Zoulfia Allakhverdieva, PhD, FAAAAI

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Summary

Scientific and Project Leader with extensive background in basic and clinical immunology, expertise in respiratory, autoimmune, inflammatory diseases, cancer, regenerative medicine

Solid knowledge of monitoring procedures, clinical trial processes and designs, ICH, GCP, FDA, TPD and EMEA Regulations; multi-therapeutic expertise

Strong organizational and leadership skills working with both internal and external multidisciplinary teams, member of Leadership Working Initiative Group of American Academy of Allergy, Asthma and Immunology (AAAAI) Leadership Institute

Excellent written/communication skills; co-authored peer-reviewed publications (many as the first author) and presented at many international scientific conferences; Website Medical Editor of the Clinical Immunology Society (CIS), editor and reviewer of international scientific journals; recipient of Parker B. Francis Fellowship in pulmonary research and international 2011 World Asthma Organization's Henning Lowenstein Research Excellence in Allergy Award

Strong team-leader, dynamic, problem-solver, quick-learner, cross-functional collaborator, mentor.

Keywords

Immunology, innate immunity, inflammation, asthma/allergy, hematology, cancer, COPD, cystic fibrosis, autoimmune diseases, regenerative medicine, immunotherapy, regulatory affairs

Languages English, French, Spanish, Azeri, Russian

Professional Experience

11.2013-Present **Clinical Immunology Society (CIS)** Milwaukee, WI

Chief Website Medical Editor

- *Serve as lead for generating and coordinating website content which is relevant, accurate, and timely to the educational and community development needs of the CIS membership.*
- *Lead monthly updates of substantive content pertinent to the field of Clinical Immunology and related to CIS educational initiatives, forums, and platforms, such as the WEBbook of Biologic Therapies.*

03.2013-Present **CHU St-Justine** Montreal, Canada

Hematology/Oncology Department, Charles Bruneau Cancer Research Center, Ste-Justine University Hospital

Attachée de recherche (Instructor equivalent), Department of Pediatrics, University of Montreal
Medical Editor, Project Search, Evaluation and Grant Development Scientist

- *Scientific Leader of the programme "The role of mast cells and fibrocytes in the progression and tumorigenesis of plexiform neurofibromas in Neurofibromatosis type I patients" with the access to300 patients*

- *Basic Science Project Leader in Phase II clinical study of imatinib mesylate in Neurofibromatosis type I patients with progressing plexiform neurofibromas.*
- *Work within and across Hematology/Oncology/Immunology teams to prepare grant applications and projects on the development of new immunotherapeutic strategies for treatments of pediatric cancers, primary immunodeficiencies and immunologic diseases.*

01.2012-Present **Freelance Medical Writer and Editor** Montreal, Canada

- *Write clinical trial protocols, clinical study reports, training manuals, investigator brochures, and CME materials*

11. 2009-07.2011 **CRCHUM, Notre-Dame Hospital** Montreal, Canada
Laboratory on Allergy Research
Attachée de recherché (Instructor equivalent), Department of Medicine, University of Montreal

- *Led research projects on essential role of the innate immune system in the pathogenesis of allergic diseases*
- *Worked within and across AllerGen teams to prepare grant applications and written evaluations of the therapeutic potential of drug discovery projects "TSLP and the pathogenesis of asthma","Hemopoietic Stem Cell Biomarkers in the Diagnosis and Prediction of Allergic Inflammation and Disease"*
- *Trained, instructed, and reviewed performance of staff*

07.2009-07.2010 **Internship** (on-line) **in Clinical Research Associate Program at Krieger Reseach Center, Toronto, Canada**

- *Member of clinical development team, developed and performed Phase II clinical study of the lowering effect of Prolipostat on blood concentrations of low-density lipoprotein cholesterol*

11. 2009-11.2010 **National Research Council Canada Biotechnology Research Institute**
Visiting scientist

- *Developed experimental models for breast cancer and cystic fibrosis*

09. 2002-11. 2009 **CRCHUM, Notre-Dame Hospital** Montreal, Canada
Laboratory on Allergy Research
Post-doctoral fellow (Supervisor: Prof. Guy Delespesse)

