

CURRICULUM VITAE

Jamie Kathleen Scott, MD, PhD

CONTACT INFORMATION:

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PERSONAL INFORMATION:

Born 26 May 1953, Pasadena, CA, USA. Husband, Felix Breden. Daughter, Fran Breden (1993).

CITIZENSHIP:

Citizen of Canada and of the USA.

PROFESSIONAL EXPERIENCE:

Assistant Professor, Department of Chemistry, Simon Fraser University, 7/1993 - 8/1996.

Assistant Professor, Department of Biological Sciences, SFU, 9/1996 - 8/1998.

President, PhageScreen Inc., a phage-library screening service for academia and industry, 1/1996 - 9/2000.

Associate Professor, Dept. of Molecular Biology and Biochemistry (MBB), and Dept. of Biological Sciences, SFU, 9/1998 - 9/2002.

Professor, Molecular Biology and Biochemistry, 9/2002 - Current.

Professor, Faculty of Health Sciences, joint appointment with MBB, 4/2004 - Current.

EDUCATION:

Undergraduate:

Occidental College, Los Angeles, CA.

A. B., Biological Sciences, with honors in biological sciences, 1975.

Graduate:

University of Missouri-Columbia.

Ph. D. in Biological Sciences, 1985.

Supervisor: George P. Smith, Ph. D.

Thesis title: Cataloging Germline Immunoglobulin Lambda Variable Region Genes in the Mouse.

Professional:

St. Louis University School of Medicine, St. Louis, MO.
M. D., 1989.

Postdoctoral:

Massachusetts Institute of Technology, Cambridge.
Research Associate of William Thilly, Ph. D., 1985.
Research topic: Detecting mutational spectra in the HPRT gene.

University of Missouri-Columbia
NIH Postdoctoral Fellow with George P. Smith, Ph. D., 1989-1993.
NRSA title: Identifying Mimetic Peptides Using an Epitope Library.

The Scripps Research Institute, La Jolla, California

Senior Research Associate with J.A. Tainer, Ph. D. and E.J. Getzoff, Ph. D., 1992.
Research topic: Designing Peptide Mimics of a Discontinuous Epitope.

Residency (not completed):

University of Missouri-Columbia, Department of Medicine.
Resident physician (Clinical Investigator Pathway, Internal Medicine), 7/1989-6/1991.

FELLOWSHIPS AND AWARDS:

McLaughlin Fellowship in Infection & Immunity Research Award. Division of Biochemistry, University of Texas, Biomedical Branch, 1978.

NIH predoctoral fellow in Molecular Genetics and Cell Biology. Division of Biological Sciences, University of Missouri-Columbia, 1980-1984.

NIH National Research Service Award. Division of Biological Sciences, University of Missouri-Columbia, 1990-1992.

BC Health Research Foundation Scholar, 1995-1999.

Canada Research Chair, Tier I, in Molecular Immunity, April 2004-March 2017.

PROFESSIONAL MEMBERSHIPS:

Member: *All Nations Hope AIDS Network (ANHAN)*, *The American Association for the Advancement of Science (AAAS)*, *American Association of Immunologists (AAI and FASEB)*, *American Chemical Society (ACS)*, *American Society for Biochemistry & Molecular Biology (ASBMB)*, *American Society for Microbiology (ASM)*, *Canadian Association of HIV Researchers (CAHR)*, *Canadian Society for Molecular Biochemistry (CSMB)*, *Canadian Society for Immunology (CSI)*, *Canadian Society for Microbiology (CSM)*, *International*

AIDS Society (IAS), The Antibody Society (TABS), and The International Society for Vaccines.

ORGANIZER FOR MEETINGS:

Pre-Conference Workshop Organizer: Cambridge Healthtech Institute's 5th Annual PEGS Conference: 11th Annual Phage Display of Antibodies and Peptides, "Phage and Yeast Display Libraries and their Screening," Boston, MA. 6-7 April 2009.

Pre-Conference Workshop Organizer: IBC's 20th Annual Antibody Engineering Conference, "Working with IMGT and Other Antibody Sequence Databases," San Diego, CA. 6-10 December 2009.

Session Co-organizer: CAHR's 19th Annual Canadian Conference on HIV/AIDS Research, "Basic Biomedical Session," TCU Place, Saskatoon, SK. 13-16 May 2010.

Session Organizer: Cambridge Healthtech Institute's 6th Annual PEGS Conference: 12th Annual Phage Display of Antibodies and Peptides, "Phage and Yeast Display Libraries and their Screening," Boston, MA. 16-18 May 2010.

Session Organizer: IBC's 21st Annual Antibody Engineering Conference, "Deep Sequencing of Antibody Genes: Technology, Data Storage and Analysis," San Diego, CA. December 2010.

Session Co-organizer: IBC's 22nd Annual Antibody Engineering Conference, "Antibodies as Probes of Structure," San Diego, CA. December 2011.

Conference Organizer, Session Co-Chair: IBC's 23rd Annual Antibody Engineering Conference, "Deep Sequencing in B Cell Biology and Antibody Libraries," San Diego, CA. December 2012.

Plenary Panel Co-Chair: 2012 Keystone Symposium, Immunological Mechanisms of Vaccination, "B-Cell Memory to Vaccines," Ottawa, ON. 13-18 December 2012.

Workshop Co-Organizer and Co-Chair: IBC's 24th Annual Antibody Engineering Conference, "Identifying Clonal Lineages from NextGen Data Sets of Expressed V_H Gene Sequences," San Diego, CA. 8 December 2013.

Session Organizer and Chair: IBC's 24th Annual Antibody Engineering Conference, "Effects of Antibody Gene Variation and Usage on the Antibody Response," San Diego, CA. 10 December 2013.

Session Organizer and Chair: IBC's 25th Annual Antibody Engineering Conference, "Identifying Clonal Lineages From Next-Generation Data Sets of Expressed V_H Gene Sequences," San Diego, CA. 7 December 2014.

Meeting Organizer: Planning Workshop for Community Meeting: Analysis, Management, and Sharing of Antigen Receptor Repertoire Sequence Data, Vancouver Canada. 12-15 September 2014.

Meeting Organizer: Community Meeting: Analysis, Management, and Sharing of Antigen Receptor Repertoire Sequence Data, Simon Fraser University Morris J. Wosk Centre for Dialogue, Vancouver Canada. 29 May – 1 June 2015.

Member, Organizing Committee & Session Chair: 2nd Annual Vaccines against Antigenically Variable Viruses, Gateway Hotel & Conference Center, Ames, IA. 5-8 November 2015.

EDITORIAL:

Member of the editorial/advisory boards for: *PEGS* (January 2009-2011), *Journal of Molecular Recognition* (2007-2012), *Current HIV Research*, (2005-2011), *Molecular Diversity* (1995-2011), *MAbs* (March 2008-current), *PLoS One* (2012-current).

