

Curriculum Vitae
Gabrielle M. Siegers, MA, PhD

Citizenship: Canadian

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Work Email: gmsiegers@ualberta.ca

A. EDUCATION:

Degree	University	Department	Years
PhD	University of Freiburg, Germany	Molecular Immunology	2001-2007*
MA	Queen's University	German	1997-1999
Academic Exchange	University of Tübingen, Germany		1994-1995
HBS	University of Guelph	Biochemistry/German	1992-1996

* two maternity leaves during this time (18 months total)

Other:

Sept 2024 –	Executive MBA, Quantic School of Business & Technology (part-time, online)
May 2024	Certificate: <i>Medical Statistics III</i>
Jan 2024	Certificate: <i>Medical Statistics II</i>
Sept 2023	Certificate: <i>Medical Statistics I</i>
	Stanford University School of Medicine
Jan 2021	Certificate: <i>Learning to Teach Online</i>
	University of New South Wales, Sydney, Australia (Coursera)
Jan – April 2014	PATH9520 <i>Public and Private Partnerships in Cancer Research</i>
	Ivey Business School, Western University, Final grade: 85%

B. POSITIONS AND EMPLOYMENT IN RESEARCH:

Jan 2025 –	Flow Cytometry Core Facility Manager Department of Medical Microbiology and Immunology Faculty of Medicine and Dentistry University of Alberta, Edmonton, AB, Canada
Aug 2022 – Sept 2024	Head of Research & Development Helix BioPharma Corporation, Toronto, ON, Canada Laboratory in Edmonton, AB, Canada
Jul 2021 – Jul 2022	Senior Scientist / Gamma Delta T Cell Specialist IN8bio, New York, NY, USA
Jan – June 2021	Independent Scientific Consultant
2014 – 2020	Research Associate Department of Experimental Oncology, University of Alberta, Edmonton, AB Supervisor: Dr. Lynne-Marie Postovit
2012 – 2014	Translational Breast Cancer Research Unit Postdoctoral Fellow CIHR Strategic Training Program in Cancer Research and Technology Transfer (CaRTT) Fellow (09.2012 - 08.2014), Department of Anatomy and Cell Biology Robarts Research Institute, Western University, London, ON Supervisor: Dr. Lynne-Marie Postovit

- 2007 – 2011 **Postdoctoral Fellow**
Cell Therapy Program, Princess Margaret Cancer Centre, Toronto, ON
Molecular and Cellular Imaging, Robarts Research Institute, London, ON
Supervisors: Dr. Armand Keating and Dr. Paula Foster
- 2001 – 2007 **PhD student, Department of Molecular Immunology**
Thesis: “Structural Organization of B and T Cell Antigen Receptors”
Max Planck Institute of Immunobiology
University of Freiburg, Freiburg, Germany
Supervisors: Dr. Michael Reth and Dr. Wolfgang Schamel
- Sept – Dec 2000 **Technical Assistant**
Max Planck Institute of Immunobiology, Freiburg, Germany
Department of Molecular Immunology
Supervisor: Dr. Juergen Wienands
- 1999 – 2000 **Intern/Volunteer, Institute for Organic Chemistry and Biochemistry**
Albert-Ludwigs-University, Freiburg, Germany
Supervisor: Dr. Dieter Jahn
- 1995 – 1996 **Student Research Assistant, Department of Nutritional Sciences**
University of Guelph, Guelph, ON
Supervisor: Dr. Kelly Meckling-Gill
- May – Aug 1995 **Fourth Year Research Student, Biochemistry**
Thesis: “The Synthesis of Radiolabeled CHAPS”
University of Guelph, Guelph, ON
Supervisor: Dr. Alan Mellors
- May – Aug 1994 **Natural Sciences and Engineering Research Council of Canada Summer Scholarship Awardee**
University of Guelph, Guelph, ON
Supervisors: Dr. Reggie Lo and Dr. Alan Mellors

C. GRANTS AND AWARDS:

Grants

- CRS OG2013 **Co-Investigator on Cancer Research Society Operating Grant:**
“Investigation of Nodal and Cytotoxic Gamma Delta T Cells in the Breast Tumour Microenvironment”
\$60,000/year for 2 years

Awards

Salary:

- 2013 – 2014 Translational Breast Cancer Research Unit Postdoctoral Award, London, ON
2012 – 2013 Translational Breast Cancer Research Unit Postdoctoral Award, London, ON
2004 – 2006 Wiedereinstiegsstipendium University of Freiburg, Germany (support for mothers returning to the lab)

Travel:

- 2019 BioCanRx Highly Qualified Personnel Travel Award (awarded, returned)
2018 BioCanRx Highly Qualified Personnel Travel Award
2017 BioCanRx Highly Qualified Personnel Travel Award
2014 Canadian Cancer Society Junior Investigator Innovation Grant Panel Travel Award
2012 2012 $\gamma\delta$ T Cell Conference Travel Award, Freiburg, Germany
2011 OICR Ontario Award, 2011 Canadian Cancer Research Conference, Toronto, ON
2010 2010 $\gamma\delta$ T Cell Conference Travel Award, Kiel, Germany

Achievement:

2009 Best Abstract, Basic Science, Annual Hematology Research Day, Toronto, ON
 1997 – 1999 Queen's Graduate Awards, Queen's University, Kingston, ON
 1997 Ernst Loeb Memorial Scholarship in German, Queen's University, Kingston, ON
 1997 Swiss Embassy Prize, University of Guelph, ON
 1996 Andrea Laatsch Scholarship, University of Guelph, ON
 1994 NSERC Summer Research Scholarship
 1992 – 1995 Special University Scholarship, University of Guelph, ON
 1992 Ontario Scholarship

D. PEER-REVIEWED PUBLICATIONS (Trainees underlined):

Google Scholar Metrics (as of 17 Jan 2025)

Citations: 1554 (732 since 2020)

h-index: 20

i10-index: 27

Original Research Articles: 26

First author: 9

Last author: 3

Contributing author: 14

Reviews: 6

Sole author: 2

First author: 1

Last author: 1

Contributing author: 2

Editorials/Other: 4

First author: 3

Contributing author: 1

Under Review:

Rodryg Ramlau, MD PhD Prof; Dariusz M. Kowalski, MD PhD Prof; Aleksandra Szczęsna, MD PhD; Cezary Szczylik, MD PhD Prof; Young Ou, PhD; Martin Köbel, MD Prof; **Gabrielle M. Siegers, MA PhD**; Heman Chao, PhD; Kim J. Gaspar, PhD; Brenda Lee, MSc, Kazimierz Roszkowski-Sliz, MD PhD Prof: Antibody-Enzyme Conjugate L-DOS47 Monotherapy Extends Progression-Free Survival in A Subset of NSCLC Patients: A Phase I/II Trial
 Under review at *Frontiers in Oncology*

Published

36) Bruna Victorasso Jardim-Perassi, Pietro Irrera, Oluwaseyi E. Oluwatola, Dominique Abrahams, Veronica C. Estrella, Bryce Ordway, Samantha R. Byrne, Andrew O. Ojeda, Christopher J. Whelan, Jongphil Kim, Matthew S. Beatty, Sultan Damgaci-Erturk, Dario Livio Longo, Kim J. Gaspar, **Gabrielle M. Siegers**, Barbara A. Centeno, Justin Y. C. Lau, Shari A. Pilon-Thomas, Arig Ibrahim-Hashim and Robert J. Gillies: L-DOS47 Elevates Pancreatic Cancer Tumor pH and Enhances Response to Immunotherapy. *Biomedicines*. 2024; Feb 19;12(2):461. doi: 10.3390/biomedicines12020461.

35) Marina Bianchi Lemieszek, Scott Douglas Findlay and **Gabrielle M. Siegers**: CellTrace Violet™ Flow Cytometric Assay to Assess Cell Proliferation. *Methods in Molecular Biology*. 2022; 2508:101-114. doi: 10.1007/978-1-0716-2376-3_9.

34) Olena Bilyk, Bahareh Hamed, Indrani Dutta, Marnie Newell, Amirali B. Bukhari, Armin M. Gamper, Rojine C. McVea, Jiahui Liu, Julia Schueler, **Gabrielle M. Siegers**, Catherine J. Field and Lynne-Marie Postovit. Docosahexaenoic acid (DHA) alone and in combination with carboplatin significantly reduces tumor cell growth in preclinical models of ovarian cancer. *Nutrition and Cancer*. 2021 July 21.1-15. doi: 10.1080/01635581.2021.1952453. Online ahead of print.

33) Dylan Dieters-Castator, Paola M. Dantonio, Matt Piaseczny, Guihua Zhang, Jiahui Liu, Miljan Kuljanin, Stephen Sherman, Michael Jewer, Katherine Quesnel, Eun Young Kang, Martin Koebel, **Gabrielle M. Siegers**, Andrew Leask, David Hess, Gilles Lajoie and Lynne-Marie Postovit. Embryonic Protein NODAL Regulates the Breast Tumour Microenvironment by Reprogramming Cancer-Derived Secretomes. *neoplasia*. 2021 April; 23(4): p375-390. <https://doi.org/10.1016/j.neo.2021.02.004>

32) Indrani Dutta, Dylan Dieters-Castator, James W. Papatzimas, Anais Medina, Julia Schueler, Darren J. Derksen, Gilles Lajoie, Lynne-Marie Postovit and **Gabrielle M. Siegers**. ADAM protease inhibition overcomes resistance of breast cancer stem-like cells to $\gamma\delta$ T cell immunotherapy. *Cancer Letters*. 2020 Oct 9. <https://doi.org/10.1016/j.canlet.2020.10.013>

Posted 17 July 2020 to *bioRxiv*

Highlighted in the American Society for Cell Biology Newsbrief 20 July 2020.

Featured in the 9 Feb. 2021 edition of the University of Alberta newsletter “folio”:

“Researcher identifies way to prevent breast cancer stem-like cells from evading therapy”

<https://www.ualberta.ca/folio/2021/02/researcher-identifies-way-to-prevent-breast-cancer-stem-like-cells-from-evading-therapy.html>

31) **Gabrielle M. Siegers**, Indrani Dutta, Eun Young Kang, Jing Huang, Martin Koebel and Lynne-Marie Postovit. Aberrantly Expressed Embryonic Protein NODAL Alters Breast Cancer Cell Susceptibility to $\gamma\delta$ T Cell Cytotoxicity. *Frontiers in Immunology – T Cell Biology special issue “ $\gamma\delta$ T Cells in Cancer”*. 2020 June 19. <https://doi.org/10.3389/fimmu.2020.01287>.

