

Saba Al Heialy

Riyadh, Saudi Arabia

E-mail: salheialy@alfaisal.edu

Date of birth: April 9th, 1985

Nationality: Canadian, British

EDUCATION

Doctor of Philosophy **Jan, 2008-May 2013**

Department of Experimental Medicine, McGill University, Montréal, QC

My courses and theses were focused on Immunology, Biochemistry and Physiology

Thesis topic: Bidirectional crosstalk between airway smooth muscle cells and CD4+ T cells: implications in asthma pathology

Supervisor: Professor. James G. Martin , Chair of Medicine, McGill University

- Cell culture
- Flow cytometry
- Real-time PCR
- Immunofluorescence imaging
- Immunocytochemistry
- Zymography
- siRNA experimentation
- Confocal microscopy

Bachelor of Science: Biochemistry **2004-2007**

Université du Québec à Montréal, Montreal, QC

Languages:

English (fluent), French (fluent), Arabic (fluent), Spanish (spoken)

TEACHING EXPERIENCE

Mentor **May 2012-Aug 2012**

Mentor student from Immunology/Microbiology program at McGill University

Mentor **May 2011-Aug 2011**

Mentor student from Medicine program (Barcelona)

Mentor **Sept 2010-Aug 2011**

Mentor honor student from Immunology/Microbiology program at McGill University

SCHOLARSHIPS AND AWARDS

James Hogg Award **May 2012**

Best poster presentation at the Canadian Thoracic Society poster competition, San Francisco, CA, USA

Travel award **May 2012**

American Thoracic Society, San Francisco, CA, USA

Travel Award **Feb 2012**

Dept of Experimental Medicine, McGill University, Montreal, QC

Best Research Presentation-1st prize in the PhD category Association des pneumologues de la province de Québec conference, Montreal, QC	Nov 2011
Doctoral Fellowship from Research Institute of the MUHC	Sept 2011-Aug 2012
Best Research presentation-1st prize in the PhD category Respiratory Research Axis Day- MUHC, Montreal, QC	June 2011
Doctoral Fellowship from Allergen	Sept 2010-Aug 2011
Doctoral Fellowship from Research Institute of the MUHC	Sept 2010-Aug 2011
Best Research presentation-1st prize in the PhD category Respiratory Research Axis Day- MUHC, Montreal, QC	June 2010
Travel Award Dept of Experimental Medicine, McGill University, Montreal, QC	Feb 2010
Best Research Presentation-1st prize in the PhD category Association des pneumologues de la province de Québec conference, Montreal, QC	Nov 2009
Doctoral Fellowship from Asthma in the Workplace	Sept 2009- Aug 2010
Best Research Presentation-1st prize in the PhD category Respiratory Research Day-MUHC, Montreal, QC	June 2009
Principal Graduate Fellowship Dept of Experimental Medicine, McGill University, Montreal, QC	Jan 2009
Fellowship from Montreal Chest Institute	Sept 2008- Aug 2009
Principal Graduate Fellowship Dept of Experimental Medicine, McGill University, Montreal, QC	Jan 2008

RESEARCH EXPERIENCE

Summer studentship Cell cultures, flow cytometry, calcium studies Supervisor: Dr. James G. Martin Meakins-Christie Laboratories, McGill University, Montreal, QC	May-July 2006
Summer studentship Performed slide preparation and immunohistochemistry Supervisor: Dr. Adel Giaid Montreal General Hospital, McGill University, Montreal, QC	May-Aug 2004

EXTRA-CURRICULAR ACTIVITIES

Journal Club Coordinator
Meakins-Christie Laboratories, Montréal, QC

Jan-June 2010

PUBLICATIONS

1. Tsuchiya, K., Jo, T., Takeda, N., **Al Heialy, S.**, Siddiqui, S., Shalaby, K., Risse, P-A., Maghni, K., Martin, JG. Epidermal growth factor receptor activation during allergic sensitization affects IL-6 induced T cell influx to airways in a rat model. *European Journal of Immunology*, June 2010
2. **Al Heialy, S.**, McGovern TK., Martin JG., Insights into Asthmatic Airway Remodeling through Murine Models. *Respirology*, March 2011
3. Al Heialy S., Risse P-A., Zeroual M., Roman H., Tsuchiya K., Siddiqui S., Martin J.G., Novel mechanism of CD4+ T cell-induced airway smooth muscle cell proliferation, *American Journal of Respiratory Cell and Molecular Biology*, May 2013
4. **Al Heialy S.**, Risse P-A., Zeroual M., Novali M., Roman H., McGovern T.K., Martin J.G., Nanotubes physically connect CD4+ T cells and airway smooth muscle cells presenting a novel mechanism for T cell survival, In revision, *Journal of Immunology*, 2014