JOURNAL REVIEWER FOR:

Analytical Biochemistry, Bio/Technology, Biochemistry, Biotechniques, Canadian Journal of Microbiology, Chemical Reviews, Chemistry & Biology, Drug Discovery Today, European Journal of Biochemistry, Frontiers in Immunotherapies and Vaccines, Gene, Genome, Journal of Biological Chemistry, Journal of Immunological Methods, Journal of Immunology, Journal of Infectious Diseases, Journal of Microbial Methods, Journal of Molecular Biology, Journal of Molecular Recognition, Journal of Neuroimmunology, Journal of the American Chemical Society, Journal of Virology, mAbs, Molecular Diversity, Nature Biotechnology, Nature Medicine, Nature Methods, Philosophical Transactions B, Proceedings of the National Academy of Sciences, PLoS ONE, Protein Engineering, Proteins: Structure Function and Genetics, Trends in Biotechnology, Trends in Drug Discovery, Trends in Genetics, Trends in Microbiology USA, Vaccine.

GRANT REVIEW PANELS:

CIHR HIV Catalyst Vaccine Discovery Committee, January 27, 2009.

External Reviewer for NSERC grant application, 2009.

Reviewer for 2 CRC renewal applications, 2009.

Initial Reviewer, NIH Challenge Grants in HIV/AIDS research, June 2009.

NIH/NIAID *Ad hoc* review panel for RFA-AI-08-007, Highly Innovative Tactics to Interrupt Transmission of HIV (HIT-IT), 20-22 April 2009.

NIH/NIAID AIP Study Section, *ad hoc* reviewer, 11-12 March 2010.

NIH/NCI CCR Nanobiology Program site visit & review, Frederick MD, 3-5 May 2010.

NIH/GM Special Panel for PAR-10-074, Technology Development for High-Throughput Structural Biology Research, IAM, 27 August 2010.

NIH/NIAID HIVRAD grant site visit & review, Novartis Vaccines, Cambridge, MA, 3-4 June 2009. HIV Vaccine Research and Design review team, 2009 - Current.

Member, Scientific Advisory Committee for Protein Capture Reagents Program, NIH Common Fund, December 2013 – January 2015.

NIH AIDS Research Review Committee (AIDSRRRC), Member July 2011 – June 2015.

MEMBERSHIPS AND SCHOLARLY DUTIES:

Reviewer of applications for professorship position in the Dept. of Biotechnology, University of Natural Resources and Applied Life Sciences, Vienna, August 2010.

Member, Scientific Advisory Committee, Annual Antibody Engineering Meetings, International Business Conferences, 1997 - Current.

Faculty Representative, Canadian Society of Microbiologists, November 1997 - 2004.

Member, Canada Research Chairs Program's College of Reviewers, November 2000 - Current.

Scientific Advisory Committee, Novel Vaccines, Cambridge HealthTech Institute, October 2006 – 2010.

Founding Member, Advisory Board, The Antibody Society, December 2006 - Current.

CURRENT SUPPORT:

Planning and Dissemination Grant **Awarded:** 2014 **Period:** September 2014
Project Title: Workshop on Analysis, Storage and Sharing of Next-Generation Sequence Data from B-cell Receptor/Antibody and T-cell Receptor Repertoires.

Funding: CIHR **Total:** \$10,000

Involvement: Co-Applicant **Collaboration:** Principal Applicant: Dr. Felix Breden

Research Grant **Awarded:** 2011 **Period:** 2012 - 2015

Project Title: The Botswana-Canada HIV Vaccine Discovery Partnership

Funding: CIHR, Team Grant in HIV Vaccine Discovery & Social Research, “The Botswana-Canada AIDS Vaccine Discovery Partnership.” **Annual:** \$850,000 **Total:** \$2,516,624

Involvement: Co-Investigator **Collaboration:** Co-PIs: M. Wainberg, R. Musonda, Co-Is: J.K. Scott, G. Zaharatos, M. Essex, V. Novitsky, T. Rees, B. Brenner, C. Liang, R. Sanders, N. Bernard, R. Pantophlet.

Institution of Co-Investigator(s): McGill

Received 1 year no-cost extension.

Operating Grant **Awarded:** 2011 **Period:** 2011 - 2015
Project Title: Vaccines that Replicate Neutralization-Competent Structures within the Membrane Proximal External Region of HIV-1 gp41.
Funding: CIHR Operating Grant #247518 (VVP) **Annual:** \$63,700
Total: \$413,319
Involvement: Principal Investigator **Collaboration:** Co-PI: Dr. Jose Nieva (U Basque Country), Co-I: N. Gulzar.
Received 1 year no cost extension

Contract **Awarded:** 2014 **Period:** 2014-2015
Project Title: iReceptor- A Distributed Data Management System and Scientific Gateway for Mining `Next Generation` Sequence Data from Immune Responses
Funding: CANARIE
Involvement: Co-Investigator **Collaboration:** PI: Felix Breden; Administrative Liason: Pam Borghardt; Technical Liason: Brian Corrie; Systems Admin: Riley Shott (SFU)

Operating Grant **Awarded:** 2012 **Period:** 2012 - 2016
Project Title: Vaccines that Replicate the Neutralization-Competent Structure of the gp41 MPER
Funding: NIH/NIAID 1R01AI097051-01A1 **Annual:** \$701,154 **Total:** \$2,762,825
Involvement: Principal Investigator **Collaboration:** Co-PIs: Drs. Jose Nieva (U Basque Country), Shan Lu (U. Mass Med School), and W. Degrado (UCSF).

Conference Grant **Awarded:** 2015 **Period:** 2015 - 2016
Project Title: Workshop on Analysis, Storage and Sharing of Next-Generation Sequence Data from B-cell Receptor/Antibody and T-cell Receptor Repertoires.
Funding: NIH/ NIAID **Annual:** \$3,000 **Total:** \$3,000
Involvement: PI **Collaboration:** Principal Applicant: Dr. Tom Kepler, Co-PI: Dr. Felix Breden

Research Grant **Awarded:** 2011 **Period:** 2011 - 2018
Project Title: Tier 1 Canada Research Chair in Molecular Immunity
Funding: Canada Research Chair **Annual:** \$200,000 CDN **Total:** \$1,400,000 CDN
Involvement: Principal Investigator

Operating Grant **Awarded:** 2014 **Period:** 2014-2018
Project Title: Targeting Neutralizing Epitopes in the MPER of HIV Env
Funding: NIH/NIAID 1R01AI111851-01 **Annual:** \$71,253USD **Total:** \$286,012
Involvement: Co-Investigator **Collaboration:** PI: Dr. Chinglai Yang (Emory University), Co-Is: N Haigwood, Y Li, R. Compans.

PREVIOUS SUPPORT:

Development Grant **Awarded:** 2009 **Period:** 2009 - 2010
Project Title: Prophylactic Vaccines for Social Networks of Injection Drug Users (this grant supports development of a full application for an Emerging Team Grant due 1 March 2010)

Funding: CIHR Type: Emerging Team Grant in HIV Vaccine Discovery and Social Research **Total:** \$ 10,000

Involvement: Co-Investigator **Collaboration:** with R. Harrigan, from December 2009 to February 2010.

