

Cameron Griffiths Curriculum Vitæ

EDUCATION AND TRAINING

Postdoctoral Fellow	University of Virginia Department of Biomedical Engineering Supervised by Dr. Kevin Janes Project Title: "Cardiomyocyte Adaptations to Chronic Viral Infection"	2020 – Present
PhD	University of Alberta Department of Medical Microbiology and Immunology Supervised by Dr. David Marchant Thesis: "Interactions between Respiratory Syncytial Virus and Cell Surface Nucleolin"	2013 – 2020
BSc	University of Alberta Honours Immunology and Infection Honours project supervised by Dr. Stefan Pukatzki	2009 – 2013

WORK EXPERIENCE

Teaching Assistantships:

DMED 512 – Infection, Immunity and Inflammation	Oct 2017 – Nov 2017 Oct 2016 – Nov 2016 Oct 2015 – Nov 2015
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Responsible for assisting with basic laboratory techniques, answering questions during the laboratory session and some marking.

MMI 352 – Microbial Pathogenesis	Jan 2015 – Apr 2015
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Responsible for giving a lecture on the content of each lab, supervising students during laboratory class, marking lab reports/worksheets, answering questions via email and designing worksheet questions.

Students Supervised:

William Shao (Graduate Rotation)	Oct 2022 – Dec 2022
Aleks Stojic (Undergraduate) Assisted with writing a successful Office of the Provost and VP (Academic) Summer Student Award	May 2018 – Apr 2019
Bill Liu (Undergraduate)	May 2015 – Apr 2016

Guest Lectures:

MMI 445 – Clinical Microbiology and Human Health

Apr 10, 2018

Mar 26, 2019

Created and delivered a 1.5 hour lecture titled “Respiratory Syncytial Virus: Combining Clinical Interests with Basic Science”

AWARDS, HONORS, AND ACCOLADES

Human Frontier Science Program Long-Term Fellowship

Apr 2021 – Present

Best poster award (postdoctoral fellow category)

Jun 2022

4th Symposium of the Canadian Society for Virology, Edmonton, Canada.

2021: UVA Postdoctoral Symposium Selected Research Talk Award

Nov 2021

Li Ka Shing Institute of Virology Research Impact Award

Jul 2021

Canadian Institutes of Health Research Fellowship (declined)

Jun 2021

Phil Parrish Postdoctoral Fellowship in Engineering

Sep 2020 – Mar 2021

Banting Postdoctoral Fellowship (declined)

Feb 2021

Ranked #4 out of 225 applications.

Life Sciences Research Foundation Fellowship Finalist

Feb 2021

55 finalists are selected from over 900 applications.

Med Star Graduate Student Award

Aug 2020

Canadian Lung Association Breathing as One Studentship Award

Sep 2018 – Aug 2019

Application ranked 4th overall.

RSV 2018 Young Investigator Award

Nov 2018

Li Ka Shing Institute of Virology Travel Award

Nov 2018

The Lung Association – Alberta & NWT Studentship Award

Jul 2017 – Jun 2018

Application ranked 2nd overall.

Award of Excellence for Student Leadership

Dec 2017

Queen Elizabeth II Graduate Scholarship (PhD)	Sep 2017 – Dec 2017 Sep 2016 – Apr 2017 Sep 2015 – Dec 2015
John Thibault Good Citizen Award	Sep 2016
Graduate Students Association Professional Development Award	Sep 2016 Jan 2014
Award for travelling to participate in an academic activity directly related to academic program.	
Distinguished poster award	Jun 2015
ImmuNet Research Day, Edmonton, Canada.	
75th Anniversary Graduate Student Award	Jan 2015
Queen Elizabeth II Graduate Scholarship (Master's)	Sep 2014 – Dec 2014 Sep 2013 – Apr 2014
The Dean's Silver Medal in Science	May 2013
For maintaining a minimum GPA of 3.7 in the last 3 fall/winter semesters of an Honors program in the Faculty of Science.	
University of Alberta Undergraduate Scholarship	Sep 2011 Sep 2010
University of Alberta Academic Excellence Scholarship	Sep 2009
University of Alberta Faculty of Science Academic Excellence Scholarship	Sep 2009
The Governor's Academic Bronze Medal	2008 – 2009
For achieving the highest average upon graduating from a secondary school.	