ORAL PRESENTATIONS

1. Presenter, **Workshop on the Development of Asthma Mouse Model and Related Techniques**, National Plan for Science, Technology and Innovation, Riyadh, Saudi Arabia, February 2014
2. **Work-in-progress:** Bidirectional crosstalk between airway smooth muscle cells and CD4+ T cells, October 2012
3. **Al Heialy S.**, Risse P-A., Zeroual M., Novali M., Roman H., Martin J.G., Nanotubes physically connect CD4+ T cells and airway smooth muscle cells presenting a novel mechanism for T cell survival, Association des pneumologues meeting, Quebec, Canada, November 2011
4. **Journal Club:** October 2011, November 2010
5. **Al Heialy S.**, Risse P-A., Zeroual M., Roman H., Tsuchiya K., Siddiqui S., T cell mediated mechanisms of airway smooth muscle cell proliferation, Presented at the **Respiratory Research Axis Day**, Montreal, QC, June 2011
6. **Al Heialy S.**, Tsuchiya K., Risse P., Siddiqui S., Ramos-Barbon D., Martin J., Antigen-specific CD4+ T cells drive airway smooth muscle proliferation via the epidermal growth factor receptor. Presented at the **European Academy of Allergy and Clinical Immunology**, London, England, June 2010
7. **Al Heialy S.**, Tsuchiya K., Risse P., Siddiqui S., Ramos-Barbon D., Martin J., Antigen-specific CD4+ T cells drive airway smooth muscle proliferation via the epidermal growth factor receptor. Presented at the **Respiratory Research Axis Day**, Montreal, QC, June 2010
8. **Al Heialy S.**, Tsuchiya K., Risse P., Siddiqui S., Ramos-Barbon D., Martin J., Antigen-specific CD4+ T cells drive airway smooth muscle proliferation via the epidermal growth factor receptor. Presented at the **Association des pneumologues de la province de Québec Conference**, Montreal, QC, November 2009
9. **Al Heialy S.**, Tsuchiya K., Risse P., Siddiqui S., Ramos-Barbon D., Martin J., Antigen-specific CD4+ T cells drive airway smooth muscle proliferation via the epidermal growth factor receptor. Presented at the **Respiratory Research Axis Day**, Montreal, QC, June 2009

POSTER DISCUSSIONS

1. **S. Al Heialy**, M. Zeroual, P-A. Risse, H. Roman, N. Novali, J.G. Martin, Nanotubes physically connect CD4+ T cells and airway smooth muscle cells presenting a novel mechanism of T cell survival, American Thoracic Society, Conference, May 2012, San Francisco, CA, USA
2. **S. Al-Heialy**, B. Tolloczko, K. Tsuchiya, S. Siddiqui, D. Ramos-Barbon, and J.G. Martin. Antigen-Specific CD4+ T Cells Drive Airway Smooth Muscle Proliferation Through the Epidermal Growth Factor Receptor. American Thoracic Society, Conference, May 2009, San Diego, CA, USA
3. K. Tsuchiya, T. Jo, N. Takeda, S. **Al-Heialy**, S. Siddiqui, K. Maghni, J.G. Martin. The role of epidermal growth factor receptor (EGFR) in allergic sensitization in the rat model of asthma. American Thoracic Society (ATS) May 2009, San Diego, CA, USA

POSTER PRESENTATIONS

1. **S. Al Heialy**, M. Zeroual, P-A. Risse, H. Roman, N. Novali, J.G. Martin, Nanotubes physically connect CD4+ T cells and airway smooth muscle cells presenting a novel mechanism of T cell survival, **Experimental Medicine Research Day**, Montreal, QC, February 2012
2. **Al Heialy S.**, Tsuchiya K., Risse P., Siddiqui S., Ramos-Barbon D., Martin J., Antigen-specific CD4+ T cells drive airway smooth muscle proliferation via the epidermal growth factor receptor. **Experimental Medicine Research Day**, Montreal, QC, February 2010
3. B. Tolloczko, **S. Al Heialy**, L. Corrigan, J.G. Martin, Mast Cell - Airway Smooth Muscle Cell Interaction in a Rat Model of Allergic Asthma. **American Thoracic Society Conference**, San Francisco, CA, US, May 2007