Equipment Grant **Awarded:** 2010 **Period:** 2010 - 2011

Project Title: A bio-containment unit to support flow cytometry and sorting of infected cells

Funding: NSERC RTI **Total:** \$56,890

Involvement: Principal Investigator

Strategic Grant **Awarded:** 2008 **Period:** 2008 - 2011

Project Title: Dynamic Cell Immunobiosensor for Identifying Antigen-specific Antibody-secreting Cells

Funding: NSERC Strategic **Annual:** \$ 128,816 **Total:** \$ 386,450

Involvement: Co-Investigator **Collaboration:** PI: K. Kavanagh

Research Grant **Awarded:** 2008 **Period:** 2008 - 2011

Project Title: Origin of Antibodies with Long CDR-H3 Loops in HIV Infection & Autoimmunity

Funding: NIH Type: R21 Innovation Grant proposal R21 AI076176-01 A2 **Annual:** \$ 162,869 **Total:** \$ 325,739

Involvement: Co-Investigator **Collaboration:** with F. Breden

Research Grant **Awarded:** 2004 **Period:** 2004 - 2011

Project Title: Canada Research Chair in Molecular Immunity

Funding: Canada Research Chair **Type:** External **Annual:** \$ 179,250 **Total:** \$ 1,254,750

Involvement: Principal Investigator

Equipment Grant **Awarded:** 2011 **Period:** 2011 - 2012

Project Title: A Surface Plasmon Resonance Instrument for the Study of Biomolecular Interactions

Funding: NSERC RTI **Total:** \$132,191

Involvement: Principal Investigator, Co-Is: 9 others

PUBLICATIONS:

[Contributors from Dr. Scott's laboratory are underlined.]

- 1 van Houten, N.E., Henry, K.A., Smith, G.P., and **Scott, J.K.** 2010. Engineering Filamentous Phage as a Carrier to Focus Antibody Responses against a Peptide. *Vaccine* **28(10)**: 2174-2185.
- 2 Irving, M.B., Craig, L., Menendez, A., van Houten, N.E., Montero, M., and **Scott, J.K.** 2010. Exploring Peptide Mimics for the Production of Antibodies against Discontinuous Protein Epitopes. *Molec. Immunol.* **47(5)**: 1137-1148.

- 3 Breden, F., Lepik, C., Longo, N.S., Montero, M., Lipsky, P.E., and **Scott, J.K.** 2010. Comparison of Antibody Repertoires Produced by HIV-1 Infection, Other Chronic and Acute Infections, and Systemic Autoimmune Disease. *PLoS ONE* **6(3)**: e16857.
- 4 Romanuik, S.F., Grist, S.M., Gray, B.L., Hohertz, D., Kavanagh, K., Gulzar, N., **Scott, J.K.**, Nirwan, R., Hui, C., Brolo, A.G., and Gordon, R. 2010. Sensing of Antibodies Secreted by Microfluidically Trapped Cells via Extraordinary Optical Transmission through Nanohole Arrays. *IEEE Sensors*, 2105-2108.
- 5 Zhu, Z., Qin, H.R., Chen, W., Zhao, Q., Shen, X., Schutte, R., Wang, Y., Ofek, G., Streaker, E., Prabakaran, P., Fouda, G.G., Liao, H.X., Owens, J., Louder, M., Yang, Y., Klaric, K.A., Moody, M.A., Mascola, J.R., **Scott, J.K.**, Kwong, P.D., Montefiori, D., Haynes, B.F., Tomaras, G.D., and Dimitrov, D.S. 2011. Cross-reactive HIV-1-neutralizing Human Monoclonal Antibodies Identified from a Patient with 2F5-like Antibodies. *J Virol.* **85(21)**: 11401-11408.
- 6 Romanuik, S.F., Grist, S.M., Haq, M., Gray, B.L., Gulzar, N., **Scott, J.K.**, Hohertz, D., Kavanagh, K.L, Nirwan, R., Hui, C, Brolo, A.G., and Gordon, R. 2011. Microfluidic Trapping of Antibody-secreting Cells. *J. Med. & Biol. Eng.* **31(2)**: 121-127.
- 7 Romanuik, S.F., Grist, S.M., Gray, B.L., Hohertz, D., Kavanagh, K., Gulzar, N., **Scott, J.K.**, Nirwan, R., Hui, C., Brolo, A.G., and Gordon, R. 2011. Detecting Antibodies Secreted by Trapped Cells Using Extraordinary Optical Transmission. *IEEE Sensors.* **11(11)**: 2732-2739.
- 8 Henry, K.A., Murira, A., van Houten, N.E., and **Scott, J.K.** 2011. Developing Strategies to Enhance and Focus Humoral Immune Responses Using Filamentous Phage as a Model Antigen. *Bioeng Bugs.* **2(5)**: 275-283.
- 9 Singh, H., Henry, K.A., Wu, S.S.T., Chruscinskia, A., Utz, P.J., and **Scott, J.K.** 2011. Reactivity Profiles of Broadly Neutralizing Anti-HIV-1 Antibodies Are Distinct from Those of Pathogenic Autoantibodies. *AIDS.* **25(10)**: 1247-1257
- 10 Raymond-Bouchard, I., Carroll, C.S., Nesbitt, J.R., Henry, K.A., Pinto, L.J., Moinzadeh, M., **Scott, J.K.**, and Moore, M.M. 2012. The MIRB Ferrisiderophore Transporter of *Aspergillus fumigatus*: Structural Requirements for Activity. *Eukaryot Cell.* **11(11)**: 1333-1344.
- 11 Montero, M., Gulzar, N., Klaric, K.A., Donald, J., Lepik, C., Wu, S., Tsai, S., Julien, J.P., Hessell, A., Wang, S., Lu, S., Burton, D., Pai, E., DeGrado, W., and **Scott, J.K.** 2012. Neutralizing Epitopes in the MPER of HIV-1 gp41 Are Influenced by the Transmembrane Domain and the Plasma Membrane. *J. Virol.* **86(6)**: 2930-2941.
- 12 **Scott, J.K.**, Pantophlet, R., Craig, L. 2012. Complex Binding Sites Made to Order. *Nature Biotechnol.* (News and Views.) **30(2)**: 154-155.
- 13 Watson, C.T., Steinberg, K.M., Huddleston, J., Warren, R.L., Malig, M., Schein, J., Willsey, A.J., Joy, J.B., **Scott, J.K.**, Graves, T., Wilson, R.K., Holt, R.A., Eichler, E.E., and Breden, F. 2013. Complete Haplotype of the Human Immunoglobulin Heavy Variable IGHV genes from a Single Individual and Characterization of Allelic and Copy Number Variation from Haplotype Sequence Analysis. *Am J Hum Genet.*, **92(4)**: 530-46.

- 14 Almagro J.C., Gilliland G.L., Breden F, **Scott J**, Sok D, Pauthner M, Reichert J.M., Helguera G, Andrabi R, Mabry R, Bléry M, Voss J.E., Laurén J, Abuqayyas L, Barghorn S, Ben-Jacob E, Crowe J.E., Huston J.S., Johnston S.A., Krauland E, Lund-Johansen F, Marasco W.A., Parren P.W., Xu K.Y. 2014. Antibody Engineering and Therapeutics. *mAbs*. **6(3)**: 577-618.

MANUSCRIPTS IN PREPARATION:

Henry, K.A., Wang, C., Wang, X., Menendez, A., Zwick, M.B., Pantophlet, R., VanCott, T.C., Kingsley, L., Little, S.J., Rinaldo, C., Burton, D.R., Richman, D.D. Silverman G., and **Scott, J.K.** Evolution of the Antibody Response against Envelope Proteins during HIV-1 Infection. In preparation for submission to *AIDS*.