- *Led studies elucidating the role of epithelial cell-derived cytokines TSLP and IL-33 in the initiation and perpetuation of allergic diseases*
- *Spearheaded the effort to identify and establish complex primary cell-based in vitro models*
- *Interacted with and established working relationship with different collaborating teams*
- *Led project of 400 commensal bacteria screening for Danone*
- *Successfully identified a specific marker enabling the isolation of human regulatory T lymphocytes from a population of activated effector lymphocytes*

04. 2000-08. 2002 **Topigen Pharmaceuticals Inc.** Montreal, Canada
Project Leader

- *Successfully developed antisense oligonucleotides blocking the common beta chain of IL-3, IL-5, GM-CSF receptors and CCR3 (Patent WO 03004511; Allakhverdi Z. et al Ann. N. Y. Acad. Sci. 2006 Oct; 1082: 62-73) that are currently undergoing Phase II clinical studies*

05. 1996-03. 2002 **CHUM, Notre-Dame Hospital** Montreal, Canada

PhD Student (Supervisor: Dr. Paolo Renzi)

- *Successfully completed different projects studying the pathogenesis of the allergic inflammatory responses and the role of Th2 cytokines in experimental asthma*
- *Led the assessment of specific inhibitors of Th2-induced airway inflammation, particularly eosinophil inflammation*

1989-1992 **St-Petersburg State Chemical-Pharmaceutical Academy** St. Petersburg, Russia
Student (Supervisor: Prof. N. Zaikina)

- *Research in microbiology*

Education

02. 2013-03.2014 *Leadership Training* at the American Academy of Asthma, Allergy, and Immunology Leadership Institute

09. 2002-11. 2009 **CHUM, Notre-Dame Hospital** Montreal, Canada
Post-doctoral training in Immunology (Supervisor: Prof. Guy Delespesse)

1998-2002 **University of Montreal** Montreal, Canada
*PhD in Biomedical Sciences (*Supervisor: Dr. P.M. Renzi)

Title of the thesis: **Modulation of airway responses to antigen in a rat model of allergic asthma**

1997-1998 **University of Montreal** Montreal, Canada
MSc Programme in Biomedical Sciences (Direct switch to PhD Programme)

1993-1997 **McGill University** Montreal, Canada
*Bachelor of Science (*Major Biochemistry; Minor Biotechnology)

1988-1992 **St-Petersburg State Chemical-Pharmaceutical Academy** St. Petersburg, Russia
Bachelor of Science (Biotechnology; Drug Industrial Technology)

Professional Training

2012-Present **Leadership Working Initiative Group at the AAAAI Leadership Institute**

2009 **Clinical Research Associate Program + GCP Certificate at Krieger Research Center,** Toronto, Canada

2008 **2008 AAAAI Strategic Training in Allergy Research (ST*AR) Program**, Philadelphia

2007 **Clinical Immunology Society School in Systemic Autoimmune Diseases,** March 14-18, Santa Fe

2006 **2007 AAAAI Strategic Training in Allergy Research (ST*AR) Program**, San Diego

2006 **AAAAI and Clinical Immunology Society School in Hypersensitivity and Allergic Diseases**, August 25-29, Aspen

Membership of Scientific Organizations

2006-Present Fellow of American Academy of Allergy and Immunology (FAAAAI)
Mechanisms of Asthma and Allergic Inflammation Interest Section

2008-Present AllerGen Allergy, Genes and Environment Network

2010-Present Clinical Immunology Society; Communication and Publication Committee

2009-Present Réseau en santé respiratoire du Fonds de recherche du Québec-Santé (the Respiratory Health Network of the FRSQ)

2012-Present Federation of Clinical Immunology Society

2012-Present AAAAI Leadership Institute

Regular Journal Reviewer

-Allergy
-Clinical and Experimental Allergy

Editorial Board Member

-World Journal of Immunology
-Host Editor of Research Topic in *Frontiers in Inflammation (Frontiers in Immunology)*

