieving Potent Autologous Neutralizing Antibody Responses against Tier 2 HIV-1 Viruses by Strategic Selection of Envelope Immunogens. *J. Immunol.*196: 3064-3078.
89. Vigdorovich, V., B. G. Oliver, S. Carbonetti, N. Dambrauskas, M. D. Lange, C. Yacoob, W. Leahy, J. Callahan, **L. Stamatatos**, and D. N. Sather. 2016. Repertoire comparison of the B-cell receptor encoding loci in humans and rhesus macaques by next generation sequencing. *Clinical and Translational Immunology.* 5: 393.
90. Tian, M., C. Cheng, X. Chen, H. Duan, H-L. Cheng, M. Dao, Z. Sheng, M. Kimble, L. Wang, S. Lin, S. D. Schmidt, Z. Du, M. G. Joyce, Y. Chen, B. J. DeKosky, Y. Chen, E. Normandin, E. Cantor, R. Chen, N. A. Doria-Rose, Y. Zhang, W. Shi, W-P. Kong, M. Choe, I. S. Georgiev, P-Y. Huang, S. Jain, A. T. McGuire, E. Georgeson, S. Menis, W. R. Schief, **L. Stamatatos**, P. D. Kwong, L. Shapiro, B. F. Haynes, J. R. Mascola and F. W. Alt. 2016. Induction of HIV neutralizing antibody lineages in mice with diverse precursor repertoires. *Cell.* 166: 1471-1484.
91. Yacoob, C*, M. Pancera*, V. Vigdorovich, B. G. Oliver, J. A. Glenn, J. Feng, D. N. Sather, A. McGuire and **L. Stamatatos**. 2016. Differences in allelic frequency and CDRH3 composition limit the engagement of HIV Env immunogens by putative VRC01 neutralizing antibody precursors. *Cell Reports.* 17: 1560-1570.
92. **Stamatatos, L.**, M. Pancera, A. McGuire. 2017. Germline-targeting immunogens. *Immunological Reviews.* 275: 203-216.
93. Zhou, T., Doria-Rose, N.A., Cheng, C., Stewart-Jones, G.B.E., Chuang, G.Y., Chambers, M., Druz, A., Geng, H., McKee, K., Kwon, Y.D., O'Dell, S., Sastry, M., Schmidt, S.D., Xu, K., Chen, L., Chen, R.E., Louder, M.K., Pancera, M., Wanninger, T.G., Zhang, B., Zheng, A., Farney, S.K., Foulds, K.E., Georgiev, I.S., Joyce, M.G., Lemmin, T., Narpala, S., Rawi, R., Soto, C., Todd, J.P., Shen, C.H., Tsybovsky, Y., Yang, Y., Zhao, P., Haynes, B.F., **Stamatatos, L.**, Tiemeyer, M., Wells, L.,

Scorpio, D.G., Shapiro, L., McDermott, A.B., Mascola, J.R., Kwong, P.D. 2017. Quantification of the Impact of the HIV-1-Glycan Shield on Antibody Elicitation. *Cell Reports*. 19; 719-732.

- ***Indicates an equal contribution**
- **#: Co-corresponding authors**

12. Perspectives, Pre-reviews and Reports

1. **Stamatatos, L.**, L. Morris, D. R. Burton, and J. R. Mascola. 2009. Neutralizing Antibodies Generated During Natural HIV-1 Infection: Good News for an HIV-1 vaccine?. *Nature Medicine*. 15: 866-870.
2. Mascola, J., King, C. R. and Steinman, R on behalf of the **Working Group*** convened by the Global HIV Vaccine Enterprise. 2010. Immunogens and antigen processing: report from a global HIV vaccine enterprise working group. *Nature Medicine*, October 2010 pg 12-16 (Originally published in Nature Proceedings 7 September 2010; doi:10.1038/npre.2010.4796.2).
* **LS is a member of the Working Group**
3. McGuire, A. T. and **L. Stamatatos**. 2015. Common characteristics of HIV neutralizing antibodies with fondness for sugars. *Immunity*. 43: 837- 840. (doi:10.1016/j.immuni.2015.10.026)

13. Invited Refereed Publications

1. Cheng-Mayer, C., **L. Stamatatos**, and A. Werner. 1992. Structure/Function relationships of the HIV-1 envelope gp120 in determining host cell tropism, cytopathicity, and sensitivity to sCD4 neutralization. *7^e Colloque des Cent Gardes*, edited by Mark Girard, Louis Valette, PMSV, Paris, 5-10.
2. **Stamatatos, L.** and D. Davis. 2001. New insights into protective humoral responses and HIV vaccines. In: AIDS 2001: A year in Review. *AIDS* 15: S105-S115.
3. Barnett, S.W., G. Otten, I. Srivastava, J. Zur Megede, Y. Lian, M.Schaefer, H. Liu, R. Deck, J. Donnelly, J. Polo, D O'Hagan, J. Ulmer, **L. Stamatatos**, D Montefiori, M. Lewis, S Engelbrecht, E Janse van Rensburg, G.Widera, X. Enhanced DNA prime-protein boost vaccines induce potent and protective immune responses against HIV-1. *XIIIth Cent Gardes Symposium*, Annecy, France, October 27-29, 2002. In Retroviruses of Human AIDS and Related Animal Diseases. M. Vicari, B. Dodet, M. Girards, Eds. Elsevier
4. Haigwood, L. N. and **L. Stamatatos**. 2004. Role of neutralizing antibodies in HIV infection. *AIDS Year in review*. *AIDS*, 7 (suppl. 4); S67-S71.
5. Hu, S.-L. and **L. Stamatatos**. 2007. Prospects of HIV Env modification as an approach to HIV vaccine design. *Current HIV Research*, 5: 507-513,7p.
6. Schief, W.R., A. B. Yih-En Andrew, and **L. Stamatatos**. 2009. Challenges for Structure-based HIV Vaccine Design. *Current Opinion in HIV and AIDS*. 4: 431-440.
7. **L. Stamatatos**. 2012. HIV Vaccine design: The neutralizing antibody conundrum. *Current Opinion in Immunology*, 24: 316-323.
8. **L. Stamatatos**, M. Pancera and A.T. McGuire. 2016. Germline targeting immunogens. *Immunological Reviews*. 275: 203-216.