30) **Gabrielle M. Siegers**, Julia Schueler, Hon Sing Leong, and Lynne-Marie Postovit. Imaging Human Breast Tumours in Different Species: How Human are They? *Imaginations, Journal of Cross-Cultural Image Studies* special issue: “Reimaging Breasts”. 2020 May 30. <http://imaginationsglendon.yorku.ca/?p=13027>.

29) Reisa Klein, **Gabrielle M. Siegers** and Dorothy Woodman. Erotic. Maternal. Cultural. Symbolic. Medical. What are breasts? How are they imagined? And who gets to decide? *Imaginations, Journal of Cross-Cultural Image Studies* special issue: “Reimaging Breasts”. 2020 May 30. <http://imaginationsglendon.yorku.ca/?p=12999>.

28) Michael Jewer, Laura Lee, Matthew Leibovitch, Guihua Zhang, Jiahui Liu, Scott D. Findlay, Krista Vincent, Kristofferson Tandoc, Dylan Dieters-Castator, Daniela F. Quail, Indrani Dutta, Mackenzie Coatham, Zhihua Xu, Bo-Jhih Guan, Maria Hatzoglou, Andrea Brumwell, James Uniacke, Christos Patsis, Antonis Koromilas, Julia Schueler, **Gabrielle M. Siegers**, Ivan Topisirovic and Lynne-Marie Postovit. Translational Control of Breast Cancer Plasticity. *Nature Communications*. 2020 May 19. <https://doi.org/10.1038/s41467-020-16352-z>.

27) Karin Schilbach, Naomi Krickeberg, Carlotta S. Kaiser, Simon Mingram, Janika Kind, **Gabrielle M. Siegers** and Hisayoshi Hashimoto. Suppressive activity of V δ 2 $\gamma\delta$ T cells on $\alpha\beta$ T cells is licensed by TCR signaling and correlates with signal strength. *Cancer Immunology, Immunotherapy*. 2020 Jan 25. doi: 10.1007/s00262-019-02469-8.

- 26) **Gabrielle M. Siegers** and Miroslav Malkovsky. In memoriam: Paul Fisch (1959 – 2018) our dear friend, pioneer of $\gamma\delta$ T cell research, esteemed scientist, and dedicated clinician. *Clinical & Translational Immunology* special issue “Unconventional immunity: role of $\gamma\delta$ T cells in host defense and disease”. 2019 April 24; 8(4):e1048. doi: full/10.1002/cti2.1048
- 25) Dylan Z Dieters-Castator, Peter F Rambau, Linda E Kelemen, **Gabrielle M. Siegers**, Gilles A Lajoie, Lynne-Marie Postovit and Martin Köbel. (2019) Proteomics derived biomarker panel improves diagnostic precision to classify endometrioid and high-grade serous ovarian carcinoma. *Clinical Cancer Research*. 2019 April 12; Epub ahead of print. doi: 10.1158/1078-0432.CCR-18-3818.
- Featured in the 7 May 2019 edition of the University of Alberta newsletter “folio”:
<https://www.folio.ca/research-could-lead-to-more-precise-diagnosis-and-treatment-of-ovarian-cancer/>
- 24) Julia Schueler, Kerstin Klingner, Daniel Bug, Caren Zoeller, Armin Maier, Meng Dong, Kerstin Willecke, Anne-Lise Peille, Eva Steiner, Manuel Landesfeind, John A. Copland, **Gabrielle M. Siegers**, Axel Haferkamp, Katharina Boehm, Igor Tsaur, Meike Schneider. (2018) Patient derived renal cell carcinoma xenografts exhibit distinct sensitivity patterns in response to antiangiogenic therapy and constitute a suitable tool for biomarker development. *Oncotarget*. 2018 July 24; 9(57): 30946.
- 23) **Gabrielle M. Siegers**, Indrani Dutta, Rayond Lai and Lynne-Marie Postovit. (2018) Functional Plasticity of $\gamma\delta$ T Cells and Breast Tumour Targets in Hypoxia. *Frontiers in Immunology – T Cell Biology*. 2018 June 15; 9:1367. doi: 10.3389/fimmu.2018.01367.
- 22) **Gabrielle M. Siegers**. (2018) Integral Roles for Integrins in $\gamma\delta$ T Cell Function. *Frontiers in Immunology – T Cell Biology*. 2018 March 13; 9:521. doi:10.3389/fimmu.2018.00521.
- 21) Indrani Dutta, Lynne-Marie Postovit, **Gabrielle M. Siegers**. (2017) $\gamma\delta$ T cell Apoptosis Induced via $\gamma\delta$ T Cell Antigen Receptor “Blocking” Antibodies: A Cautionary Tale. *Frontiers in Immunology – T Cell Biology*. 2017 June 30; 8:776. doi: 10.3389/fimmu.2017.00776.
- 20) **Gabrielle M. Siegers**, Christy R. Barreira, Lynne-Marie Postovit, Gregory A. Dekaban. (2017) CD11d β 2 integrin expression on human NK, B and $\gamma\delta$ T cells. *Journal of Leukocyte Biology*. 2017. 101(4):1029-1035. doi: 10.1189/jlb.3AB0716-326RR. Epub 2016 Nov 23.
- 19) **Gabrielle M. Siegers**, Shruti Krishnamoorthy, Laura E. Gonzalez-Lara, Catherine McFadden, Yuhua Chen, Paula J. Foster. (2016) Pre-labeling of Immune Cells in Normal Bone Marrow and Spleen for Subsequent Cell Tracking by MRI. *Tomography*. 2016. 2(1):26-34. doi: 10.18383/j.tom.2016.00103.
- 18) Daniela Wesch, Christian Peters, **Gabrielle M. Siegers**. (2014) Human $\gamma\delta$ T regulatory cells in cancer: fact or fiction? *Frontiers in Immunology*. 2014 Nov 20; 5:598. doi: 10.3389/fimmu.2014.00598. eCollection 2014. Review.
- 17) **Gabrielle M. Siegers** and Lawrence S. Lamb Jr. (2014) Cytotoxic and Regulatory Properties of Circulating V δ 1+ $\gamma\delta$ T Cells: A New Player on the Cell Therapy Field? *Molecular Therapy*. 2014. 22(8):1416-22. doi: 10.1038/mt.2014.104. Epub 2014 June 4.
- 16) Elaine P. Dopfer, Frederike A. Hartl, Hans-Heinrich Oberg, **Gabrielle M. Siegers**, Sascha Yousefi, Sylvia Kock, Gina J. Fiala, Beatriz Garcillán, Andrew Sandstorm, Balbino Alarcón, Jose-Ramon Regueiro, Dieter Kabelitz, Erin J. Adams, Susana Minguet, Daniela Wesch, Paul Fisch, Wolfgang W. A. Schamel. (2014) The CD3 conformational change in the $\gamma\delta$ T cell receptor is not triggered by antigens but can be enforced to enhance tumor killing. *Cell Reports*. 2014. 7(5):1704-15. 10.1016/j.celrep.2014.04.049. Epub 2014 May 22.