RESEARCH, PUBLICATIONS, AND SCHOLARLY ACTIVITIES

*Indicates equal contribution

Peer-Reviewed Publications:

1. ***Griffiths C.**, *Sweatt A., and Janes K. Simulating Coxsackievirus B3 infection with an accessible computational model of its complete kinetics. *STAR Protoc.* 2021, 2(4): 100940
2. ***Griffiths C.**, *Bilawchuk L., McDonough J., Jamieson K., Elawar F., Cen Y., Duan W., Lin C., Song H., Casanova J.L., Ogg S., Jensen L., Thienpont B., Kumar A., Hobman T., Proud D., Moraes T., and Marchant D. IGF1R is an entry receptor for respiratory syncytial virus. *Nature.* 2020, 583: 615–619

3. *Elawar F., *Griffiths C., *Zhu D., Bilawchuk L., Jensen L., Forss L., Tang J., Hazes B., Drews S., and Marchant D. A Virological and Phylogenetic Analysis of the Emergence of New Clades of Respiratory Syncytial Virus. *Sci Rep.* 2017, 7(1): 12232
4. *Bilawchuk L., *Griffiths C., Jensen L., Elawar F., and Marchant D. The Susceptibilities of Respiratory Syncytial Virus to Nucleolin Receptor Blocking and Antibody Neutralization Depends on the Method of Virus Purification. *Viruses.* 2017, 9(8): 207
5. Griffiths C., Drews S., and Marchant D. Respiratory Syncytial Virus: Infection, Detection, and New Options for Prevention and Treatment. *Clin. Microbiol. Rev.* 2017, 30(1): 277-319

Conference Oral Presentations:

"Defining roles for distinct cardiomyocyte adaptations to chronic viral infection." (2021) University of Virginia Postdoc Research Symposium.

"Defining roles for distinct cardiomyocyte adaptations to chronic coxsackievirus B3 infection." (2021) LKSloV/Gairdner Zooming in on COVID-19 Symposium, virtual. (Oral presentation and poster)

"Respiratory Syncytial Virus Binds to a Signaling Coreceptor which Induces Recruitment of its Receptor, Nucleolin, to the Cell Surface during Entry." (2018) 11th International Respiratory Syncytial Virus Symposium, Asheville, North Carolina.

"Respiratory Syncytial Virus Recruits its Receptor, Nucleolin, to the Cell Surface during Entry via PKC ζ Signaling." (2018) ImmuNet Research Day, Edmonton, Canada.

"Respiratory Syncytial Virus Recruits its Receptor, Nucleolin, to the Cell Surface Prior to Viral Fusion and Mediates Viral Entry by Toll-Like Receptor-4 Signaling." (2016) ImmuNet Research Day, Edmonton, Canada.

"Respiratory Syncytial Virus Recruits its Receptor, Nucleolin, to the Cell Surface Prior to Viral Fusion and Mediates Viral Entry by Toll-Like Receptor-4 Signaling." (2016) American Thoracic Society Meeting, San Francisco, California. (Poster and Discussion) – Selected for the Canadian Thoracic Society poster session (Top 30 Canadian Abstracts).

"Respiratory Syncytial Virus (RSV) Recruitment of its Receptor, Nucleolin, to the Cell Surface is the Rate Limiting Step in RSV Fusion and Entry in Bronchial Epithelial Cells." (2015) American Thoracic Society Meeting, Denver, Colorado. (Poster and Discussion).

"The Virus that Directs its Receptor: RSV and Nucleolin." (2014) ImmuNet Research Day, Edmonton, Canada.

Conference Posters:

"Three classes of cardiomyocyte adaptation to chronic viral infection." (2022) 21st HFSP Awardees Meeting, Paris, France.

"Classifying distinct cardiomyocyte adaptations to chronic viral infection." (2022) 4th Symposium of the Canadian Society for Virology, Edmonton, Canada.

"Respiratory Syncytial Virus Induces a Signaling Cascade through PKC ζ during Entry, Resulting in Recruitment of its Receptor, Nucleolin, to the Cell Surface." (2017) Alberta Respiratory Centre Research Day, Edmonton, Canada.

"Respiratory Syncytial Virus Induces a Signaling Cascade through PKC ζ during Entry, Resulting in Recruitment of its Receptor, Nucleolin, to the Cell Surface." (2017) ImmuNet Research Day, Edmonton, Canada.