14. Book Chapters

1. Düzgünes, N., M.C. Pedroso de Lima, C.E. Larsen, **L. Stamatatos**, D. Flasher, D. Alford, D.S. Friend, and S. Nir. 1991. Fusion of influenza, sendai and simian immunodeficiency viruses with cell membranes and liposomes. In: *Cell and Model Membrane Interactions* (S. Ohki, ed.) Plenum Press, New York. Pg. 179-197.
2. Düzgünes, N., C.L. Larsen, **L. Stamatatos**, and K. Konopka. 1992. Fusion of immunodeficiency viruses with liposomes and cells: inhibition of human immunodeficiency virus type 1 infectivity by cardiolipin liposomes. In: *Membrane Interactions of HIV* (R. C. Aloia, C. C. Curtain and L. M. Gordon, eds.), Wiley-Liss, New York. Pg 317-327.

3. Barker, E., S.W. Barnett, **L. Stamatatos**, and J.A. Levy. 1995. The human immunodeficiency viruses. In: *The Retroviridae*, Vol. IV (J. A. Levy ed.), Plenum Press, New York. Pg 1-96.

15. Presentations

1. Conference on HIV Pathogenesis, Keystone Symposia on Molecular and Cellular Biology, Keystone, Colorado, April 17-23 1995. Title of presentation: 'Exposure of the third hypervariable region on intact HIV-1 virions displaying macrophage- and T-cell line-tropism'.
2. Second Diamond Center AIDS Symposium, The Rockefeller University, New York, May 20, 1998. Title of presentation: 'Deletion of the V2 loop alters the neutralization-susceptibility of HIV'.
3. 1999 Winter Biotechnology Conference at Cold Spring Harbor, Molecular Approaches to Vaccine Design, Cold Spring Harbor, New York, December 2-5, 1999. Meeting on 'Molecular Approaches to Vaccine Design'. Title of presentation: 'Generation of T-helper and neutralizing antibody responses in macaques immunized with the SF162ΔV2 envelope using a bimodal DNA/protein vaccination protocol'.
4. WHO-UNAIDS Vaccine Advisory Committee Meeting, 'Approaches to the development of broadly protective HIV/AIDS vaccines: HIV subtypes and cross-reactive anti-HIV immune responses', Geneva, Switzerland, February 21-23, 2000. Title of presentation: 'Immunogenicity of SF162-derived envelope proteins'.
5. Conference on Vaccine Development and Immunotherapy in HIV, Palm Beach, Florida, June 28-July 1, 2000. Title of presentation: 'A modified HIV-1 envelope immunogen elicits neutralizing antibodies against heterologous primary HIV-1 isolates'.
6. Seattle Biomedical Research Institute, Seattle, Washington, March 6, 2000. Title of presentation: 'Structural analysis and immunogenicity of SF162-derived envelope proteins'.
7. University of Massachusetts, September 29, 2000. Title of presentation: 'Can modified HIV envelope immunogens elicit potent cross-reactive neutralizing antibodies?'.
8. 18th Annual Symposium on Nonhuman Primate Models for AIDS, Madison, Wisconsin, October 4-7, 2000. Title of presentation: 'Vaccine-induced anti-HIV envelope antibodies protect CD8+ T cell-depleted rhesus macaques from SHIV-challenge'.
9. Fred Hutchinson Cancer Research Center, Seattle, Washington, November 9, 2000. Title of presentation: 'Designing of novel HIV envelope-based vaccines'.
10. Third International Summit Meeting on Immunological Correlates of Protection, Sestri, Italy, November 30-December 3, 2000. Title of presentation: 'DNA-immunization with a modified HIV envelope elicits protective antibodies in macaques'.
11. Tenth Diamond Center AIDS Symposium, The Rockefeller University, New York, April 17, 2001. Title of presentation: 'Induction of HIV neutralizing antibodies'.
12. New York Blood Center, New York, June 12, 2001. Title of presentation: 'HIV envelope modifications that increase the exposure of neutralization epitopes'.
13. 19th Annual Symposium on Non-Human Primate Models for AIDS, San Juan, Puerto Rico, November 7-10, 2001. Title of presentation: 'Generation of cross-reactive neutralizing and protective antibodies in macaques immunized with a modified HIV-1 envelope'.
14. U.S.-Japan Cooperative Medical Science Program, 14th Joint Scientific Meeting of the AIDS panels, Seattle, WA, March 19-21, 2002. Title of presentation: 'Analysis of anti-HIV envelope responses in macaques immunized with SF162gp140 and □V2gp140 immunogens and exposed to SHIV_{SF162P4}'.
15. Third AIDS Seminar in Kumamoto, Japan, September 20, 2002. Title of presentation: 'Modified HIV envelope immunogens: Can they elicit cross-reactive neutralizing antibodies?'.
16. University of Washington, Department of Pathobiology, Seattle, WA, November 21, 2002. Title of presentation: "Modification of the HIV envelope: Effects on viral phenotype and implications for vaccine development".
17. Keystone Symposia on HIV Vaccines, Banff, Alberta, Canada, March 29-April 4, 2003. Title of presentation: "Priming by vaccination of HIV envelope-specific B-cell responses allows for the long-term control of SHIV_{SF162P4}-replication in macaques".