- 15) Julia Schöler, Dagmar Wider, Kerstin Klingner, **Gabrielle M. Siegers**, Ralph Wäsch, Heinz-Herbert Fiebig, Monika Engelhardt (2013). Intratibial injection of human multiple myeloma cells in NSG mice mimics human myeloma and serves as a valuable tool for the development of anticancer strategies. *PLoS ONE*. 8(11): e79939. doi: 10.1371/journal.pone.0079939.
- 14) Padmalaya Das*, **Gabrielle M. Siegers***, Lynne-Marie Postovit. (2013) Illuminating Luminal B: QSOX1 as a subtype-specific biomarker. *Breast Cancer Research*. 2013 May 15;15(3):104. [Epub ahead of print]. *equal contributions
- 13) Daniela F. Quail, **Gabrielle M. Siegers**, Michael Jewer, Lynne-Marie Postovit. (2013) Nodal Signaling in Embryogenesis and Tumorigenesis. *International Journal of Biochemistry and Cell Biology*. 2013 Apr; 45(4):885-98. doi:pii: S1357-2725(12)00417-7. 10.1016/j.biocel.2012.12.021. Epub 2013 Jan 3.
- 12) **Gabrielle M. Siegers**, Emeline J. Ribot, Armand Keating, Paula J. Foster. (2013) Extensive Expansion of Primary Human $\gamma\delta$ T Cells Generates Cytotoxic Effector Memory Cells that can be Labeled with Feraheme for Cellular MRI. *Cancer Immunology, Immunotherapy*. 2013 Mar;62(3):571-83. doi: 10.1007/s00262-012-1353-y. Epub 2012 Oct 26.
- Highlighted in *World Biomedical Frontiers*: <http://biomedfrontiers.org/infection-2013-12-29/>
- Cover image, *OncolImmunology*:
<https://www.landesbioscience.com/journals/oncoimmunology/toc/volume/2/issue/2/>
- 11) Daniela F. Quail, Guihua Zhang, Logan Walsh, **Gabrielle M. Siegers**, Dylan Dieters-Castator, Scott Findlay, Heather Broughton, David A. Hess, Lynne-Marie Postovit. (2012) Embryonic morphogen Nodal promotes breast cancer growth and progression. *PLoS ONE*. 7(11):e48237. doi: 10.1371/journal.pone.0048237. Epub 2012 Nov 7.
- 10) **Gabrielle M. Siegers** (2012): Anti-leukemia Activity of Human $\gamma\delta$ T Cells. *OncolImmunology*. 1(2): 237-239.
- 9) Meike Schneider, Johannes Huber, Boris Hadaschik, **Gabrielle M. Siegers**, Heinz-Herbert Fiebig, Julia Schöler (2012): Characterization of colon cancer cells: a functional approach characterizing CD133 as a potential stem cell marker. *BMC Cancer*. Mar 20;12(1):96.
- 8) **Gabrielle M. Siegers**, Helena Dhamko, Xing-Hua Wang, A. Mark Mathieson, Yoko Kosaka, Tania C. Felizardo, Jeffery A. Medin, Shuji Tohda, Julia Schöler, Paul Fisch, Armand Keating (2011): Human V δ 1 $\gamma\delta$ T cells expanded from peripheral blood exhibit specific cytotoxicity against B-CLL derived cells. *Cytotherapy*. 13(6):753-64. Epub 2011 Feb 11 (doi:10.3109/14653249.2011.553595).
- 7) **Gabrielle M. Siegers**, Tania C. Felizardo, A. Mark Mathieson, Yoko Kosaka, Xing-Hua Wang, Jefferey A. Medin, Armand Keating (2011): Anti-leukemia Activity of *in vitro*-Expanded Human $\gamma\delta$ T Cells in a Xenogeneic Ph⁺ Leukemia Model. *PLoS ONE*. Feb 3;6(2):e16700.
- 6) Mahima Swamy, **Gabrielle M. Siegers**, Gina J. Fiala, Eszter Molnar, Elaine P. Dopfer, Paul Fisch, Burkhardt Schraven, Wolfgang W.A. Schamel (2010): Stoichiometry and intracellular fate of TRIM-containing TCR complexes. *Cell Communication and Signaling*. 8:5, doi:10.1186/1478-811X-8-5.
- 5) Elaine P. Dopfer, Mahima Swamy, **Gabrielle M. Siegers**, Eszter Molnar, Jianying Yang, Wolfgang W.A. Schamel (2008): Segregation models. *Advances in Experimental Medicine and Biology*. 2008;640:74-81. doi: 10.1007/978-0-387-09789-3_7. Review.