"Respiratory Syncytial Virus Induces a Signaling Cascade through PKC ζ during Entry, Resulting in Recruitment of its Receptor, Nucleolin, to the Cell Surface." (2017) Alberta Virology Conference, Edmonton, Canada.

"Respiratory Syncytial Virus (RSV) Recruits its Receptor, Nucleolin, to the Cell Surface during Viral Entry." (2016) 10th International Respiratory Syncytial Virus Symposium, Patagonia, Argentina. (Poster) – Granted a travel award to attend the conference.

"Respiratory Syncytial Virus (RSV) Recruits its Receptor, Nucleolin, to the Cell Surface During Viral Entry." (2015) ImmuNet Research Day, Edmonton, Canada.

"Directing Traffic: RSV Re-Routes its Receptor, Newly Synthesized Nucleolin, to the Cell Surface During Entry." (2014) Banff Conference on Infectious Diseases, Banff, Canada.

Patents

Marchant D., Bilawchuk L., and **Griffiths C.** IGF1R is an Entry Receptor for Respiratory Syncytial Virus. United States Provisional Patent Application Serial No. 63/034,022. Date of Filing: June 3, 2020

Marchant D. and **Griffiths C.** Expression Vector and Methods for Preparing and Using Same. United States Provisional Patent Application Serial No. 62/835,734. Date of Filing: April 18, 2019

COMMITTEE MEMBERSHIP AND SCIENTIFIC ADVOCACY

Biomedical Engineering Department IT Committee Member	Nov 2022 – Present
Ad Hoc Peer-Reviewer PLOS Computational Biology and Therapeutic Advances in Infectious Disease	2021 – Present
Judge for the University of Virginia GBMES Fall Symposium	Oct 1, 2021 Oct 7, 2022
Li Ka Shing Institute of Virology Management and Review Committee Member	May 2018 – Nov 2019

The committee is responsible for reviewing and advising on the use of institute funds for developing financial assistance programs and acquiring resources to benefit institute members.

Volunteer for the Canadian Cytometry and Microscopy Association 2019 Symposium	Jun 12-18, 2019
NSERC USRA Studentship Review Committee Member	Feb 2019
President of the Medical Microbiology and Immunology Graduate Students Association	Sep 2015 – Sep 2018
Volunteer for the Faculty of Medicine and Dentistry Festival of Health	May 26, 2018
Volunteer for Science FUNday	Mar 17, 2018
Research Zone – Science Communication Fellowship A series of 4 workshops intended to enhance scientific communication skills, which culminated in designing a unique, hands-on activity with the purpose of communicating a scientific concept to children.	Apr 2017 – Jun 2017
Student Representative for the Graduate Training Committee The committee is responsible for meeting monthly to discuss applications of potential new graduate students and discussing issues that arise pertaining to graduate student progress, such as committee meetings, candidacy exams or graduation.	Sep 2016 – Sep 2017
ImmuNet Research Day Co-Chair of the Table Committee	Sep 2017 – Aug 2018
Member of the Public Relations Committee	Sep 2017 – Aug 2018
Chair of Equipment and Registration Committees	Sep 2016 – Aug 2017 Sep 2015 – Aug 2016
Co-Chair of Organizing Committee	Sep 2014 – Aug 2015
Student Representative for Departmental Staff Meeting	Sep 2013 – Aug 2014
Edmonton Regional Science Fair Judge	2012, 2013, 2015, 2016, 2017*, 2018*, 2019*

Asterisk indicates dates when acting as a judging team lead.

EXTRACURRICULAR ACTIVITIES

University of Virginia Fencing Club Member	Sep 2022 – Present
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cg3gh@virginia.edu
434-987-5456

**Alberta Fencing Association Member of
Board of Directors**

Nov 2015 – Nov 2018

**University of Alberta Fencing Club
Member**

Sep 2011 – May 2019

President

May 2015 – Apr 2018

Treasurer

May 2014 – Apr 2015

May 2012 – Apr 2013

Sabre Coach

Sep 2013 – Dec 2015

Assistant Sabre Coach

Dec 2015 – Apr 2018

Reading Circle Tutor for Frontier College

Oct 2012 – Apr 2013

**Volunteer with University of Alberta
Campus Recreation**

Sep 2010 – Apr 2013