Awards and Distinctions

2011	**2011 WAO (World Asthma Organization) Henning Loewenstein Award for Research excellence in Allergy** worldwide among young investigators in the field of Allergy/Immunology (first time in Canada, second in North America)
2009	**2009 WAO (World Asthma Organization) Henning Loewenstein Award for Research excellence in Allergy** *(second place)*
2009	**2009 AAAAI Strategic Training in Allergy Research (ST*AR) Program,** selected as a mentor, March 13-18, Washington, DC
2009	**Best Poster Presentation Award in 4th Annual Meeting of AllerGen,** February 14-17, Ottawa
2008-2011	**Parker B. Francis transitional to independent investigator Fellowship in Pulmonary Research**
2008	**2008 AAAAI Strategic Training in Allergy Research (ST*AR) Program**, Philadelphia
2007	**Clinical Immunology Society School in Systemic Autoimmune Diseases,** March 14-18, Santa Fe
2007	**2007 AAAAI Strategic Training in Allergy Research (ST*AR) Program**, San Diego
2007	**Travel Award for XX World Allergy Congress 2007,** December 2-6, Bangkok
2006	**AAAAI and Clinical Immunology Society School in Hypersensitivity and Allergic Diseases**, August 25-29, Aspen
2006	**Travel Award for *6th Annual Meeting of the Federation of Clinical Immunology Societies*** *(FOCIS 2006)*
1999-2001	**Biomedical Sciences, University of Montreal.** Scholarship for doctoral studies
1986	**Gold Medal for pre-university studies**

Publications

1. Haddad E., **Z. Allakhverdi**, L. M. Griffith, M. J. Cowan, L. D. Notarangelo. Survey on re-transplantation criteria for severe combined immunodeficiency patients. *J. Allergy Clin. Immunol*. 2014 Feb; 133(2): 597-9 (**highlighted in the *Editors' Choice* of JACI**; impact Factor **12.047**, highest-ranking (1/22) in Allergy and 9/134 in Immunology).
2. **Allakhverdi Z.**, M. R. Comeau, M. Armant, R. Agrawal, J. A. Woodfolk, R. Sehmi, K. J. Howie, G. M. Gauvreau, and G. Delespesse. Mast Cell-activated Bone Marrow Stromal Cells Regulate Proliferation and

Lineage Commitment of $CD34^+$ Progenitor cells. *Front Immunol* 2013 Dec 17; 4: 461 (Open Access journal; under Research Topic "Hematopoietic cells in inflammation and allergy", corresponding author).