18. FHCRC Symposium on Research at the Seattle Biomedical Research Institute, 2003. Title of presentation: "Engineering vaccines to overcome HIV antigenic variation".
19. 21st Annual Symposium on Non-Human Primate Models for AIDS, Seattle, WA, October 23-26, 2003. Title of presentation: "Successful containment of viral replication in macaques infected with an R5-tropic SHIV depends on the early development of anti-envelope antibodies".
20. Washington National Primate Research Center, Seattle, WA, May 26, 2004. Title of presentation: "Evolution in macaques of an R5-tropic SHIV in the absence and presence of a competing X4-tropic SHIV".
21. Chiron Corporation, Emeryville, CA, July 20, 2004. Title of presentation: "HIV envelope modifications and the generation of protective antibodies".
22. AIDS Vaccine 2004. Lausanne, Switzerland, August 30- September 1, 2004. Title of presentation: "HIV envelope modifications and the generation of protective antibodies".
23. AIDS Vaccine 2005. Montreal, Canada, September 6-9, 2005. Title of presentation: "Viral escape in the presence of broadly reactive anti-HIV serum neutralizing antibodies".
24. 6th AIDS Seminar in Kumamoto International Symposium, Kumamoto, Japan, September 15-16, 2005. Title of presentation: "Continuous viral replication in the presence of broadly reactive anti-HIV serum neutralizing antibodies in macaques infected with an R5-SHIV".
25. SBRI Seminar Series, Seattle, WA, January 30, 2006. Title of presentation: "HIV, Neutralizing Antibodies, and Monkeys".
26. Keystone Symposia on HIV Vaccines, Keystone, Colorado, March 27-April 2, 2006. Title of presentation: "Distinct immunogenic properties of the SF162 Env on infectious virions and soluble gp140 proteins".
27. Aaron Diamond AIDS Research Center, New York, NY, April 23, 2007. Title of presentation: "Designing HIV Env immunogens: loops, twists, turns and dead ends".
28. Washington Technology Alliance, Discovery Series, Seattle, WA, June 8, 2007. Title of presentation: "Novel approaches to develop an HIV vaccine".
29. Viral Pathogenesis retreat, Fred Hutchinson Cancer Research Center, Seattle, WA, June 28, 2007. Title of presentation: "Novel approaches to HIV Env immunogen design".
30. Fred Hutchinson Cancer Research Center, Vaccine and Infectious Disease Institute Symposium, Seattle, WA, July 16, 2007. Title of presentation: "New approaches to elicit cross reactive NAb against HIV".
31. Uniformed Services University, Dept. of Defense, Bethesda, October 29, 2007. Title of presentation: "Comparing the neutralizing antibodies generated during HIV/SHIV-infection to those elicited by HIV Env immunogens".
32. HIV Vaccine Trials Network, Seattle, WA, November 8, 2007. Title of presentation: "Making HIV trimers".
33. B&MGF, Seattle, WA, February 4, 2008. Title of presentation: "Roadblocks in designing a vaccine against HIV that would elicit protective antibodies".
34. The 8th Awaji International forum on Infection and Immunity / US-Japan Cooperative Medical Science Program -21st Joint Meeting of the AIDS Panel, Awaji Island/Tokyo, September 7-12, 2008. Title of presentation: "Epitope specificities of cross-reactive NAb in HIV+ plasma".
35. The Collaboration for AIDS Vaccine Discovery, B&MGF, Seattle, WA, December 3-5, 2008: Multiple epitope-specificities in HIV+ sera containing cross-reactive NAb. Can we elicit them by immunization?
36. PATH, Seattle, WA, November 17-18, 2008: aids2031 – Discovery and Innovation for HIV/AIDS. Title of Presentation: "HIV vaccines".
37. Keystone Symposia on prevention of HIV/AIDS, Keystone, Colorado, March 22-27, 2009. Title of presentation: "Broad neutralizing antibody responses during HIV-1 infection: prevalence and epitope specificities".