4) **Gabrielle M. Siegers**, Mahima Swamy, Edgar Fernández-Malavé, Susana Minguet, Sylvia Rathmann, Alberto C. Guardo, Verónica Pérez-Flores, Jose R. Regueiro, Balbino Alarcón, Paul Fisch, Wolfgang W.A. Schamel (2007): Different composition of the human and the mouse $\gamma\delta$ T cell receptor CD3 explains different phenotypes of CD3 γ - and CD3 δ -immunodeficiencies. *Journal of Experimental Medicine*. 2007 Oct 29; volume 204(11): 2537-2544.

3) Mahima Swamy, Susana Minguet, **Gabrielle M. Siegers**, Balbino Alarcón, Wolfgang W.A. Schamel (2007): A native antibody-based mobility-shift technique (NAMOS-assay) to determine the stoichiometry of multiprotein complexes. *Journal of Immunological Methods*. 2007 July 31; volume 324(1-2): 74-83.

2) **Gabrielle M. Siegers**, Jianying Yang, Claudia U. Duerr, Peter J. Nielsen, Michael Reth, Wolfgang W.A. Schamel (2006): Identification of disulfide bonds in the Ig- α /Ig- β component of the B cell antigen receptor using the Drosophila S2 cell reconstitution system. *International Immunology*. 2006 July 28; volume 18(9): 1385-1396.

1) Mahima Swamy, **Gabrielle M. Siegers**, Susana Minguet, Bernd Wollscheid, Wolfgang W.A. Schamel (2006): Blue native polyacrylamide gel electrophoresis (BN-PAGE) for the identification and analysis of multiprotein complexes. *Science's STKE*. 2006 July 25; volume 345, pp. l4.

Book Chapters:

2) **Gabrielle M. Siegers**, Edgar Fernández-Malavé, Paul Fisch, Jose R. Regueiro and Wolfgang W.A. Schamel (2010): From structure to disease: differential CD3 usage in the human and mouse $\gamma\delta$ T cell antigen receptor determines the impact of CD3 deficiencies on T cell development. *Advances in Genetics Research*. Volume 1. Nova Science Publishers, Inc.

1) **Gabrielle M. Siegers**, Edgar Fernández-Malavé, Paul Fisch, Jose R. Regueiro and Wolfgang W.A. Schamel (2008): From structure to disease: differential CD3 usage in the human and mouse $\gamma\delta$ T cell antigen receptor determines the impact of CD3 deficiencies on T cell development. *International Journal of Medical and Biological Frontiers*. Volume 14, Number 1/2. Nova Science Publishers, Inc.

E. SELECTED PRESENTATIONS:

Invited Oral Presentations

- 2024 Princess Margaret Cancer Centre and Krembil Research Institute, Toronto, ON
- 2020 Princess Margaret Cancer Centre and Krembil Research Institute, Toronto, ON
- 2019 Canadian Cancer Immunotherapy Consortium, Toronto, ON (speed poster)
University of Ottawa & Ottawa Hospital Research Institute, Ottawa, ON
- 2018 ImmuNET Seminar Series, University of Alberta, Edmonton, AB
University of Saskatchewan, Saskatoon, SK
- 2017 Cancer Research Institute of Northern Alberta Annual Meeting, Edmonton, AB
Canadian Society for Immunology Annual Meeting, Banff, AB
Cancer Research Institute of Northern Alberta (CRINA) Seminar Series: Future Leaders
in Cancer, University of Alberta, Edmonton, AB
- 2015 ImmuNET Seminar Series, University of Alberta, Edmonton, AB
ImmuNET Research Day, University of Alberta, Edmonton, AB
Oncology 660 Seminar Series, University of Alberta, Edmonton, AB
- 2014 Division of Hematology & Oncology and Cancer Cell Biology Program Research
Conference, University of Alabama, Birmingham, Alabama, USA
Robarts Research Retreat, London, ON
Genome Sciences Center, Vancouver, BC

- 2013 Molecular Medicine Seminar Series, Western University, London, ON
2013 Infection and Immunity Research Forum, London, ON
10th Annual Oncology Research and Education Day, London, ON
- 2012 BD Multicolor Workshop, Robarts Research Institute, London, ON
Fifth International Gamma-Delta T-Cell Conference, Freiburg, Germany
Max Planck Institute of Immunobiology and Epigenetics, Freiburg, Germany
- 2011 Oncotest GmbH, Freiburg, Germany
- 2010 Tumor Immunology and Immunotherapy Symposium, OCI, Toronto, ON
- 2009 Steps to Success in an Academic Career: Academic Choices and Challenges,
Positioning Yourself for a Career in Academia series, University of Toronto, ON
Optical Microscopy Users Group Meeting: *In vivo* Imaging with the IVIS system,
Advanced Optical Microscopy Facility, University Health Network, Toronto, ON
Annual Hematology Research Day 2009, University of Toronto, ON
- 2008 American Society of Hematology (ASH) Annual Meeting, San Francisco, CA, USA
- 2006 4th B Cell Forum of the German Society of Immunology, Kloster Banz, Germany