3. **Allakhverdi Z.,** and G. Delespesse. Hematopoietic Progenitor Cells are Innate Th2 Cytokine Producing Cells. *Allergy*. 2012 Jan; 67(1): 4-9 ***Figure 1 on the cover page*** (Imp factor **6.297**, ranked 2/22 in Allergy and 18/134 in Immunology journals; corresponding author).
4. **Allakhverdi Z.**, M.R. Comeau, and G. Delespesse. Dexamethasone regulation of TSLP receptor expression on mast cells and their precursors*. J. Allergy Clin. Immunol.* 2011 Feb;127(2):523-524.e1-2 (Impact Factor **9.273**, highest-ranking (1/22) in Allergy and 9/134 in Immunology journals).
5. **Allakhverdi Z.**, M.R. Comeau, H.K. Jessup, and G. Delespesse. TSLP as a mediator of crosstalk between bronchial smooth muscles and mast cells. *J. Allergy Clin. Immunol.* 2009 Apr;123(4): 958-60 e2 (Impact Factor **9.165,** highest-ranking (1/22) in Allergy and 9/134 in Immunology journals).
6. **Allakhverdi Z.**, M.R. Comeau, D.E. Smith, D. Toy, L.M. Endam, M. Desrosiers, Y.J. Liu, K.J. Howie, J.A. Denburg, G.M. Gauvreau, and G. Delespesse. $CD34^+$ Hemopoietic Progenitor Cells are Potent Effectors of Allergic Inflammation. *J. Allergy Clin. Immunol.* 2009 Feb; 123(2): 472-8. Epub 2008 Dec 6 (Impact Factor **9.165,** highest-ranking (1/22) in Allergy and 9/134 in Immunology journals).
7. **Allakhverdi Z.**, D.E. Smith, M.R. Comeau, and G. Delespesse. **Cutting Edge:** The ST2 ligand IL-33 potently activates and drives maturation of human mast cells. *J Immunol*. 2007 179: 2051-2054 (Impact Factor **6.293,** ranked 20/134 in Immunology journals, cited more than any other immunology journal).
8. **Allakhverdi, Z.**, M.R. Comeau, H.K. Jessup, B.P. Yoon, A. Brewer, S. Chartier, N. Paquette, S. F. Ziegler, M. Sarfati, and G. Delespesse. Thymic stromal lymphopoietin is released by human epithelial cells in response to microbes, trauma or inflammation and potently activates mast cells. *J Exp Med.* 2007 Feb 19; 204(2): 253-8 (Impact Factor **14.484**, ranked 2/106 in Medicine, Research and Experimental and 5/134 in Immunology journals). F1000 Factor 8: Evaluated by P'ng Loke 23 Feb 2007, Marc Rothenberg 08 Mar 2007; Dale Umetsu 11 Apr 2007
9. **Allakhverdi, Z.**, M. Allam, A. Guimond, N. Ferrari, K. Zemzoumi, S. Seguin, L. Paquet, and P.M. Renzi. Multitargeted approach using antisense oligonucleotides for the treatment of asthma. *Ann. N. Y. Acad. Sci.* 2006 Oct; 1082: 62-73 (Impact Factor **3.16,** ranking 5/48 in Multidisciplinary Sciences).
10. Fortin M., N. Ferrari, M.E. Higgins, S. Seguin, M. Allam, **Z. Allakhverdi,** C. Piaget-Rodriguez, L. Paquet, and P.M. Renzi. 2006. Effects of antisense oligodeoxynucleotides targeting CCR3 on the airway response to antigen in rats. *Oligonucleotides*. Fall; 16 (3): 203-12. (Impact Factor **2.808**)
11. Grimbert, P., S. Bouguermouh, N. Baba, T. Nakajima, **Z. Allakhverdi**, D. Braun, H. Saito, M. Rubio, G. Delespesse, and M. Sarfati. 2006. Thrombospondin/CD47 interaction: a pathway to generate regulatory T cells from human $CD4^+CD25^-$ T cells in response to inflammation. *J Immunol*. 177: 3534-3541 (Impact Factor **6.293,** ranked 20/134 in Immunology journals).
12. **Allakhverdi, Z.**, D. Fitzpatrick, A. Boisvert, S. Bouguermouh, N. Baba, M. Sarfati, and G. Delespesse. 2006. Expression of CD103 identifies human regulatory T cell subsets. *J. Allergy Clin. Immunol.* 118(6): 1342-1349. (Impact Factor **8.829;** highest-ranking (1/22) in Allergy)
13. **Allakhverdi, Z**., S. Bouguermouh, M. Rubio, and G. Delespesse. 2005. Adjuvant activity of pollen grains. *Allergy*. 60(9): 1157-1164. (Impact Factor **5.334**, ranked 2/22 in Allergy and 18/134 in Immunology journals).
14. **Allakhverdi, Z**., M. Allam, and P. M. Renzi. 2002. Inhibition of antigen-induced eosinophilia and airway hyperresponsiveness by antisense oligonucleotides against common β chain of IL-3, IL-5, GM-CSF receptors in a rat model of allergic asthma. *Am. J. Respir. Crit. Care Med.* 165: 1015-1021. (Impact Factor **6.567**, ranking the highest rated subspecialty journals).
15. **Allakhverdi, Z**., B. Lamkhioued, R. Olivenstein, Q. Hamid, and P. M. Renzi. 2000. CD8-depletion-induced late airway response is characterized by eosinophilia, increased eotaxin and decreased IFN-γ in rats. *Am. J. Respir. Crit. Care Med* 162: 1123-1131. ***Fig. 3 on the cover page.*** (Impact Factor **5.956**).
16. Lamkhioued, B., E. A. Garcia-Zepada, S. Abi-Younes, H. Nakamura, S. Jedrzkiewicz, L. Wagner, P. M. Renzi, **Z. Allakhverdi,** C. Lilly, Q. Hamid, and A. D. Luster. 2000. Monocyte chemoattractant protein (MCP)-4 expression in the airways of patients with asthma: Induction in epithelial cells and mononuclear cells by proinflammatory cytokines. *Am. J. Respir. Crit. Care Med.* 162: 723-732 (Impact Factor **5.956**).
17. Ghaffar, O., Q. Hamid, P. M. Renzi, **Z. Allakhverdi**, J. C. Holgate, S. Molet, S. A. Shore, A. D. Luster, and B. Lamkhioued. 1999. Constitutive and cytokine stimulated expression of eotaxin by human airway smooth muscle. *Am. J. Respir. Crit. Care Med.* 159: 1933-1942. (Impact Factor **5.956**).