Menendez, A., Bahr, S.J., Mai, M.J., Wu, S., and **Scott, J.K.** An Optimized Peptide Ligand for HIV-1 Broadly Neutralizing Antibody, 4E10. In preparation for submission to *PLoS One*.

Gulzar, N., Montero, M., Wang, S., Klaric, K-A., Lepik, C., Ross, T.M., Shan, L., and **Scott, J.K.** Efficacy of DNA Vaccines that Present the Membrane Proximal External Region of HIV-1 gp41 Tethered to Alternative Transmembrane Domains. In preparation for submission to *Journal of Virology*.

Gulzar, N., Ahmed, F., Rujas, E., Apellaniz, B., Wang, S., Klaric, K.-A., Montero, M., Lu, S., Nieva, J.L. and **Scott, J.K.** Optimizing DNA-prime / Peptide-liposome-boost Immunization Strategies to Elicit Neutralizing Antibodies against the MPER of HIV-1 gp41. To be submitted to *Journal of Virology*.

PATENTS:

Method of Obtaining Small, Conformationally Rigid Conopeptides.

Co-inventors: B.M. Olivera, D.R. Hillyard, R.A. Myers, **J.K. Scott**, G.P. Smith
USA. Issue date: 23 March 1999. Patent# 5,885,780

Peptides for Use as a Vaccine and/or Treatment for HIV Infection.

Co-inventors: **J.K. Scott**, D.R. Burton, C.F. Barbas, III, M.B. Zwick, P.H.W.I. Parren
Canada/USA. Filed: 01 May 2000.

Immunogenicity of the Membrane-Proximal External Region of HIV-1 gp41 Protein as a DNA Vaccine. US provisional patent filed on behalf of SFU, 26 March 2006.

Co-inventors: M. Montero and **J.K. Scott**

INVITED PRESENTATIONS SINCE 2009:

- 1 The Biodesign Institute, School of Life Sciences, Arizona State University, Phoenix. 19 January 2009.
Title: Role(s) of Broadly Neutralizing Antibodies against HIV-1 in Vaccine Design.
- 2 Cambridge Healthtech Institute's 5th Annual PEGS Conference: 11th Annual Phage Display of Antibodies and Peptides, Boston, MA. 6-7 April 2009. (Workshop organizer and speaker.)
Workshop Title: Phage and Yeast Display Libraries and their Screening.
- 3 Cambridge Healthtech Institute's 5th Annual PEGS Conference: 11th Annual Phage Display of Antibodies and Peptides, Boston, MA. 6-7 April 2009. (Speaker.)
Title: Engineering the Filamentous Phage Surface to Alter Its Immunogenicity.

- 4 NSTI Nanotechnology Conference and Exposition Symposium: Phage Nanobiotechnology, Houston, TX. 3-7 May 2009.
Title: Engineering the Filamentous Phage Surface to Alter Its Immunogenicity.
- 5 Novartis Vaccines and Diagnostics, Inc., Cambridge, MA. 5 June 2009.
Title: Mechanisms of Antigen Mimicry by Peptides and Applications to Vaccine Design.
- 6 University of Victoria, Department of Chemistry, BC. 25 August 2009.
Title: Structure and Function of Antibodies.
- 7 IBC's 20th Annual Antibody Engineering Conference, San Diego, CA. 6-10 Dec 2009.
Workshop Session Title: Interactive Exercises –Working with IMGT and other Antibody Sequence Databases.
- 8 Cambridge Healthtech Institute's 6th Annual PEGS Conference: 12th Annual Phage Display of Antibodies and Peptides, Boston, MA. 17-21 May 2010. (Workshop co-organizer and speaker.)
Workshop Title: Phage and Yeast Display Libraries and their Screening.
- 9 1st Aegean International Conference on Molecular Recognition. 6-11 June 2010.
Title: Mechanisms of Epitope Mimicry by Peptides: Applications to HIV Vaccine Design.
- 10 Cambridge Healthtech Institute (CHI) 5th annual conference, Novel Vaccines: Design & Development, Cambridge, MA. 17-18 August 2010.
Title: Filamentous phage as a carrier for conjugate vaccines.
- 11 University of the Basque Country, Dept of Biochemistry, Bilbao, Spain. 21 October 2010.
Title: HIV Vaccines that Target Sites of Antibody-Mediated Neutralization on the Viral Envelope.
- 12 24th Annual Meeting, Canadian Society for Immunology, Fairmont Chateau Lake Louise, AB. 8-11 April 2011.
Title: Features of Antibodies against Chronic and Acute Viral Infections: Implications for Vaccine Design
- 13 Lady Davis Institute, McGill University, Montreal. 16 May 2011.
Title: Neutralizing Antibodies against HIV-1 and How They Inform Vaccine Design.
- 14 Cambridge Healthtech Institute (CHI) 6th Annual Novel Vaccines: Design and Development, Boston Marriott Cambridge Hotel, MA. 16-17 August 2011.
Title: Vaccines to elicit broadly neutralizing antibodies against the membrane proximal external region of HIV gp41.
- 15 5th Vaccine and ISV Annual Global Congress. Seattle Marriott Waterfront, WA, USA. 2-4 October 2011.
Title: Optimizing Exposure of the Neutralization-Competent Structure of the HIV-1 gp41 Membrane Proximal External Region.
- 16 1st French-Israeli International Meeting on B cells and Therapeutic Antibodies. The Hebrew University-Hadassah Medical School, Jerusalem, Israel. 23-25 October 2011.
Title: Features of antibodies produced during infection by HIV-1 and other chronic viruses, and their implications for vaccine design.

- 17 Gordon Research Conference on Peptides, Chemistry, and Biology of Peptides as Signals, BioMaterials, and Therapeutics. Ventura Beach Marriott, CA. 19-24 February 2012.
Title: How the neutralization competent structure of the HIV-1 MPER informs peptide vaccine design.
- 18 AIDS 2012, XIX AIDS Conference, Washington, DC. 21-23 July 2012.
Title: Novel DNA Vaccine Candidates that Mimic the Neutralization-Competent Structure of the MPER of HIV-1 gp41.
- 19 PIMS Disease Dynamics. University of British Columbia, Vancouver, BC. 18 January 2013.
Title: Dynamics of the immune response to HIV infection and their implications for vaccine design.
- 20 The 13th Annual World Vaccine Congress, The Ritz Carlton, Washington, DC. 16-18 April 2013.
Title: A DNA-Prime, Liposome-Boost Immunization Strategy for Eliciting Broadly Neutralizing Antibodies against the MPER of HIV-1 gp41.
- 21 The Science of Vaccines: A Panel Discussion, Centre for Scientific Inquiry, SFU Harbour Centre, Vancouver, BC. 26 April 2013.
Title: Vaccines: What they are and how they work.
- 22 Faculty of Health Sciences, Simon Fraser University, Burnaby, BC. 23 May 2013.
Title: The Filamentous Bacteriophage: A Nanoparticle Platform for Vaccine Design and for Probing the Antibody Response.
- 23 ImmunoVancouver 2013, Fourth Annual Vancouver Immunology Retreat, Simon Fraser University, Vancouver, BC. 13 June 2013.
Title: Features of the Antibody Response against HIV-1 Infection and Their Relation to the Development of Broadly Neutralizing Antibodies.
- 24 IBC's 24th Annual Antibody Engineering Conference, San Diego, CA. 8-12 Dec 2013.
Title: Antibody Polyspecificity and Auto Reactivity: Their Relation to Health and Disease.
- 25 IBC's 24th Annual Antibody Engineering Conference, San Diego, CA. 8-12 Dec 2013.
Title: Biased VH Gene Usage by Antibodies of B Cell Subsets in HIV Infection and SLE.
KA Henry.
- 26 Genmab, University of Utrecht, Utrecht, Netherlands. 19 May 2014.
Title: Engineering Filamentous Bacteriophage as an Immunogenic, Nanoparticle Carrier for Conjugate Vaccines.
- 27 Karolinska Institute, Stockholm Sweden (Host: Gunilla Karlsson Hedstam). 26 May 2014.
Title: Evolution of the Antibody Response during HIV-1 Infection and the Emergence of Neutralizing Antibodies.
- 28 VVAV Conference, College of Veterinary Medicine, Iowa State University, Ames IA. 18-20 June 2014.
Title: Evolution of the Neutralizing Antibody Response during HIV-1 Infection.
- 29 AfriCan Forum 2: African Canadian partnership on capacity building in HIV prevention and intervention Research, Johannesburg, South Africa. 16-18 February 2015.
Title: Analysis of HIV pol diversity in the concentrated HIV epidemic in Saskatchewan