POSTER PRESENTATIONS: *2 abstracts

- 2023 AACR-NCI EORTC International Conference on Molecular Targets and Cancer
Therapeutics, Boston, USA
10th International Gamma Delta T Cell Conference, Lisbon, Portugal
- 2019 Canadian Cancer Immunotherapy Consortium Annual Meeting, Toronto, ON
- 2018 Cancer Research Institute of Northern Alberta Research Day, Edmonton, AB*
Summit for Cancer Immunotherapy, Banff, AB*
8th International Gamma Delta T Cell Conference, Bordeaux, France
- 2017 Cancer Research Institute of Northern Alberta Research Day, Edmonton, AB*
Summit for Cancer Immunotherapy, Gatineau, QC
Oncology Research Day, Edmonton, AB*
Canadian Society for Immunology Annual Meeting, Banff, AB*
- 2016 Cancer Research Institute of Northern Alberta Research Day, Edmonton, AB*
20th Annual ImmuNET Research Day, Edmonton, AB
7th International Gamma Delta T Cell Conference, London, UK*
- 2015 Cancer Research Institute of Northern Alberta Research Day, Edmonton, AB*
Canadian Cancer Research Conference, New PI Meeting, Montreal, QC*
Canadian Cancer Immunotherapy Consortium Symposium, Vancouver, BC
- 2014 Cancer Research Institute of Northern Alberta Research Day, Edmonton, AB*
Oncology Research and Education Day, London, ON
London Health Research Day, London, ON
- 2013 Canadian Cancer Research Conference, New PI Meeting, Toronto, ON*
10th Annual Oncology Research Day, London, ON
6th Annual Canadian Cancer Immune Therapy Symposium, Toronto, ON*
Terry Fox Research Institute Annual Scientific Meeting, Ottawa, ON
- 2012 ASH Annual Meeting 2012, Atlanta, USA
Infection and Immunity Research Forum, Western University, London, ON
9th Annual Oncology Research Day, London, ON
5th International Gamma Delta T Cell Conference, Freiburg, Germany
5th Annual Canadian Cancer Immune Therapy Symposium, Montreal, QC

- 2011 Canadian Cancer Research Conference, Toronto, ON
Imaging Applications in Prostate Cancer, CIHR/OICR Workshop, London, ON
Infection and Immunity Research Forum, Western University, London, ON
World Molecular Imaging Congress, San Diego, California, USA
9th Imaging Network Ontario Symposium, Toronto, ON
- 2010 4th International Gamma Delta T Cell Conference, Kiel, Germany*
Annual Hematology Research Day 2010, University of Toronto, ON
- 2009 ASH Annual Meeting 2009, New Orleans, USA
Human Immunology Research Day, Toronto, ON
Annual Hematology Research Day 2009, University of Toronto, ON
- 2006 ENII-MUGEN Summer School 2006, Capo Caccia, Sardinia, Italy

Abstracts:

- 2023 American Society of Gene + Cell Therapy (L. Ding, poster)
- 2021 Alberta Cancer Research Conference (M. Lemieszek, poster)
- 2020 3rd International Caparica Conference in Splicing (M. Lemieszek, poster and oral)
- 2019 Summit for Cancer Immunotherapy, Victoria, BC (I. Dutta, poster)
- 2019 Oncology Research Day, Edmonton, AB (I. Dutta, poster, Award: 3rd of 31)
- 2019 ImmuNET Research Day, Edmonton, AB (I. Dutta, oral presentation)
- 2018 8th International Gamma Delta T Cell Conference, Bordeaux, FR (A. Jungbluth, poster)
- 2018 Canadian Society for Immunology Annual Meeting, London, ON (I. Dutta, poster)
- 2017 Canadian Cancer Research Conference, Vancouver, BC (I. Dutta, poster)
- 2017 Alberta Diabetes Institute Research Day, Edmonton, AB (M. Sosniuk, oral presentation)
- 2017 ImmuNET Research Day, Edmonton, AB (I. Dutta, oral presentation)
- 2015 Women and Children's Health Research Institute Research Day, Edmonton, AB
(I. Dutta oral presentation)

F. TEACHING AND MENTORING:**Lectures at the University of Alberta**

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|-----------------|--|
| January 2020 | Oncology 425: Advanced Topics in Cancer Research
Module 1: Stem Cells and Cancer, 6 Lectures |
| 11 May 2015 | Panel Design, Flow Cytometry Workshop
"Flow Cytometric Panel Design to Study Peripheral Blood $\gamma\delta$ T Cells in Chronic Myeloid Leukemia Patients undergoing Interferon Alpha Therapy" |
| 15 January 2015 | Oncology 661
" $\gamma\delta$ T Cells: Immunotherapeutic Agents in the War against Cancer"
an introductory lecture on $\gamma\delta$ T cells to prepare students for Dr. Lawrence Lamb, Jr.'s lecture on his $\gamma\delta$ T cell research the following week |
| 15 January 2015 | Oncology 425
" $\gamma\delta$ T Cells: Immunotherapeutic Agents in the War against Cancer" |