18. Lamkhioued B., P. M. Renzi, S. Abi-Younes, E. A. Garcia-Zepada, **Z. Allakhverdi**, O. Ghaffar, M. D. Rothenberg, A. D. Luster, and Q. Hamid. 1997. Increased expression of eotaxin in bronchoalveolar lavage and airways of asthmatics contributes to the chemotaxis of eosinophils to the site of inflammation. *J. Immunol.* 159:4593-4601 (Impact Factor **6.937**).

Book chapters

19. **Allakhverdi Z.** Role of Mast Cells in Health and Disease. In: "Mast Cells: Phenotypic Features, Biological Functions, and Role in Immunity". NovaScience Publishers Inc., 2012, pages 1-41.

Patents

Allakhverdi, Z and P. M. Renzi. 2004. Methods for increasing in vivo efficacy of oligonucleotides and inhibiting inflammation in mammals. EC: C12N15/11B7; A61K31/7076 WO 03004511

Invited Presentations

1. **CHU St-Justine, GRETISC**, seminar "Possible role of mast cells, MASTers of allergic inflammation, in GvHD", June 21, 2013, Montreal, QC
2. **2013 American Academy of Allergy, Asthma and Immunology Meeting,** invited discussion leader in the seminar "Regulation of Allergic Inflammation by Airway Epithelium" February 23, San Antonio, TX
3. **The Benaroya Research Institute,** seminar "Mast cells as MASTers of allergic inflammation", June 5th, 2012, Seattle, WA
4. **The Northwestern University**, seminar "The role of mast cells in allergic inflammation", May 11th, 2012, Chicago, IL
5. **The University of Montreal**, seminar "Epithelial cell-derived cytokines in airway inflammation". 23rd March, 2012
6. **2012 American Academy of Allergy, Asthma and Immunology Meeting,** invited discussion leader in the seminar "Airway Epithelium as the Interplay Between Innate and Th2 Immunity" March 3, Orlando, FL
7. **The University of Manitoba,** seminar "Role of epithelial cells in airway inflammation", 3rd November, 2011
8. **2011 EPS Montreal International Congress of Dermatology**, invited speaker **"**Dexamethasone regulation of thymic stromal lymphopoietin receptor expression on mast cells and their precursors" Sept 7-8, Montreal
9. **2011 American Academy of Allergy, Asthma and Immunology Meeting,** invited discussion leader in seminar "Epithelial Cell-derived Cytokines in Airway Inflammation" March 19, San Francisco, CA
10. **2011 American Academy of Allergy, Asthma and Immunology Meeting,** invited speaker in Interest Section Forum "Human Hemopoietic Progenitor Cells as Effectors of Th2 Inflammation" March 20, San Francisco, CA
11. **2011 American Academy of Allergy, Asthma and Immunology Meeting,** invited speaker in symposium "Hemopoietic Progenitor Cells are a Major Source of Th2 Cytokines" March 22, San Francisco, CA
12. **2010 American Academy of Allergy, Asthma and Immunology Meeting,** moderator of the session "TSLP: Regulator of Immune Response", February 26-March 2, New Orleans, LA
13. **2010 American Academy of Allergy, Asthma and Immunology Meeting,** invited discussion leader in seminar "Hemopoietic $CD34^+$ Precursor Cells are Pro-inflammatory", February 26, New Orleans, LA
14. **2010 American Academy of Allergy, Asthma and Immunology Meeting.** Regulation of Thymic Stromal Lymphopoietin (TSLP) Receptor Expression. February 26-March 2, New Orleans, LA
15. **Association des Pneumologues de la province de Québec/Réseau en Santé Respiratoire du FRSQ**, 6th November, 2009, Montréal**.** Effector function of $CD34^+$ hemopoietic progenitor cells in allergic inflammation.
16. **National Research Council Canada Biotechnology Research Institute.** Seminar "Epithelial cell-derived cytokines in airway inflammation". 6th October, 2009.
17. **McGill University, Meakins-Christie Laboratories**. Beer Seminar "Role of epithelial cells in airway inflammation". 5th October, 2009.