- 30 7th Affinomics Workshop: Affinity Proteomics, Alpbach, Austria. 9-11 March 2015.
Title: The evolution of peptide vaccines to protect against HIV-1 infection

POSTERS:

Presenter is underlined

- 1 Hohertz, D., Gulzar, N., Romanuik S., Brolo, A.G., Gordon, R., Gray, B.L., **Scott, J.K.**, and Kavanagh, K.L. Exploring the Detection Limit of Nanohole Array Sensors. The 14th Annual Meeting of The Pacific Centre for Advanced Materials and Microstructures (PCAMM). Burnaby, Canada. 12 December 2009.
- 2 Hohertz, D., Gulzar, N., Romanuik, S., Gray, B.L., **Scott, J.K.**, Brolo, A.G., Gordon, R., Berry, J., and Kavanagh, K.L. A Surface Plasmon Resonance Cellular Antibody Sensor. 2010 MRS Spring Meeting. San Francisco, California. 5-9 April 2010. [Oral presentation]
- 3 Brolo, A.G., Gordon, R., Hui, C., Kavanagh, K.L., **Scott, J.K.**, Gray, B.L., Hohertz, D., Gulzar, N., Grist, S., and Romanuik, S. Chemical sensors based on the extraordinary optical transmission (EOT) and their application to antibody screening. SPIE Defense, Security and Sensing 2010. Orlando, Florida. 5-9 April 2010. [Oral presentation]
- 4 Hohertz, D., Gulzar, N., Romanuik, S., Gray, B.L., **Scott, J.K.**, Brolo, A.G., Gordon, R., Berry, J., and Kavanagh, K.L. A Surface Plasmon Resonance Cellular Antibody Sensor. The 2010 Simon Fraser University Exchange. Vancouver, Canada. 6 May 2010. [Oral presentation. This was awarded best presentation of the meeting.]
- 5 Henry, K.A., Murira, A., Lepik, C., Bradbury, A.R.M., Breden, F.B., and **Scott, J.K.** Origins of Broadly Neutralizing Anti-HIV-1 Antibodies as Elucidated by Deep Sequencing of Expressed Immunoglobulin Heavy Chain Repertoires. Conference on Sequencing, Finishing and Analysis in the Future. Santa Fe, NM. 2-4 June 2010.
- 6 Montero, M., Klaric, K.A., Lepik, C., Wu, S., Wang, S., Lu, S., Gulzar, N., and **Scott, J.K.** The Transmembrane Domain of HIV-1 gp41 Influences the Presentation of a Neutralizing Epitope on the Membrane Proximal External Region in the Context of the Plasma Membrane. 1st Aegean International Conference on Molecular Recognition. 6-11 June 2010.
- 7 Romanuik, S., Grist, S.M., Haq, M., Gray, B.L., Gulzar, N., and **Scott, J.K.** The Microfluidic Trapping of Antibody-Secreting Cells. The 33rd Annual Conference of the Canadian Medical and Biological Engineering Society. Vancouver, Canada. 15-18 June 2010. [Oral presentation] Awarded the 2010 Outstanding Research Award (\$1,000 CND).
- 8 Montero, M., Klaric, K.A., Lepik, C., Wu, S., Wang, S., Lu, S., Gulzar, N., and **Scott, J.K.** The Transmembrane Domain of HIV-1 gp41 Influences the Presentation of a Neutralizing Epitope on the Membrane Proximal External Region in the Context of the Plasma Membrane. ImmunoVancouver 2010 (A CIHR-sponsored conference). Chan Center, University of BC, Vancouver. 28 June 2010.
- 9 Henry, K.A., Murira, A., Lepik, C., Bradbury, A.R.M., Breden, F.B., and **Scott, J.K.** Origins of Broadly Neutralizing Anti-HIV-1 Antibodies as Elucidated by Deep Sequencing of Expressed Immunoglobulin Heavy Chain Repertoires. ImmunoVancouver 2010 (A CIHR-sponsored conference). Chan Center, University of BC, Vancouver. 28 June 2010.