38. NIH/ Vaccine Research Center, Bethesda, Maryland, April 21, 2009. Title of presentation: "Epitope specificities of cross-neutralizing antibody responses in HIV+ sera: implications for immunogen-design".
39. The American Association of Immunologists, 96th Annual meeting; Seattle, WA, May 8-12, 2009. Title of presentation: "Prevalence and epitope specificities of broadly-neutralizing antibodies generated during HIV-1 infection: how can we elicit them by vaccination?".
40. Marie Curie Conference on Immunology of HIV-1 and Tuberculosis infections; Nobel Forum; Karolinska Institute, Stockholm, Sweden; June 4-5 2009. Title of presentation: "HIV escape from naturally-occurring broadly-neutralizing antibodies: a pathway to disease progression?".
41. Symposium on "Co-Infection with HIV and the Hepatitis Viruses: an Asian Perspective"; Portland, Oregon, September 20-21, 2009; Title of presentation: "Cross-reactive anti-HIV Neutralizing Antibody Responses during 'Acute / Early' HIV-1 Infection".
42. AIDS Vaccine 2009. Paris, France, October 19-22, 2009. Title of presentation: "Eliciting broad anti-HIV neutralizing antibodies by vaccination: lessons learned from natural infection".
43. The 13th Annual CFAR Scientific Symposium, Vanderbilt, Tennessee, November 5, 2009. Title of presentation: "Cross-reactive neutralizing antibodies during acute and chronic HIV-1 infection".
44. Infectious Diseases Symposium /Virology Annual Conference, Seattle, Washington, January 5, 2010. Keynote Presentation: "Multiple HIV-1 escape pathways from B cell responses during acute and chronic HIV-1 infection".
45. Molecular Biology and Biochemistry Department at Simon Fraser University, Vancouver, BC, April 16, 2010. Title of presentation: "Characterization of the earliest cross-neutralizing antibody response to HIV-1".
46. 12th Annual International Meeting of IHV, Tropea, Italy October 4-8, 2010. Title of presentation: "Characteristics of the Earliest Cross-Neutralizing Antibody Response to HIV-1".
47. HIV Vaccine Trials Network, Washington DC, June 1-3, 2011. Panel Discussion on 'Selection of Envs Immunogens for upcoming efficacy trials'. Title of presentation: "Evaluation of clade A and other Envs for Env selection".
48. Global Health Research Congress on Vaccines, Seattle, WA, June 19-21, 2011. Panel Discussion on 'Harnessing advances in basic science to enable rational vaccine design'. Title of presentation: "Frequency and epitope-specificities of broadly neutralizing antibody responses during HIV-1 infection: implications for future vaccine-design strategies".
49. 13th Annual International Meeting of IHV, Baltimore, Maryland October 30-November 2, 2011. Title of presentation: "Interactions between HIV Env and germline versions of bnAbs".
50. HIV Vaccine Trials Network, Seattle, WA, November 7-9, 2011. Title of presentation: "Envs from transmitted strains from vaccine trials".
51. The 2012 Palm Springs Symposium on HIV/AIDS "The Biology of HIV Infection", Palm Springs, CA, March 8-10, 2012. Title of presentation: "Broadly anti-HIV neutralizing antibodies, viral-escape and fitness costs".
52. AIDS Vaccine 2013. Barcelona, Spain, October 7-10, 2013. Title of presentation: "Recombinant Env interactions with B cell receptors of broadly neutralizing anti-HIV antibodies".
53. Institute for Systems Biology, Seattle Washington, November 18, 2013. Title of presentation: "Activating B cell receptors of broadly neutralizing anti-HIV antibodies and guiding their affinity maturation".
54. Seattle Biomedical Research Institute, March 10, 2014. Title of presentation: "Design and clinical testing of a conceptually novel HIV vaccine".
55. NIH/ Twinbrook Seminar, May 20, 2014. Title of presentation: "Activating the germline BCR form of a broadly neutralizing anti-HIV antibody by recombinant vaccines".
56. HIV Vaccine Trials Network, Washington, DC, June 3, 2014. Title of presentation: "Env immunogens designed to activate germline VRC01 class BCRs".
57. Fred Hutchinson Cancer Research Center, Seattle, WA, July 22, 2014. Title of presentation: "Activating the germline BCRs of anti-HIV-1 bnAbs by recombinant vaccines".

58. Cell & Gene Therapy for HIV cure, Seattle, WA, August 26, 2014. Title of presentation: "Immunogen-design efforts to activate the germline BCR forms of broadly neutralizing antibodies against HIV-1".
59. Les Cent Gardes, Vayrier de Lac, France, October 5-7, 2014. HIV Vaccines: Prospects for the future. Title of presentation: "Regulating the competition of progenitor BCRs of narrow and broadly neutralizing anti-HIV-1 antibodies by immunogen modification".
60. HIVR4, Cape Town, South Africa, October 28-31, 2014. Title of presentation: "HIV envelope interactions with the progenitor BCRs of narrow and broadly neutralizing antibodies".
61. Keystone Symposia, HIV Vaccines, Banff, Alberta, Canada, March 22-27, 2015. Title of presentation: "Characterization of Recombinant HIV-1 Envelopes that Bind Germline Forms of Broadly Neutralizing Antibodies".
62. SickKids, Molecular Structure & Function Seminar Series, Toronto, Ontario, Canada, September 21st, 2015. Title of presentation: "Germline BCRs of broadly neutralizing HIV-1 antibodies: How do they interact with HIV and how can we stimulate them during vaccination?".
63. Protein Engineering Summit (PEGS), Boston, MA, April 25-29, 2016. Title of presentation: "Immunogen-design approaches to activate and mature the germline forms of broadly neutralizing HIV-1 antibodies".
64. The Scripps Research Institute, Immunology and Microbial Sciences Seminar Series, San Diego, CA, May 12, 2016. Title of presentation: "Improving the odds of germline BCR-binding immunogens to succeed".
65. University of Rochester, Microbiology and Immunology, Rochester, NY, September 19, 2016. Title of presentation: "Novel immunogens to initiate the development of HIV-1 broadly neutralizing antibodies during vaccination".
66. B&MGF, The Collaboration for AIDS Vaccine Discovery Meeting, Seattle, WA, December 6-8, 2016. Title of presentation: "Efforts to expand primary VRC01 antibody responses elicited by germline-targeting immunogens".