18. **2009 American Thorasic Society Meeting,** invited featured speaker in symposium "Hemopoietic $CD34^+$ Precursor Cells are Pro-inflammatory" May 15-20, San Diego, CA
19. **4th Annual Meeting AllerGen**, February 14-17, 2009, Ottawa **"**Effector function of $CD34^+$ hemopoietic progenitor cells in allergic inflammation".
20. **4th School in Systemic Autoimmune Diseases**, March14-18, 2007, Santa Fe, New Mexico. **"**Mast cells promote the development of $CD103^+$ regulatory T cells".
21. **2007 American Academy of Allergy, Asthma and Immunology Meeting. "**Thymic Stromal Lymphopoietin (TSLP) is released by human epithelial cells in response to microbes and potently activates mast cells".
22. **2007 KeyStone Symposia**, Copper Mountain, Colorado. "Thymic Stromal Lymphopoietin (TSLP) is a potent activator of human mast cells".
23. **1st School in Hypersensitivity and Allergic Diseases**, August 25-29, 2006, Aspen, Colorado. "Co-expression of CD103 and CD25 identifies human regulatory $CD4^+$ T cells".
24. **6th Annual Meeting of the Federation of Clinical Immunology Societies** (FOCIS), 2nd June 2006, San Francisco, CA. **"**Co-expression of CD103 and CD25 identifies human regulatory $CD4^+$ T cells".
25. **2005 American Academy of Allergy Asthma and Immunology Meeting**, 22nd March. "Interactions between mast cells and dendritic cells".
26. **12th International Congress of Immunology and 4th Annual conference of FOCIS**, 22nd July 2004, Montreal. "Adjuvant activity of intact grains of pollen".
27. **Congrès annuel des stagiaires de recherche**, le 27 janvier 2001, Montréal. "Effets de l'inhibition de l'expression du récepteur CCR3 par les antisens phosphorothioate".
28. **Congrès annuel des stagiaires de recherche**, le 19 janvier 2000, Montréal. "L'augmentation de la réaction semi-retardée causée par déplétion des cellules $CD8^+$ est caracterisée par une éosinophilie, l'augmentation de l'expression d'éotaxin et une diminution de l'expression de l'IFN-γ chez les rats".