- 10 Romanuik, S., Grist, S.M., Haq, M., Gray, B.L., *Gulzar, N.*, and **Scott, J.K.** The Microfluidic Trapping of Antibody-Secreting Cells. The 8th Annual International Conference on Nanochannels, Microchannels, and Minichannels. Montréal, Canada. 1-5 August 2010. [Oral presentation]
- 11 *Gulzar, N.*, Hohertz, D., Hui, C., Nirwan, R., Romaniuk, S.F., Grist, S., Gordon, R., Gray, B.L., Brolo, A.G., Kavanagh, K.L., and **Scott, J.K.** A Nanoarray-based Immunobiosensor for the Detection of an Antibody Secreted by a B-Cell Hybridoma. The 24th Annual Symposium of the Protein Society. San Diego, USA. 1-5 August 2010.
- 12 Romanuik, S.F., Grist, S.M., Gray, B.L., *Gulzar, N.*, **Scott, J.K.**, Hohertz, D., Kavanagh, K., Nirwan, R., Hui, C., Brolo, A.G., and Gordon, R. The Detection of Antibodies Secreted by Microfluidically Trapped Biological Cells via Extraordinary Optical Detection Based Nanoscale immunobiosensing Arrays. The 14th Annual International Conference on Miniaturized Systems for Chemistry and Life Sciences (MicroTAS 2010). Groningen, The Netherlands. 3-7 October 2010. [Oral presentation]
- 13 *Murira, A.*, Henry, K.A., Holland J., and **Scott, J.K.** Filamentous phage as a model for tracking B cell responses during early and chronic infection. Keystone Symposium on immunological mechanisms of vaccination. Seattle, WA. 27 October - 1 November 2010.
- 14 Romanuik, S.F., Grist, S.M., Gray, B.L., Hohertz, D., Kavanagh, K.L., *Gulzar, N.*, **Scott, J.K.**, Nirwan, R., Hui, C., Brolo, A.G., and Gordon, R. Sensing of Antibodies Secreted by Microfluidically Trapped Cells via Extraordinary Optical Transmission through Nanohole Arrays. Oral presentation at The 9th Annual IEEE Conference on Sensors (IEEE Sensors 2010). Waikoloa, HI, USA. 3 November 2010.
- 15 *Montero, M.*, *Gulzar, N.*, *Klaric, K.A.*, Donald, J., Wang, S., *Lepik, C.*, Tsai, S., Wu, S., Julien, J.P., Hessell, A., Lu, S., Ross, T.M., Zhu, Z., Dimitrov, D.S., Burton, D.R., Pai, E.F., DeGrado, W.F., and **Scott, J.K.** Exposure of the Neutralization-competent Structure of the HIV gp41 Membrane Proximal External Region. Keystone Symposium (X8) Protection from HIV: Targeted Intervention Strategies. Whistler Conference Centre, BC. 20-25 March 2011.
- 16 *Murira, A.*, Henry, K.A., Holland, J., and **Scott, J.K.** Filamentous Phage as a Model Immunogen for Tracking B-cell Responses to Infection and Vaccination. Keystone Symposium (D6) B Cells: New Insights into Normal vs. Dysregulated Function. Fairmont Chateau Whistler, BC. 12-17 April 2011.
- 17 *Gulzar, N.*, *Montero, M.*, *Klaric, K.A.*, Donald, J., Wang, S., *Lepik, C.*, Tsai, S., Wu, S., Julien, J.-P., Hessell, A., Lu, S., Burton, D., Pai, E., DeGrado, W., and **Scott, J.K.** Promotion of the Neutralization-competent Structure of the HIV-1 gp41 Membrane Proximal External Region when Tethered to its Native Transmembrane Domain, and Expressed in the Context of the Plasma Membrane: Implications for Vaccine Design. 20th Annual Meeting of the Canadian Association of HIV Researchers. Westin Harbour Castle Hotel, Toronto, ON. 14-17 April 2011.
- 18 Bailey, J.J., Henry, K.A., **Scott, J.K.**, and Bundle, D.R. A Sugar-Coated Phage Vaccine Against HIV-1. 7th annual National Carbohydrate Symposium. Banff, AB. May 2011.

- 19 Gulzar, N., Montero, M., Klaric, K.A., Donald, J., Wang, S., Lepik, C., Tsai, S., Wu, S., Julien, J.-P., Hessel, A., Lu, S., Burton, D., Pai, E., DeGrado, W., and Scott, J.K. Promotion of the Neutralization-competent Structure of the HIV-1 gp41 Membrane Proximal External Region when Tethered to its Native Transmembrane Domain, and Expressed in the Context of the Plasma Membrane: Implications for Vaccine Design. Immunology 2011. 98th Annual Meeting of the American Association of Immunology meeting. San Francisco, CA. 13-17 May 2011. [Oral Presentation]
- 20 Murira, A., Henry, K.A., Holland, J., and Scott, J.K. Filamentous Phage as a Model Immunogen for Tracking B-Cell Responses to Infection and Vaccination. 2nd Annual ImmunoVancouver Meeting. Vancouver, BC. June 2011.
- 21 Montero, M., Gulzar, N., Klaric, K.A., Donald, J., Wang, S., Lepik, C., Tsai, S., Wu, S., Julien, J.P., Hessel, A., Lu, S., Ross, T.M., Zhu, Z., Dimitrov, D.S., Burton, D., Pai, E., Degrado, W., and Scott, J.K. Promotion of the Neutralization-Competent Structure of the HIV-1 gp41 Membrane Proximal External Region: Implications for Vaccine Design. 2nd Annual ImmunoVancouver Meeting. Vancouver, BC. June 2011.
- 22 Zhu, Z., Qiin, H.R., Chen, W., Zhao, Q., Shen, X., Schutte, R., Wang, Y., Ofek, G., Streaker, E., Prabakaran, P., Fouda, G.G., Liao, H.-X., Owens, J., Louder, M., Yang, Y., Klaric, K.A., Moody, M.A., Mascola, J.R., Scott, J.K., Kwong, P.D., Montefiori, D., Haynes, B.F., Tomaras, G.D., and Dimitrov, D.S. 2F5-like Cross-reactive HIV-1-neutralizing Monoclonal Antibodies with Low Number of Somatic Mutations. AIDS Vaccine 2011. Bangkok, Thailand. 12-15 Sept 2011.
- 23 Murira, A., Henry, K.A., Holland, J., and Scott, J.K. Filamentous Phage as a Model Immunogen for Tracking B-cell Responses to Infection and Vaccination. 1st French-Israeli International Meeting on B cells and Therapeutic Antibodies. Jerusalem, Israel. October 2011.
- 24 Montero, M., Gulzar, N., Klaric, K.A., Donald, J., Wang, S., Lepik, C., Tsai, S., Wu, S., Julien, J.P., Hessel, A., Lu, S., Burton, D., Pai, E., Degrado, W., and Scott, J.K. Promotion of the Neutralization-Competent Structure of HIV-1 gp41 Membrane Proximal External Region: Implications for Vaccine Design. 1st French-Israeli International Meeting on B cells and Therapeutic Antibodies. Jerusalem, Israel. October 2011.
- 25 Murira, A., Henry, K.A., Holland, J., and Scott, J.K. Filamentous Phage as a Model Immunogen for Tracking B-cell Responses to Infection and Vaccination. 5th Vaccine and ISV Annual Global Congress. Seattle, WA. October 2011.
- 26 Romanuik, S.F., Grist, S.M., Gray, B.L., Gulzar, N., Scott, J.K., Hohertz, D., Kavanagh, K., Nirwan, R., Hui, C., Brolo, A.G., and Gordon, R. The Detection of Antibodies Secreted by Microfluidically Trapped Biological Cells via Extraordinary Optical Detection Based Nanoscale immunobiosensing Arrays. Pacific Centre for Advanced Materials and Microstructures (PCAMM) Annual Meeting. UBC, Vancouver, Canada. 11 December 2011.
- 27 Grewal, P., Gulzar, N., Levett, P., Brooks, J., and Scott, J.K. The HIV-1 Epidemic in Saskatchewan: A Population-Based Approach to Vaccine Design. 7th annual UW/UBC/SFU Public Health Symposium. Blaine, WA. January 2012.