16. Scientific meeting / Symposia organization and specific session participation

1. 24th Annual Symposium on Nonhuman Primate Models for AIDS, 2006, Member, Scientific Committee
2. AIDS Vaccine 2007. Seattle, Washington, August 21-23, 2007, Member of the Local Committee and Chair of a panel discussion on neutralizing antibodies.
3. XVII International AIDS Conference IAS Mexico City 3-8 August 2008, Abstract reviewer for the
4. NIAID, Summit on HIV vaccine research and development, March 25th 2008, Bethesda, MD
5. Global Health Research Congress; Seattle, WA, June 16-17, 2009. Panelist on "Vaccine Discovery and Development: Challenges and Opportunities". Title of Presentation: "The HIV neutralizing antibody perspective: Lessons learned from natural infection".
6. 29th Annual Symposium on Nonhuman Primate Models for AIDS, 2011, Seattle, WA., Member, Scientific Committee
7. CROI 2012, March 5-8, 2012, Seattle, WA. Convener of Session on the 'Ontogeny of a protective immune response to HIV'.
8. AIDS Vaccine 2012. Boston, MA. Co-Chairing session on "B cell responses".
9. NIAID Workshop on "Strategies to guide antibody affinity maturation process for HIV vaccine design", February 24, 2014. Title of Presentation: "Env-activation of B cells expressing germline BCR forms of broadly neutralizing anti-CD4-BS antibodies".
10. Keystone Symposia on HIV Vaccines 2015. Co-organizer.

17. Invited Presentations by Trainees

1. 21st Annual Symposium on Non-Human Primate Models for AIDS, Seattle, WA, October 23-26, 2003. Presenter: R. McCaffrey (postdoc). Title of presentation: "The effect of N-linked glycosylation of the V3 loop and the immunologically 'silent' face of gp120 on the HIV-1 SF162 viral phenotype".
2. US-Japan cooperative medical science program - 16th Joint scientific meeting of the AIDS panels, Nashville, TN, March 8-10, 2004. Presenter: R. McCaffrey (postdoc). Title of presentation: "The V3 loop and the immunologically 'silent' face of gp120 protect HIV-1 SF162 from neutralization by anti-gp120 and anti-gp41 antibodies".
3. Keystone Symposia on HIV vaccine development: progress and prospects, Whistler, Canada, April 12-18, 2004. Presenter: R. McCaffrey (postdoc). Title of presentation: "The immunologically 'silent' face of gp120 protects HIV-1 SF162 from neutralization by anti-gp120 and anti-gp41 antibodies".
4. AIDS Vaccine 2005. Montreal, Canada, September 6-9, 2005. Presenter: N. R. Derby (Graduate Student). Title of presentation: "Immunization with soluble oligomeric modified gp140s elicits neutralizing and enhancing antibodies".
5. AIDS Vaccine 2007. Seattle, Washington, August 21-23, 2007. Presenter: L. Ching (Graduate Student). Title of presentation: "Characterizing broadly reactive neutralizing antibody responses during HIV and SHIV infections".
6. Viral Pathogenesis Retreat 2008, Fred Hutchinson Cancer Research Center, June 2 2008. Presenter: N. Sather (Postdoctoral fellow). Title of Presentation: "Factors associated with the emergence of cross-reactive NABs in HIV-1 infection".
7. Keystone Symposia on HIV Vaccines, Keystone Co, March 2012. Presenter: S. Hoot (Postdoctoral fellow). Title of Presentation: "Interaction of germline precursor to broadly neutralizing anti-CD4 binding site antibody b12 with HIV-1 envelope glycoproteins".
8. AIDS Vaccine, Barcelona Oct. 8 2013. Presenter: A. McGuire (Postdoctoral fellow). Title of Presentation: Engineering an HIV Envelope Protein to Activate Germline B Cell Receptors of Broadly Neutralizing VRC01-Class Antibodies.
9. Keystone Symposia: HIV Vaccines. Keystone, Colorado Feb 11 2013. Presenter: A. McGuire (Postdoctoral fellow). Title of Presentation: Engaging the germline BCRs of anti-HIV bNABs with modified recombinant Env immunogens.
10. ImmunoVancouver, Vancouver BC, Jun 13 2013. Presenter: A. McGuire (Postdoctoral fellow). Title of Presentation: Glycans in the D loop and V5 of HIV Env restrict binding to, and activation of B cells expressing the germline BCRs of broadly neutralizing anti-HIV antibodies.
11. HIV Research for Prevention 2014, Cape Town, South Africa, October 28-31 2014. Presenter: A. McGuire (Associate in Vaccine and Infection Disease Division, Fred Hutchinson Cancer Research Center). Title of Presentation: Minimizing undesirable epitope immunodominance on HIV-1 Env immunogens through rational immunogen modification.
12. UW/CFAR New Faces seminar series. Seattle, WA, January 18 2015. Presenter: A. McGuire (Associate in Vaccine and Infection Disease Division, Fred Hutchinson Cancer Research Center). Title of Presentation: Regulating the competition of progenitor BCRs of narrow and broadly neutralizing anti-HIV-1 antibodies by immunogen modification.
13. Vaccine and Infectious Disease Division, Fred Hutchinson Cancer Research Center. Seattle, WA, January 13 2015. A. McGuire (Associate in Vaccine and Infection Disease Division, Fred Hutchinson Cancer Research Center). Title of Presentation: Antigen modification regulates competition between B cells that give rise to broad and narrow neutralizing HIV-1 antibodies.
14. Awaji International Forum on Infection and Immunity, Awaji Island, Japan. September 11, 2015. A. McGuire (Associate in Vaccine and Infection Disease Division, Fred Hutchinson Cancer Research Center). Title of Presentation: Immunogen design and optimization to target germline B cell receptors that give rise to broadly neutralizing antibodies against HIV-1.
15. Keystone Symposia: HIV Vaccines. Olympic Valley, California, March 20-24, 2016. Presenter: M. D. Gray. (Senior Scientist). Title of Presentation: Self-assembling HIV Envelope Nanoparticles Increase Antibody Binding, Membrane Dynamics and B-cell Activation