Abstracts

1. **Allakhverdi Z.,** M.R. Comeau, and G. Delespesse. Activated Mast Cells Instruct Bone Marrow to Produce Effector Cells of Allergic Response. *J Allergy Clin Immunol 127 (2): AB130; 2011 American Academy of Allergy, Asthma and Immunology Meeting, March 18-22, San Francisco, CA*
2. Hui C., I. Asher, D. Heroux, **Z. Allakhverdi**, G. Delespesse and J.A. Denburg. *Effects of thymic stromal lymphopoietin on cord blood progenitor cell differentiation and hemopoietic cytokine receptors expression. Canadian Society of Allergy and Clinical Immunoloy Annual Scientific Meeting 2011.*
3. D. Heroux, I. Asher, J. Denburg, G. Delespesse, **Z. Allakhverdi** *Effect of Thymic Stromal Lymphopoietin (TSLP) on Cord Blood (CB) Progenitor Cell Hemopoietic Cytokine Receptors (HCR). J Allergy Clin Immunol 127 (2): AB126; 2011 American Academy of Allergy, Asthma and Immunology Meeting, March 18-22, San Francisco, CA*
4. **Allakhverdi Z.,** M.R. Comeau, and G. Delespesse. Regulation of Thymic Stromal Lymphopoietin (TSLP) Receptor Expression. *J Allergy Clin Immunol 125 (2): AB235; 2010 American Academy of Allergy, Asthma and Immunology Meeting, February 28-March 3, New Orleans, LA*
5. Mfuna Endam L., Y. Bosse, A. Filali-Mouhim, **Z. Allakhverdi**, G. Delespesse, M.P. Platt, K.M. Stankovic, R. Metson, P. Boisvert, L.P. Boulet, and M. Desrosiers. Identification of TSLP as a Susceptibility Gene for Chronic rhinosinusitis. *J Allergy Clin Immunol 125 (2): AB240; 2010 American Academy of Allergy, Asthma and Immunology Meeting, February 28-March 3, New Orleans, LA*
6. **Allakhverdi Z.**, M.R. Comeau, D.E. Smith, D. Toy, L. Mfuna Endam, M. Desrosier, K. J. Howie, J. A. Denburg, G. M. Gauvreau, and G. Delespesse. Effector Function of $CD34^+$ Hemopoietic Progenitor Cells in Allergic Inflammation. *J Allergy Clin Immunol 123(2): S273; 2009 American Academy of Allergy, Asthma and Immunology Meeting, March 14-18, Washington, DC*
7. M.R. Comeau, **Z. Allakhverdi**, and G. Delespesse. TSLP as a mediator of crosstalk between bronchial smooth muscles and mast cells. *Cytokines 2008, October 13-18, Montreal, Quebec, Canada*
8. **Allakhverdi Z.,** M.R. Comeau, D.E. Smith, G. Delespesse. $CD34^+$ Precursors Cells are Potent Effectors of Allergic Inflammation. *J Allergy Clin Immunol 121 (2): S137; 2008 American Academy of Allergy, Asthma and Immunology Meeting, March 14-18, Philadelphia*
9. **Allakhverdi Z.,** D.E. Smith, M.R. Comeau, G. Delespesse. Role of IL-33 in Mast Cell-mediated Inflammation. *J Allergy Clin Immunol 121(2): S150; 2008 American Academy of Allergy, Asthma and Immunology Meeting, March 14-18, Philadelphia;* **Featured Poster**
10. **Allakhverdi Z.,** D.E. Smith, M.R. Comeau, G. Delespesse. IL-33 is a potent activator of human mast cells. *World Allergy Congress, WAC 2007, December 2-6, Bangkok*