- 28 *Gulzar, N., Montero, M., Klaric, K.A.,* Donald, J., Wang, S., *Lepik, C., Tsai, S., Wu, S., Julien, J.P., Hessel, A., Lu, S., Ross, T.M., Dimitrov, D.S., Morris, L., Burton, D.R., Pai, E.F., DeGrado W.F., and Scott, J.K.* Optimizing Exposure of Neutralizing Epitopes within the Membrane Proximal External Region of HIV-1 gp41. 7th annual UW/UBC/SFU Public Health Symposium. Blaine, WA. January 2012.
- 29 *Gulzar, N., Montero, M., Klaric, K.A.,* Donald, J., *Lepik, C., Julien, J.P., Burton, D., Pai, E., DeGrado, W., and Scott J.K.* Neutralizing Epitopes in the MPER of HIV-1 gp41 Are Influenced by the Transmembrane Domain and the Plasma Membrane: Implications for Vaccine Design. 19th Conference on Retroviruses and Opportunistic Infections. Seattle, WA. 5-8 March 2012.
- 30 *Gulzar, N., Montero, M., Klaric, K.A.,* Donald, J., Wang, S., *Lepik, C., Tsai, S., Wu, S., Julien, J.P., Hessel, A., Lu, S., Ross, T. M., Dimiter, D., Morris, L., Burton, D., Pai, E., DeGrado, W., and Scott, J.K.* Influence of the Transmembrane Domain on Neutralizing Epitopes in the MPER of HIV-1 gp41: Implications for Vaccine Design. Keystone Symposium on HIV Vaccines (X5). Keystone, Colorado. 21-26 March 2012.
- 31 *Gulzar, N., Montero, M., Klaric, K.A., Lepik, C.,* Donald, J., Tsai, S., Wu, S., Wang, S., DeGrado, W., Lu, S., and **Scott, J.K.** DNA Vaccines that Elicit Antibodies Targeting the MPER of HIV-1 gp41. Canadian Association for AIDS/HIV Research, 21st Annual Meeting. Montreal, Canada. 19-22 April 2012.
- 32 *Gulzar, N., Montero, M., Klaric, K.A.,* Donald, J., Wang, S., *Lepik, C., Tsai, S., Wu, S., Julien, J.P., Hessel, A., Lu, S., Ross, T.M., Dimiter, D., Morris, L., Burton, D., Pai, E., DeGrado, W., and Scott, J.K.* Influence of the Transmembrane Domain on Neutralizing Epitopes in the MPER of HIV-1 gp41: Implications for Vaccine Design. 3rd Annual ImmunoVancouver Meeting. Vancouver, BC. 31 May 2012.
- 33 *Gulzar, N., Montero, M., Klaric, K.A., Lepik, C.,* Donald, J., Tsai, S., Wu, S., Wang, S., Degrado, W., Lu, S., and **Scott, J.K.** Novel DNA Vaccine Candidates that Mimic the Neutralization-Competent Structure of the MPER of HIV-1 gp41. AIDS 2012, XIX AIDS Conference. Washington, DC, USA. 22-27 July 2012. [Poster and Oral Presentation]
- 34 **Scott, J.K.,** *Gulzar, N., Klaric, K.A.,* Ross, T.M., Lu, S., and Wang, S. DNA Vaccines that Express the MPER of HIV-1 gp41 Elicit Different Antibodies Depending Upon Their Transmembrane and Cytoplasmic Domains. AIDS Vaccine 2012. Boston, USA. 9-12 Sept 2012.
- 35 *Lee, J., Gulzar, N., Scott, J.K.,* and Li, P.C.H. A Nanofluidic Bioarray Chip for Fast and High-throughput Detection of Antibodies in Biological Fluids. Proceedings of SPIE 2012 Global Congress on NanoMedicine. Incheon, South Korea. 10-13 September 2012. [Oral Presentation]
- 36 *Murira, A., Henry, K.A.,* and **Scott, J.K.** Murine B-cell Responses during Hyperimmunization with a Virus-like Particle. Keystone Symposium on Immunological Mechanisms of Vaccination. Ottawa, ON. 13-18 Dec 2012.
- 37 *Murira, A., Henry, K.A.,* and **Scott, J.K.** Murine B-cell Responses during Hyperimmunization with a Virus-like Particle. Keystone Symposium on B cell Development (X1) and HIV Vaccines (X2). Keystone, CO, USA. 10-15 Feb 2013.

- 38 *Murira, A., Henry, K.A.,* Aghaeepour, N., Brinkman, R.R., Moir, S., and **Scott, J.K.** A systems immunology approach to investigate the antibody response during HIV infection. Keystone Symposium on B cell Development (X1) and HIV Vaccines (X2). Keystone, CO, USA. 10-15 Feb 2013.
- 39 *Henry, K.A.,* Wang, X., Wang, C., Wu, S.S.T., Kingsley, L., Rinaldo, C.R. Jr, Richman, D.D., Silverman, G.J., and **Scott, J.K.** Serological profiling of antibody responses during HIV infection. Keystone Symposium on B cell Development (X1) and HIV Vaccines (X2). Keystone, CO, USA. 10-15 Feb 2013.
- 40 *Murira, A., Henry, K.A.,* and **Scott, J.K.** Murine B-cell responses during hyperimmunization with a virus-like particle. Canadian Society for Immunology 2013. Whistler, BC. 5-8 April 2013.
- 41 Bailey, J.J., Reiz, B., *Henry, K.A.,* **Scott, J.K.,** and Bundle, D.R. HIV-1 glycoconjugate vaccine utilizing filamentous bacteriophage as an immunogenic carrier. Canadian Society for Immunology 2013. Whistler, BC. 5 April 2013.
- 42 *Henry, K.A., Murira, A.,* Joy, J.B., Aghaeepour, N., Chen, W., Prabakaran, P., Dimatrov, D.S., Brinkman, R.R., Breden, F., and **Scott, J.K.** Tools for characterizing phenotypic and immunogenetics features of the B-cell response against HIV. Canadian Society for Immunology 2013. Whistler, BC. 5-8 April 2013.
- 43 *Gulzar, N., Klaric, K.A., Parfyonov, M., Montero, M.,* Hannigan, B., McCully, M., Ulas, G., Wang, S., Huarte, N., Appellaniz, B., Nieva, J., Lu, S., DeGrado, W.F., and **Scott, J.K.** DNA Vaccines that Optimally Present Neutralizing Epitopes within the Membrane Proximal External Region of HIV-1 gp41. Canadian Association for AIDS/HIV Research, 22nd Annual Meeting. Vancouver, Canada. 10 April 2013.
- 44 *Bailey, J.J., Henry, K.A.,* **Scott, J.K.,** and Bundle, D.R. An HIV-1 Glycoconjugate Vaccine Utilizing Filamentous Phage as an Immunogenic Carrier. 9th Annual National Carbohydrate Symposium. Banff, Alberta. 8-10 May 2013.
- 45 *Gulzar, N., Klaric, K.A., Parfyonov, M., Montero, M.,* Hannigan, B., McCully, M., Ulas, G., Wang, S., Huarte, N., Appellaniz, B., Nieva, J., Lu, S., DeGrado, W.F., and **Scott, J.K.** DNA Vaccines that Optimally Present Neutralizing Epitopes within the Membrane Proximal External Region of HIV-1 gp41. ImmunoVancouver 2013. Vancouver, Canada. 13 June 2013.
- 46 *Gulzar, N., Klaric, K.A., Parfyonov, M., Montero, M.,* Wang, S., Huarte, N., Appellaniz, B., Nieva, J., Lu, S., and **Scott, J.K.** Study 1: Optimizing DNA Vaccines that Target the 2F5 Epitope of the Membrane Proximal External Region of HIV-1 gp41. AIDS Vaccine 2013. Barcelona, Spain. 6-11 October 2013.
- 47 *Gulzar, N., Ahmed, F.,* Rujas, E., Appellaniz, B., *Klaric, K.A., Parfyonov, M.,* Huarte, N., *Montero, M.,* Nieva, J., Lu, S., and **Scott, J.K.** Study 1: A DNA-prime, Liposome-boost Immunization Strategy Targeting the 2F5 Epitope of the Membrane Proximal External Region of HIV-1 gp41. AIDS Vaccine 2013. Barcelona, Spain. 6 October 2013.
- 48 *Gulzar, N.,* McCully, M.E., *Parfyonov, M., Klaric, K.A.,* Hannigan, B.T., Ulas, G., DeGrado, W.F., and **Scott, J.K.** Study 2: DNA Vaccines Expressing the Membrane Proximal External Region of HIV-1 gp41 to Optimize Exposure of Neutralizing Epitopes. AIDS Vaccine 2013. Barcelona, Spain. 6 October 2013.