Supervising

2015 – 2020	Indrani Dutta, PhD Student, Thesis Defence 3 Dec 2020 – no revisions Awards: Alberta Cancer Foundation Meltzer Tuition Award 2019-2020 Experimental Oncology Research Day Poster Award, 2 nd place, 2019 Queen Elizabeth II Graduate Scholarship 2017-2018 Department of Oncology Achievement Award 2017 University of Alberta Doctoral Recruitment Scholarship 2015-2016 Alberta Cancer Foundation Antoine Noujaim Scholarship 2015-2016 Travel Awards: 2020 (BioCanRx), 2018 (CSI, BioCanRx), 2015 (U of A)
2014 – 2015	Research Assistant (Sept 2014-Aug 2015) University of Alberta
2016 – 2017	Jing Huang, Student Research Assistant, casual University of Alberta
Summer 2016	Jing Huang, HYRS Summer Research Student University of Alberta
2013 – 2014	Carmen Simedrea, Animal Care Technician, Robarts Research Institute ~3-10 hours/week, as required
2013 – 2014	Mykola Merkulov, Work-Study/Summer Student Western University
Fall 2013	Shivam Sharma, Partners in Experiential Learning Cooperative Education Student, Western University ~3 hours/day
Summer 2009	Helena Dhamko, ASH Summer Studentship Awardee
Nov – Dec 2002	Daniel Mueller and Claudia Duerr*, undergraduate students
May/June 2001	laboratory techniques (molecular biology, immunology & protein biochemistry) University of Freiburg, Germany 6 weeks, full days, *now PI in Germany

Classroom

2000	English Teacher Wall Street Institute, Freiburg, Germany Mixed adult learners, variable class sizes (1-10 people), all levels, most ESL ~20 hours/week
Winter 1999	Instructor of “German 102” , rating $4.6 \pm 0.49/5$ (Dept. mean = 4.4) Queen’s University, Kingston, ON 3 hours (h) classroom, 10 h preparation and marking, 3 h office hours/week; developed own materials, contributed to exam questions
1998	English Trainer Team für Bürokommunikation, Berlin, Germany Mixed adult learners, variable class sizes (1-6 people), all levels, most ESL ~6 hours/week
Winter 1997	Instructor of “German 101” , rating $4.2 \pm 0.83/5$ (Dept. mean = 4.3) Queen’s University, Kingston, ON 3 hours (h) classroom, 10 h preparation and marking, 3 h office hours/week; developed own materials, contributed to exam questions

G. OTHER SCIENTIFIC ACTIVITIES**Editorships**

10 Oct 2020 Invited to join the Editorial Board of *Frontiers in Immunology – T Cell Biology*

11 June 2019 Invited to join the Editorial Board of *Scientific Reports*

June 2017 – May 2020

Co-editor, *Imaginations, Journal of Cross-Cultural Image Studies*

Special issue: "Reimaging Breasts"

<http://imaginations.glendon.yorku.ca/?p=13069>

Time commitment: 2 hours/month

Adjudication

2021 Alberta Cancer Research Conference, Poster Judge

2021 Gairdner Symposium on COVID-19 Elevator Pitch Judge

2019 CRINA Research Day Poster Session Judge

2019 ImmuNET Research Day Oral/Poster Session Judge

2018 Judge, Dept. of Oncology Summer Student Presentations

2018 Invited judge, Immunotherapy debate in undergraduate class
Oncology 425 (professor: K. Baker)

2017 CRINA Research Day Poster Session Judge

2017 ImmuNET Research Day Oral/Poster Session Judge

2016 ImmuNET Research Day Oral/Poster Session Judge

2015 CRINA Research Day Poster Session Judge

2015 ImmuNET Research Day Oral/Poster Session Judge

2013 London Health Research Day Poster Session Judge

2012 London Health Research Day Poster Session Judge

Panel Participant

4 Nov 2022 Invited panelist in University of Alberta Course
WGS 250: Gender and Science
To discuss experiences and career challenges

20 Jan 2021 Invited panelist in WGS 250

1 April 2020 Invited panelist in WGS 250

Session Chair

June 2018 $\gamma\delta$ T cell function in cancer, session 9
8th International gamma-delta Conference, Bordeaux, France

Seminar Series Host

7 Feb 2019 ImmuNET Seminar Series, Introduced Dr. Olivier Julien
Assistant Professor, Department of Biochemistry
University of Alberta

21 Feb 2019 ImmuNET Seminar Series, Introduced Dr. Aja Rieger
Flow Cytometry Core Manager, Faculty of Medicine and Dentistry,
University of Alberta

Volunteering

2023 Project Leader and Scientific Editor
Website Editorial Department
Canadian Pet Cancer Foundation

2021 – 2022 Scientific Editor and Medical Illustration Liaison
 Treatment and Support Team, Canadian Pet Cancer Foundation
 Evaluates and edits articles, conceptualizes illustrations for educational
 content to be published on website for pet owners
 Volunteer position, 2 – 4 hours/week

Public Outreach

29 Sept 2022 Where are they now? BioCanRx blog
<https://biocanrx.com/now-gabrielle-siegers>

11 May 2021 Radio Interview on The Mike Farwell Show – 570 News

10 May 2021 Opinion piece published in *The Globe and Mail*,
<https://www.theglobeandmail.com/opinion/article-covid-19-has-shown-how-science-can-be-messy-but-we-can-still-trust-it/>