11. **Allakhverdi Z.,** M.R. Comeau, S.F. Ziegler, M. Sarfati and G. Delespesse. Thymic Stromal Lymphopoietin (TSLP) is released by human epithelial cells in response to microbes and potently activates mast cells. *J Allergy Clin Immunol 119(2): 523; 2007 American Academy of Allergy, Asthma and Immunology Meeting, San Diego, CA*
12. **Allakhverdi Z.,** M.R. Comeau, S.F. Ziegler, M. Sarfati and G. Delespesse. Thymic Stromal Lymphopoietin (TSLP) is a potent activator of human mast cells. *2007 KeyStone Symposia, Copper Mountain, Colorado*
13. **Allakhverdi Z.,** and G. Delespesse. Mast cells promote the development of $CD103^+$ regulatory T cells. *J Allergy Clin Immunol 119(1): S48; 2007 American Academy of Allergy, Asthma and Immunology Meeting, San Diego, CA*
14. **Allakhverdi Z.**, D. Fitzpatrick, M. Sarfati, and G. Delespesse. CD103 is a marker of human suppressor cells. *6th Annual Meeting of the Federation of Clinical Immunology Societies (FOCIS 2006), 2nd June 2006, San Francisco, CA*
15. **Allakhverdi Z.**, D. Fitzpatrick, M. Sarfati, and G. Delespesse. CD103 is a marker of human suppressor cells. *J Allergy Clin Immunol 117 (2): S83; 2006 American Academy of Allergy, Asthma and Immunology Meeting*
16. **Allakhverdi Z**., S Mecheri, C. Demeure, and G. Delespesse. Interactions between mast cells and dendritic cells. *J Allergy Clin Immunol 115(2): S270; 2005 American Academy of Allergy, Asthma and Immunology Meeting*
17. Grimbert, P., Rubio, M., **Allakhverdi, Z.**, Braun, D., Levecque, M., Delespesse, G., and Sarfati, M. L'interaction du récepteur CD47 avec son ligand, la Thrombospondine, sur des lymphocytes T humains naïfs, induit l'apparition de cellules T régulatrices. *Société de Néphrologie et Société Francophone de Dialyse*. September 28 – October 1, 2004, Marseille, France.
18. Grimbert, P., Rubio, M., **Allakhverdi, Z.**, Braun, D., Levecque, M., Delespesse, G., and Sarfati, M. CD47 ligation on naïve cells promotes the generation of distinct human anergic/regulatory T cells. *12th International Congress of Immunology and 4th Annual Conference of FOCIS*. July 18-23, 2004, Montreal, Quebec, Canada.
19. **Allakhverdi Z**., and G. Delespesse. Adjuvant effect of intact pollen. *2004 12th Inaternational Congress of Immunology and 4th Annual Conference of FOCIS.* July 18-23, 2004, Montreal, Quebec, Canada.
20. **Allakhverdi Z**., S. Mécheri, and G. Delespesse. Interaction between mast cells and dendritic cells. *2004 12th International Congress of Immunology and 4th Annual Conference of FOCIS*
21. **Allakhverdi Z**., and G. Delespesse. Adjuvant effect of intact pollen. *J Allergy Clin Immunol113 (2): S160; 2004 American Academy of Allergy, Asthma and Immunology Meeting.*
22. **Allakhverdi Z.**, M. Allam, and P.M. Renzi. Antisense oligonucleotides against CCR3, the common β chain of IL-3/IL-5/GM-CSF receptors, and common α chain of IL-4/IL-13 receptors inhibit eosinophilia and airway hyperresponsiveness synergistically in a rat model of allergic asthma. *Am J Respir Crit Care Med 165: A233; 2002 American Thorasic Society Meeting.*
23. **Allakhverdi Z.,** M. Allam, and P. M. Renzi. Effect of inhibition of the common beta chain of GM-CSF, IL-3 and IL-5 receptors by antisense phosphorothioate oligonucleotides. *Réunion Annuelle Conjointe de Société de Thoracologie du Québec, Québec, le 16novembre 2001.*
24. **Allakhverdi Z.,** M. Allam, and P. M. Renzi. Effect of inhibition of the common beta chain of GM-CSF, IL-3 and IL-5 receptors by antisense phosphorothioate oligonucleotides. *Am J Respir Crit Care Med 163: A943; 2001 American Thorasic Society Meeting.*
25. **Allakhverdi Z.,** M. Allam, and P. M. Renzi. Inhibition of CCR3 expression by antisense phosphorothioate oligonucleotides. *3ième Congrès annuel des étudiantes et stagiares du CRCHUM*.
26. **Allakhverdi Z.,** M. Allam, and P. M. Renzi. Inhibition of CCR3 expression by antisense phosphorothioate oligonucleotides. *Réunion Annuelle Conjointe de Société de Thoracologie du Québec, Québec,* le 10 novembre 2000.
27. **Allakhverdi Z.,** M. Allam, and P. M. Renzi. Inhibition of CCR3 expression by antisense phosphorothioate oligonucleotides. *Am J Respir Crit Care Med* 161: A285; *2000 American Thorasic Society Meeting.*
28. **Allakhverdi Z.**, B. Lamkhioued, O. Ghaffar, A. Soussi-Gounni, Q. Hamid, P. M. Renzi. Human bronchial smooth muscle cells express the high affinity (FcER1) and low affinity (FcERII/CD23) receptors for IgE. *Réunion Annuelle Conjointe de Société de Thoracologie du Québec, le 1 octobre 1999.*
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Student Supervision

2003: Geraldine Robert, BSc student

2004-2006: Annie Boisvert, MSc. Screening of probiotics.

2008: Elisabeth Glitzner, BSc student

2009 AAAAI STA*R Program: Hui Huang, PhD student
Christof Straub, PhD student
Kathryn Hulse, PhD student

2010-2011 Valerie Garcia, MSc. Characterization of stem cells from adult and cord blood.

Previous Research Support

2008-2009: **AllerGen Strategic Initiative**: *TSLP and the pathogenesis of asthma*

2008-2011: **Parker B Francis Fellowship in Pulmonary Research:** *The role of epithelial cell-derived cytokines in intrinsic forms of allergic diseases*

2009-2012: **AllerGen**: *Hemopoietic Stem Cell Biomarkers in the Diagnosis and Prediction of Allergic Inflammation and Disease*

Pending Research Support

2014-2016: **Department of Defense, Congressionally Directed Medical Research Program on Neurofibromatosis:** *The role of mast cells and fibrocytes in the progression and tumorigenesis of plexiform neurofibromas*