- 49 *Murira, A., Henry, K.A., Nickel, K., and Scott, J.K.* Murine B-cell Responses during Hyperimmunization with a Virus-like Particle. Antibody Engineering and Therapeutics. Huntington Beach, CA. 8-12 December 2013.
- 50 *Ahmed, F.K., Gulzar, N., Apellaniz, B., Rujas, E., McCully, M.E., Hannigan, B., Ulas, G., Wang, S., and Scott, J.K.* Immunization Strategies for Engineering DNA and Liposome Vaccines that Target the MPER of HIV gp41. Keystone Symposia: HIV Vaccines. Banff, Alberta. 22-27 March 2015.
- 51 *Henry, K.A., Murira, A.M., Marthandan, N., Nickel, K., Ahmed, F., Breden, F.J., and Scott, J.K.* Immune profiling of IgM and IgG antibody response elicited by hyperimmunization with a virus-like particle. Keystone Symposia: The Golden Anniversary of B Cell Discovery. Banff, Alberta. 22-27 March 2015.
- 52 *Murira, A., and Scott, J.K.* Transcriptomic profiling of CD138+ cells from immunized mice indicates ontological heterogeneity. Keystone Symposia: The Golden Anniversary of B Cell Discovery. Banff, Alberta. 22-27 March 2015.
- 53 *Breden, F., Marthandan, N., Zimonja, B., Jaglale, J., Scott, J.K., and Brian Corrie.* iReceptor: Bioinformatic Platform for Storing and Sharing Next Generation Sequencing (NGS) Data from Immune Repertoires. ImmunoBC 2015. Vancouver, BC. 11 June 2015.
- 54 *Gulzar, N., Ahmed, F.K., Rujas, E., Apellaniz, B., McCully, M.E., Wang, S., DeGrado, W.F., Nieva, J.L., Lu, S., and Scott, J.K.* Durable Antibody Responses Against the 2F5 Region of the MPER of HIV gp41 are Elicited using Engineered DNA and Liposome Vaccines, and Co-Immunization Strategies. ImmunoBC 2015. Vancouver, BC. 11 June 2015.
- 55 *Marthandan, N., Henry, K.A., Murira, A.M., Nickle, K., Ahmed, F., Breden, F.J., and Scott, J.K.* B receptor repertoire analysis to study antibody responses elicited by hyperimmunization with a bacteriophage. ImmunoBC 2015. Vancouver, BC. 11 June 2015.
- 56 *Murira, A., Henry, K.A., Ahmed, F.K., and Scott, J.K.* Transcriptomic profiling of CD138+ cells from immunized mice indicates ontological heterogeneity. ImmunoBC 2015. Vancouver, BC. 11 June 2015.

SUPERVISION OR CO-SUPERVISION OF TRAINEES:

Postdoctoral fellows:

Naveed Gulzar, PhD, MSFHR postdoctoral fellow. In progress

PhD Students:

Senior Supervisor:

Kevin A. Henry, CIHR pre-doctoral award recipient, completed 2013
 Armstrong Murira, international student from Kenya, completed 2014
 Anna Von Rossum, completed 2015

External Examiner:

Wadim Matochko, 2015

MSc Students:

Supervisory Committee:

Chris Ford, completed 2009
Mindy Lim, completed 2009
Subreena Manhas, completed 2010
Fatima Ahmed, completed 2012
Cassandra Carroll, transferred to PhD program 2013
Justin Sharpley, completed 2015
Aniqa Shahid, currently in progress
Alekhya Venkata, currently in progress
Miguel Gutierrez, currently in progress

Undergraduates:

Undergraduate Students:

Mackenzie Caulfield, NSERC USRA recipient, Summer 2011
Prabvir Grewal, NSERC USRA recipient, Fall 2011
Maksim Parnofov, SFU VPR USRA recipient, Summer 2012
Subin Punnen, SFU VPR USRA recipient, Summer 2014

Directed Readings Students (3- and 2-unit research proposal development):

Kristina-Ana Klaric, Summer 2009
Jessica Holland, Fall 2009
Prabvir Grewal, Spring 2011
Ben Tan, Summer 2011

Honors Students (15-unit research course):

Heather Heit, Spring 2009
Kristina-Ana Klaric, Fall 2009
Jessica Holland, Spring 2010
Ben Tan, Fall 2011
Prabvir Grewal, Summer 2011
Kevin Nickel, Summer 2013

COURSES TAUGHT

Spring 2006-present: **Immune System I: Basis of innate and adaptive immunity** (HSCI 426/726, also taught as MBB 426/726 4 hours`credit). This course was taught as a cross-listed course Spring 2006 and 2007; Fall 2007, 2008, 2009, 2010, 2011 and 2012.

Course evaluations for MBB426 and HSCI426 for fall 2011 and fall 2012 follow.

UNIVERSITY COMMITTEE PARTICIPATION

Committee Member, Program Steering Committee, Faculties of Health Sciences & Science, Simon Fraser University, 2005 – 2009

Committee Member, Formal Advisory committee to the Dean of Science, Dean of Health Sciences, Faculty Executive Committee, 2008 – 2009

Chair, Committee to Revise the Faculty of Health sciences BSc program into 2 streams (Life Sciences & Population, Quantitative Health Sciences, 2008 – 2009

Committee Member, Committee to write the PhD program description for the Faculty of Health Sciences, 2008 – 2009

Senate Representative, Faculty of Health Sciences, Simon Fraser University, January, 2009 – May, 2010

Committee Member, Life Sciences Biological Sciences Working Group, Ad hoc Committee in the Faculty of Health Sciences, Simon Fraser University, 2008 – 2011

Chair, Ad hoc Committee to write PhD program documents and revise MSc program documents, Faculty of Health Sciences, Simon Fraser University, 2010 – 2011

Wet Lab Planning Committee Member, Faculty of Health Sciences, Simon Fraser University, 2007 – present

Chair, Cross-Faculty Graduate Program with Faculty of Health Sciences, Molecular Biology & Biochemistry and Biological Sciences, Interdisciplinary Learning in Infectiously Acquired Diseases (ILIAD), 2009 – present

Committee Member, Faculty of Health Sciences Graduate Studies, Simon Fraser University, 2010/1 – present

Director, PhD & MSc Programs, Faculty of Health Sciences Graduate Studies, Simon Fraser University, 2010/1 – present

Chair, PhD & MSc Programs, Faculty of Health Sciences Graduate Studies, Simon Fraser University, 2010/1 – present