

Lai Tee (Melissa) Teoh
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Free Radical and Radiation Biology
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Education:

Sep 2003 – Feb 2005

Ph.D

(Transferred from University of Guelph in Sep, 2003)
Medical Microbiology and Immunology,
University of Alberta, Edmonton, Alberta, Canada.

Sep 2000 - Sep 2003

Ph.D candidate

Molecular Biology and Genetics,
University of Guelph, Ontario, Canada

Sep 1998 – May 1999

Special Science student

Microbiology and Immunology,
Dalhousie University, Nova Scotia, Canada

Sep 1995 – May 1998

Bachelor of Science

Food Science and Microbiology,
Acadia University, Nova Scotia, Canada

Academic Achievements:

2004

Travel Award

11th Annual Meeting of the Society for Free Radical Biology and Medicine, St. Thomas, VI

2004

Travel Bursary

XVth Biennial International Poxvirus and Iridovirus Conference, Oxford, UK

2004

Best Oral Presentation Award

8th Annual Immunet Retreat, Alberta, Canada

2003-2004

75th Anniversary Graduate Student Award

Faculty of Medicine and Dentistry, University of Alberta, Alberta, Canada

2004-2005

AHFMR Studentship Award

Alberta Heritage Foundation for Medical Research, Alberta, Canada

2003

Travel Award

10th Annual Meeting of the Society for Free Radical Biology and Medicine, Seattle, WA

2002

Travel Award

21st Annual Meeting of the American Society of Virology, Lexington, KY

2000 – 2003

University Graduate Scholarship

University of Guelph, Ontario, Canada

2001

Young Investigator's Award

8th Annual Meeting of the Society for Free Radical Biology and Medicine, Research Triangle Park, NC

1997

Jane Louise Robb Memorial Bursary

Acadia University, Nova Scotia, Canada

Research and Work Experience:

Winter 2004**Teaching Assistant**

IMIN 2000 Immunology and Infection

Department of Science, University of Alberta

- Advising undergraduate students during help sessions
- Grading midterms and exams

Winter and Fall 2002**Teaching Assistant**

MBG 3500 Laboratory Methods

Department of Molecular Biology and Genetics, University of Guelph

- Instructing laboratory section
- Grading lab reports and exams

Winter 2002**Teaching Assistant**

MBG 1000 Introductory Genetics

Department of Molecular Biology and Genetics, University of Guelph

- Teaching students in tutorial sections
- Grading exams

Fall 2000**Teaching Assistant**

MBG 3500 Laboratory Methods

Department of Molecular Biology and Genetics, University of Guelph

- Instructing laboratory section
- Grading lab reports and exams

Fall 2000**Teaching Assistant,**

TOX 2000 Introductory Toxicology

Department of Toxicology, University of Guelph

- Grading exams

June 1998 – Aug 2000**Research Associate**

Medmira Laboratories Inc., Halifax, Nova Scotia, Canada

(previously known as the Octopus Diagnostic Research Center)

- Major expertise in synthesizing stabilized gold colloids in various particle sizes, conjugated with different antibodies and antigens.
- Developing and improving of rapid immunomembrane “flow-through” diagnostic devices for detection of HIV, HCV, HBV, breast cancer and *Helicobacter pylori*.
- Performing immunization of chickens against HBV virus surface antigen and purification of the virus antigen-specific IgY from egg yolks for immunodiagnostic purposes.
- Running clinical trial for rapid detection kits of breast cancer antigen at Biochemistry Lab in Health Science Hospital, Cape Breton, Nova Scotia, Canada.

Fall 1999

Research Project

Department of Microbiology, Dalhousie University

- Performing a project under the course “Techniques in Electronmicroscopy”, entitled “Preparation of 12nm, 20nm, and 30nm gold particles conjugated with antibodies to heat shock protein-60 and comparison of their detection sensitivities on localization of hsp-60 in *Legionella pneumophila*”

Sep 1997 – April, 1998

Research Project

Department of Food Science, Acadia University

- Performing a project in collaboration with Octopus Diagnostic Research Center entitled – “Rapid detection of methicillin resistant *Staphylococcus aureus* by RNA-probing method”.