16. Keystone Symposia: HIV Vaccines. Olympic Valley, California, March 20-24, 2016. Presenter: C. Yacob (Postdoctoral fellow). Title of Presentation: Selective allelic expansion of HIV-1 immunized rhesus macaques based on different antigenic properties of Env immunogens.
17. HIVR4P 2016. Chicago, IL, October 17-21, 2-16. Presenter: A. McGuire (Associate Scientist): Title of Presentation: 426c: A Clade C Env-Derived Germline VRC01 Targeting Immunogen.
18. HIVR4P 2016. Chicago, IL, October 17-21, 2-16. Presenter: Pancera (Associate Scientist): Title of presentation: The Role of the CDRH3 of Germline VRC01-class Antibodies in HIV-1 Env Interactions.
19. HIVR4P 2016. Chicago, IL, October 17-21, 2-16. Presenter: C. Yacob (Postdoctoral fellow): Title of presentation: Interactions of Putative Germline VRC01-Class Antibodies with HIV-1 Env: The Role of CDRH3.

19. University Courses and Lectures

a) Course Organizer

1. University of Washington, Department of Pathobiology, Spring 2003. Pathobiology 590C: "Vaccines and immunization approaches". Credits: 1. Organizer.
2. University of Washington, Department of Pathobiology, Fall Quarters 2004-2006. Pathobiology 550: "Diseases of public health importance and strategies for their control". Credits: 3. Co-organizer with Dr. M. Parsons.

b) Lectures in other courses

1. University of Washington, Department of Pathobiology, Winter or fall Quarters 2006-2016. Pathobiology 551: "Biochemistry and Genetics of Pathogens and Their Hosts". Lecture on Carbohydrates (Structure and Function).
2. University of Washington, Department of Pathobiology, Fall Quarters 2007 and 2008. Pathobiology 550: "Diseases of public health importance and strategies for their control". Lectures on 'Controlling infections with vaccines: science, practice, and clinical trials' and 'H5N1 Influenza on the horizon'.
3. University of Washington, Department of Pathobiology, 2008 and 2016. Pathobiology 582: "Critical thinking".
4. University of Washington, Department of Microbiology, Spring Quarter 2011. MICROM 496/499, Molecular Biology and Immunology of HIV and AIDS. Topic of lecture: "Humoral Immunology / Vaccine designs to elicit antibodies".

20. University Service

1. Member, Search committee for a new Pathobiology faculty position. 2002
2. Member, Pathobiology task force for the "Development of departmental elective courses". 2002
3. Member, Department of Pathobiology Student Affairs Committee. 2005-2008

19. Seattle Biomedical Research Institute Service

1. SBRI BIACORE and Flow Cytometry Core Director. 2002-2008
2. SBRI Seminar series co-organizer. 2002-2004
3. Member, Search Committee for SBRI Recruitment. 2004
4. SBRI BSL3 facility Director. 2004-present
5. Member of SBRI's Communications Advisory Group. 2005
6. Co-organizer of the 'Seattle HIV group' meetings. 2005-2006
7. Member and Chair, SBRI Innovation grants 2005 review panel
8. Member, Protein Production Core task Force, 2006
9. Member and Chair, SBRI Viral Vaccine Program Recruiting Committee, 2006
10. Member, SBRI Immunology Task Force, 2006
11. Member, SBRI, Interim Operations Team, June 2007 – December 2007
12. Member, SBRI Leadership Team, October 2008 - present

13. Member, SBRI Succession Planning Committee, November 2008 – 2010
14. Member, SBRI, Transition Planning Committee, 2011
15. Member, Council of Scientific Advisors Organizing committee 2009.