18 Nov 2020 Invited to discuss new technology from CellPly with Masters of Engineering
 in Biopharmaceutical Processing graduate students from the Keck Graduate
 Institute, California, USA

25 May 2019 Invited to speak about current research to lay audience
 Festival of Health, University of Alberta
 Session: Cellular Immunotherapy – Next Generation Cancer Treatment
 Talk title: Harnessing the Power of $\gamma\delta$ T Cells for Immunotherapy of Cancer

21 Dec 2018 Co-author of the 2018 Community Dissemination Report from the
 BioCanRx-Cancer Stakeholder Alliance Learning Institute
<https://biocanrx.com/learning-institute-community-dissemination-report-2018>

30 Nov 2018 Invited to speak, on behalf of the Alberta Cancer Foundation, about
 progress in Ovarian Cancer research and accept a \$35,000 cheque from
 Gary Tomchuk, Managing Partner for the Sherlock Holmes Hospitality
 Group, at the Rose and Crown's 40th Birthday celebration, Edmonton, AB

27-30 Oct 2018 Academic Scholar/Educator – paired with patient advocate to translate
 research findings at the 2018 Learning Institute for BioCanRx in conjunction
 with the Summit for Cancer Immunotherapy, Banff, AB

17 Jan 2018 Interview with Morgan Sosniuk for “Generator”, a radio program on the
 University of Alberta campus radio station CJSR; topic was my career path
 and advice for students interested in pursuing a research career

1 Dec 2017 Co-author of the 2017 Community Dissemination Report from the
 BioCanRx-Cancer Stakeholder Alliance Learning Institute
<https://biocanrx.com/learning-institute-community-dissemination-report-2017>

22-28 June 2017 Academic Scholar/Educator – paired with patient advocate to translate
 research findings at the 2017 Pilot of The Learning Institute for BioCanRx in
 conjunction with the Summit for Cancer Immunotherapy, Gatineau, QC

26 Nov 2015 Article in The Londoner (newspaper) Hallmarks of Cancer Series
 “Hijacked: Cancer Uses Immune Cells to Benefit Tumour Survival”

- 25 Mar 2014 Invited speaker at Ignite Cancer, London, ON
(event sponsored by the Canadian Cancer Society)
"Naughty Nodal: how an embryonic protein helps breast tumour cells escape
certain death by killer $\gamma\delta$ T cells"
<https://www.youtube.com/watch?v=NqqHI2Y465s>
- 31 May 2013 Invited speaker at the John Paul II ONE RUN fundraiser in support of the
Translational Breast Cancer Research Unit, London, ON

Podcasts

- 30 May 2020 $\gamma\delta$ T cells, breast cancer research and fragmented bodies
DOI: 10.17742/IMAGE.BR.11.1.12

Peer Review

External Grant Review

- 2021 Fonds National de la Recherche Luxembourg
2013 Leukemia Lymphoma Research, UK
Portuguese Foundation for Science & Technology Investigator Call (one full application)
2012 Leukemia Lymphoma Research, UK (two grants)
Portuguese Foundation for Science & Technology

Journals

- 2024 *Experimental Hematology & Oncology*
2023 *Frontiers in Immunology*
2021 *International Journal of Molecular Sciences*
2020 *Frontiers in Immunology*
Viral Immunology x2
International Journal of Molecular Sciences
Cells x2
2019 *Mucosal Immunology*
Clinical and Translational Immunology
Methods in Enzymology - Tumor Immunology and Immunotherapy
2018 *Scientific Reports*
Frontiers in Immunology x2
Cancer Cell International
2015 *Blood*
2013 *Laboratory Investigation*
2012 *Molecular Imaging*
2011 *Cellular and Molecular Immunology*
2010 *Cytotherapy*

Committee Participation/Advocacy

- 2024 - 2025 Member, Local Organizing/Advisory Committee, 11th International Gamma Delta
T Cell Conference to take place in Toronto, ON, 20-23 May 2025
2018 - 2020 Equity, Diversity and Inclusion Committee Member (subcommittee of Academic
Women's Association), University of Alberta
Time commitment: 1 hour/month
2012 - 2013 CaRTT Program Advisory Committee Trainee Representative
2009 - present DAAD (German Academic Exchange Service) Research Ambassador
2003 - 2004 PhD Representative, Max Planck Institute of Immunobiology

Memberships

2016 - Canadian Society for Immunology, Full Member
2023 - 2024 American Association for Cancer Research, Active Member
2015 - 2020 Academic Women's Association, University of Alberta
2011 - 2012 Society for Molecular Imaging
2010 - 2012 Canadian Society for Immunology
2010 - 2014 Deutsche Gesellschaft für Immunologie (German Immunology Society)
2009 - 2014 American Society of Hematology

Media Coverage

"Wir wollen Krebszellen zerstören" (We want to destroy cancer cells)
January 30, 2024 by Andre Will-Laudien in goingpublic.de Platform Life Sciences
<https://www.goingpublic.de/life-sciences/wir-wollen-krebszellen-zerstoeren/>

"Researcher identifies way to prevent breast cancer stem-like cells from evading therapy"
February 09, 2021 by Adrianna MacPherson in *Folio*
<https://www.ualberta.ca/folio/2021/02/researcher-identifies-way-to-prevent-breast-cancer-stem-like-cells-from-evading-therapy.html>