Summer 1997

Lab Assistant

CHEM 2000 and CHEM 3000 Biochemistry I & II

Department of Biochemistry, Acadia University

- Preparation of reagents and setting up apparatus for lab experiments
- Instructing students during lab sections
- Grading lab reports and exams

Sep 1996 – May 1998

Lab Technician

Octopus Diagnostic Research Center, Windsor, Nova Scotia, Canada

- Formulation and calibration of immunodiagnostic reagents
- Performing quality control for immunodiagnostic devices for detection of HIV, HBV, and HCV.

Publications:

Teoh, M.L.T., P. Turner, D.H. Evans (2005) Tumorigenic Leporipoxviruses up-regulates intracellular superoxide to inhibit apoptosis and promote cell proliferation. *J. Virol.* JV 79: 5799-811.

Teoh, M. L.T., Walasek P., and Evans D. H. (2003) Leporipoxvirus Cu-Zn superoxide dismutase homologs are catalytically inert decoy proteins that bind copper chaperone for SOD (CCS). *JBC* 278: 33175-84.

Cao, J.X., **M.L.T. Teoh**, M. Moon, G. McFadden, and D. H. Evans. (2002) Leporipoxvirus Cu-Zn superoxide dismutase homologs inhibit cellular superoxide dismutase, but are not essential for virus replication or virulence. *Viol.* 296, 125-135 (Cao and Teoh are co-first authors)

Abstracts:

Teoh, M.L.T., Turner, P., and Evans, D.H. (2004) Tumorigenic Leporipovirus SOD1 homologs upregulate intracellular superoxide level to promote cellular proliferation and inhibit apoptosis. Eleventh Annual Meeting of the Society for Free Radical Biology and Medicine. St. Thomas, US Virgin Islands.

Teoh, M.L.T., Turner, P., and Evans, D.H. (2004) Leporipoxvirus SOD1 homologs promote virus tumorigenesis and enhance pathogenicity. Fifteen International Poxvirus and Iridovirus Conference, Oxford, UK.

Teoh, M.L.T., Walasek, P., Tuner, P., and Evans, D.H. (2003) Leporipoxvirus SOD1 homologs promote virus tumorigenesis and enhance pathogenicity. Tenth Annual Meeting of the Society for Free Radical Biology and Medicine. Seattle, WA.

Teoh, M.L.T., Walasek, P., and Evans, D.H. (2002) Biochemical Properties of Shope fibroma virus Cu-Zn superoxide dismutase homolog. Fourteenth International Poxvirus and Iridovirus Conference, Lake Placid, NY.

Teoh, M.L.T., Walasek, P., and Evans, D. H. (2002) Leporipoxvirus Cu-Zn superoxide dismutase homologs inhibit cellular superoxide dismutase, but are not essential for virus replication or virulence. 21st Annual Meeting of the American Society for Virology, Lexington, KY.

Teoh, M.L.T., Cao, J.X., Moon, M., McFadden, G., nd Evans, D.H. (2001) Characterization of myxoma virus gpM131R, a viral homologs of Cu-Zn superoxide dismutase. Eighth Annual Meeting of Oxygen Society (currently named Society for Free Radical in Biology and Medicine), Research Triangle Park, NC.

Referees Contact Information

Dr. David Evans

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Department of Medical Microbiology and Immunology,
University of Alberta, Edmonton, Alberta, Canada T6G 2H7
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Dr. John Phillips

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Room 225, Axelrod Building,
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University of Guelph, Guelph, Ontario, Canada N1G 2W1
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Dr. A. Kirumira

Biochemistry Professor and supervisor at Octopus Diagnostic Research Center,
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