20. Fred Hutchinson Cancer Research Service

1. Member, VID D Appointments and Promotion Committee, 2015- present
2. Member, VID D Faculty Retreat 2016 Planning committee.
3. Member, Pathogens-Cancer Working Group, FHCRC
4. Member, Search Committee for the Chief Operating Officer, FHCRC
5. Member, Search Committee for a Senior Immunologist, VID D, FHCRC

21. Graduate student committee member

1. Member, Doctoral thesis committee, Laboratory of Cellular Physiology and Immunology The Rockefeller University: Lei Zhong, "Dendritic cells, modified by recombinant adenovirus-SIV, elicit SIV-specific immunity". Ph.D. Received 06/12/00
2. Member, Doctoral thesis committee, Department of Pathobiology, University of Washington: Pushpa Jayaraman (2002-2006)
3. Member, Chair, Doctoral thesis committee, Department of Pathobiology, University of Washington: Nina Derby (2002-2007)
4. Member, Co-Chair, Doctoral thesis committee, Department of Pathobiology, University of Washington: Tsai-Yu Lin (2004-2008)
5. Member, Doctoral thesis committee, Department of Immunology, University of Washington: Blythe Sather (2004-2007)
6. Member, Chair, Doctoral thesis committee, Department of Global Health, Pathobiology Program, University of Washington: Lance Ching (2006-2010)
7. Member, Chair, Doctoral thesis committee, Department of Global Health, Pathobiology Program, University of Washington: Iliyana Skorcheva (2008-Present)
8. Member, Doctoral thesis committee, Department of Pathobiology, University of Washington: Joel Janes (2006-present)
9. Member, Master thesis committee, Department of Pathobiology, University of Washington: Katie Bosch (2007-2008)
10. Member, Master thesis committee, Department of Pathobiology, University of Washington: Travis Beckett (2008- 2009)
11. Member, Doctoral thesis committee, Department of Biochemistry, University of Washington: Mihai L. Azoitei (2009- 2011)
12. Member, Doctoral thesis committee, Department of Pathobiology, University of Washington: Maxwell Omenda (2010-present)
13. Member, Doctoral thesis committee, Department of Pathobiology, University of Washington: Leslie Goo (2010-present)
14. Member, Chair, Doctoral thesis committee, Department of Global Health, Pathobiology Program, University of Washington: Iliyana Mikell (2008-2012)
15. Member, Chair, Doctoral thesis committee, Department of Global Health, Pathobiology Program, University of Washington: Thaddeus Davenport (2009-2010)
16. Member, Doctoral thesis committee, Department of Biochemistry, University of Washington: Christopher Thomas Carrico (2012-2013)
17. Member, Chair, Doctoral thesis committee, Department of Global Health, Pathobiology Program, University of Washington: Kristen Cohen (2009-2013)
18. Member, Doctoral thesis committee, Department of Global Health, Pathobiology Program, University of Washington: Lianna Wood (2011-2015)
19. Member, Doctoral thesis committee, Department of Global Health, Pathobiology Program, University of Washington: Emily Cage (2015- Present)

22. Undergraduate student training

1. Amy Ly, Summer rotation, ADARC, 1996 and 1997
2. Raegan Robinson, SBRI, STAR summer program, University of Washington, Summer 2002
3. Luke Wanami, Summer rotation, SBRI, 2003
4. Miranda Bethay, SBRI, STAR summer program, University of Washington, Summer 2004
5. Eirini Moisy, Bachelor Thesis Advisor, University of Thrace, Department of Molecular Biology and Genetics, Greece, March 2005- May 2006
6. Rachel Niec, Summer Internship, SBRI, Summers 2005 and 2006
7. Brianne Chittenden, SBRI, STAR summer program, University of Washington, Summer 2005
8. Brianne Chittenden, SBRI, University of Washington, Undergraduate Research, PABIO 499, Autumn, Fall, and Winter 2005
9. Giorgios Vlahogiannis, Bachelor Thesis Advisor, University of Thrace, Department of Molecular Biology and Genetics, Greece, March – August 2006
10. Sara Gore, Summer Internship, SBRI, Summer 2006
11. Rozina Caridha, Bachelor Thesis Advisor, University of Thrace, Department of Molecular Biology and Genetics, Greece, April 2007 – March 2008
12. Blake Hovde, Summer Intern, SBRI, Summer 2007
13. Angeliki Mavrantoni, Bachelor Thesis Advisor, University of Thrace, Department of Molecular Biology and Genetics, Greece, March – August 2008
14. Stella-Christiana Chotou, Bachelor Thesis Advisor, University of Thrace, Department of Molecular Biology and Genetics, Greece, March – August 2008
15. Nicole Duggan, Summer Intern, SBRI, Summer 2008
16. Jenny Kehayia, Bachelor Thesis Advisor, University of Thrace, Department of Molecular Biology and Genetics, Greece, March – August 2009
17. Jacqueline Benthuisen, Global Health Intern SBRI, Summer 2009
18. Kristen Frey, Global Health Intern SBRI, Summer 2010
19. Danielle LaVigne, Undergraduate Intern (ASM Microbiology Undergraduate Research Fellow), Summer 2010
20. LaMarcus Ford, SBRI Teen Intern (through BioQuest), Summer 2010
21. Wesley Plinke, Undergraduate Intern, November 2010 – June 2011
22. Joe Lalli, Global Health Intern, Summer 2011
23. Jack Petersen, Summer Intern 2014 & 2015
24. Josephine Trichka, Summer Intern 2016

23. Graduate student laboratory rotations

1. Nina Derby, University of Washington, Department of Pathobiology. Winter quarter 2002
2. Wendy Blay, University of Washington, Department of Pathobiology. Spring quarter 2002
3. Sam Pine, University of Washington, Department of Pathobiology. Fall quarter 2003
4. Amber Randal, University of Washington, Department of Pathobiology. Fall quarter 2004
5. Sheri Wardwell, Graduate student, SBRI, UW, Department of Pathobiology. Summer 2005
6. Lance Kao Ching, University of Washington, Department of Global Health. Winter quarter 2006
7. Katie Bosch, University of Washington, Department of Pathobiology. Fall quarter 2006
8. Iliyana Mikell, University of Washington, Department of Global Health. Winter quarter 2008
9. Tad Davenport, University of Washington, Department of Global Health. Fall quarter 2008
10. Kristen Cohen, University of Washington, Department of Global Health. Fall quarter 2009
11. Jiho Kim, University of Washington, Department of Global Health. Winter quarter 2016
12. Daniel Ellis, University of Washington and Fred Hutchinson Cancer Research Center, Molecular and Cellular Biology Program. Autumn quarter 2016.

24. Present Graduate, Post-Graduate Trainees and Senior Scientists

1. Andrew McGuire, Ph.D. Postdoctoral fellow, July 2011 – 2014
Associate in VID D, FHCRC, 2014-present
2. Matthew Gray, Ph.D. Senior Scientist, November 2012 – 2014
Associate Staff Scientist VID D, FHCRC, 2014-present
3. Christina Yacoob, Ph.D. Postdoctoral fellow, October 2013 - present
4. Marie Pancera, Ph.D. Affiliate in VID D, September 2015 - present
6. Tara Bancroft, Ph.D. Postdoctoral fellow, November 2015 - present
7. Rachael Parks Graduate student, UW, July 2016 – present
8. Tyler Liban Postdoctoral fellow, UW, May 2017 - present
9. Maria Knudsen Postdoctoral fellow, UW, May 2017 - present

25. Past trainees

1. Ruth McCaffrey, Ph. D. Postdoctoral fellow, SBRI, UW, Department of Pathobiology 2001-2004
2. Chuanbin Dai Postdoctoral fellow, SBRI, UW, Department of Pathobiology 2003-2004
3. Rong Xu, Ph.D. Research Associate, SBRI, UW, Department of Pathobiology 2004-2005
Currently: Principal Research Scientist at Profectus BioSciences, Inc
4. Brian Burke, Ph.D. Postdoctoral fellow, SBRI, UW, Department of Pathobiology 2003-2005
5. Nina R. Derby Ph.D. Graduate student, UW, Department of Pathobiology 2002-2007
Currently: postdoctoral fellow (The Rockefeller University)
6. Sean Gray, Ph.D. Associate Scientist, SBRI, 2005-2007
7. Jakob Peter Armann MD/Ph.D. student, Munich University, Germany, 2007 – 2008
8. Aaron Wallace, Ph.D. Postdoctoral fellow, SBRI, January 2006 – May 2009
9. Lance Kao Ching Graduate student, SBRI, UW, Department of Global Health, 2006-2010
10. Thaddeus Davenport Graduate student, SBRI, UW, Department of Global Health. 2009-2010
11. Pallavi Twade, Ph.D. Postdoctoral fellow, SBRI, June 2008– Sept 2010
12. George Sellhorn, Ph.D. Postdoctoral fellow, SBRI, June 2006 – 2010
Staff Scientist, SBRI, 2010 – 2011 and 2013-2014
13. Sara Campbell, Ph.D. Postdoctoral fellow, SBRI, October 2010 – April 2012
14. Jennifer Hoot, Ph.D. Postdoctoral fellow, SBRI, March 2011 – 2012
15. Florie Greinhofer Intern, March-July 2012, University of Applied Sciences Weihenstephan in Freising, Germany
16. Iliyana Mikell Graduate student, SBRI, UW, Department of Global Health, 2008-2012
17. Kristen Cohen, Ph.D. Graduate student, SBRI, UW, Department of Global Health, 2009-2013
Postdoctoral Fellow, SBRI, December 2013 – 2014
18. Anita Dreyer, Ph.D. Postdoctoral fellow, August 2012 - 2014
19. Miles Lange, Ph.D. Postdoctoral fellow, November 2012 – 2014
20. Brian Oliver, Ph. D. Senior Scientist, October 2012 -2014
21. Vladimir Vigdorovich, Ph.D. Staff Scientist, August 2013 -2014
22. Noah Sather, Ph.D. Postdoctoral fellow, June 2007 - 2010
Staff Scientist, Seattle Biomedical Research Institute, 2010 - 2011
Principal Scientist, Seattle Biomedical Research Institute, 2011 – 2014
Assistant Professor, Seattle Biomedical Research Institute, 2014-Present
23. Alka Saxena, Ph.D. Staff Scientist, 2013 – 2014
Associate Staff Scientist VID D, FHCRC, 2014-2015
24. Michelle Coleman, Ph.D. Postdoctoral fellow, October 2014 – July 2016
25. Brandon Gallaher, Ph.D. Postdoctoral fellow, October 2014 – September 2016