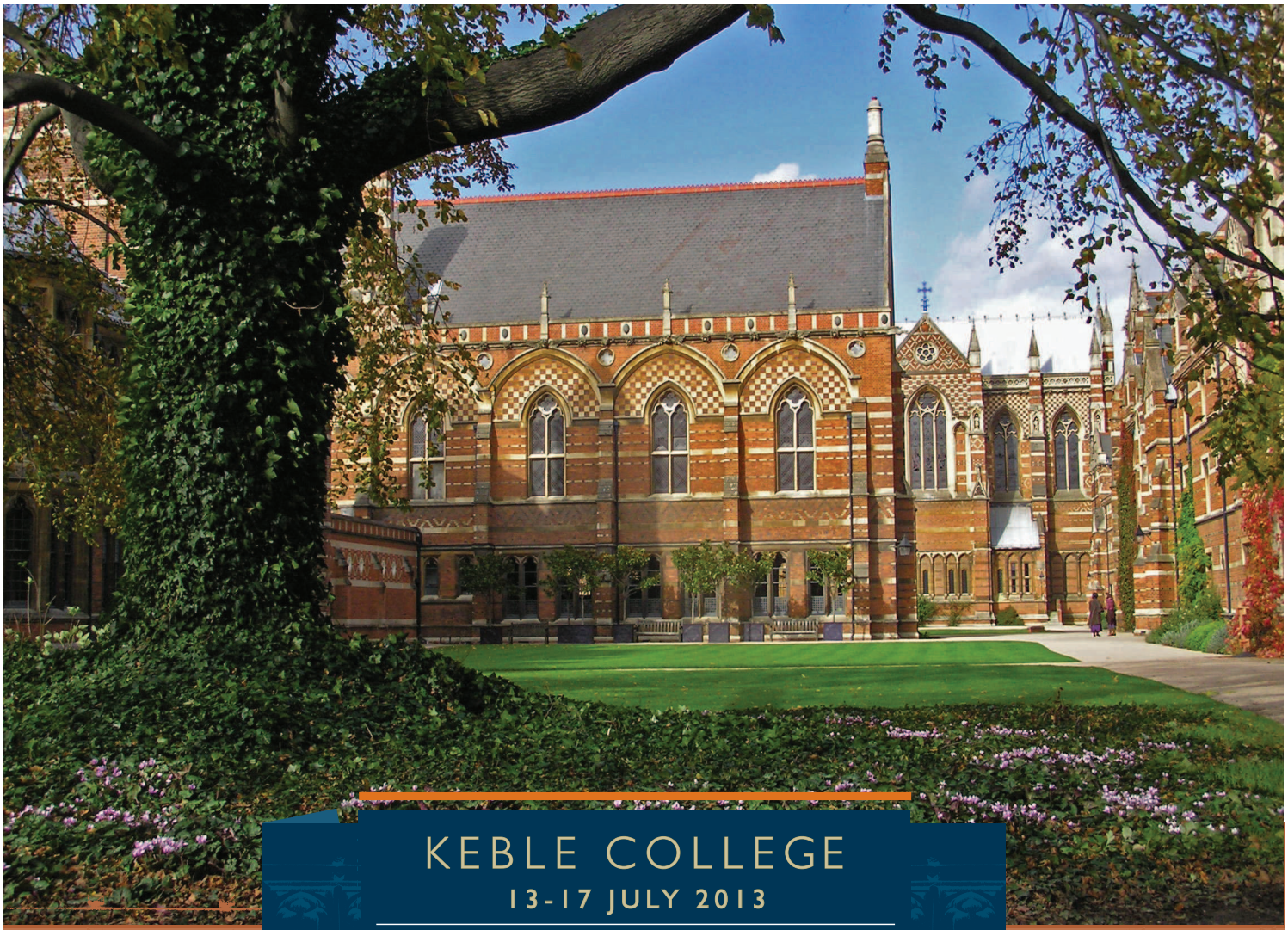
8TH BIENNIAL SYMPOSIUM OF THE
INTERNATIONAL EOSINOPHIL SOCIETY, INC.

FINAL PROGRAM

13-17 JULY 2013 KEBLE COLLEGE OXFORD – UNITED KINGDOM



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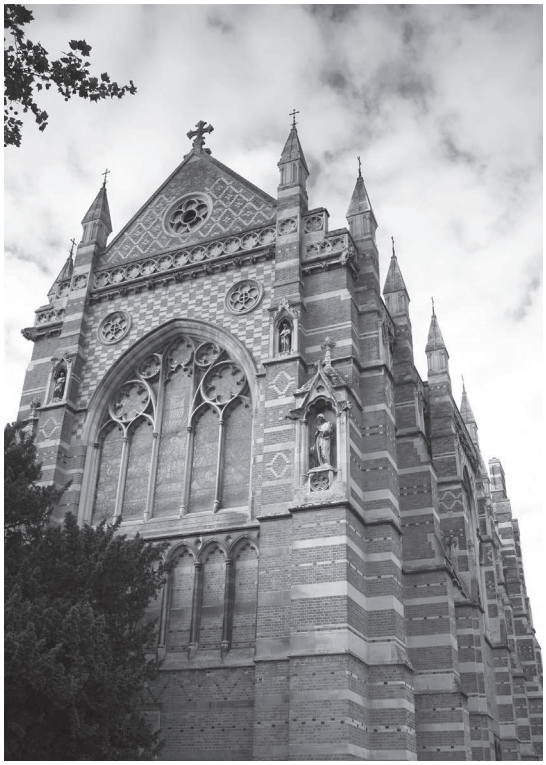

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TABLE OF CONTENTS

Welcome 3

Acknowledgements 4

General Information 5

Speaker Disclosures 6

Scientific Program 7

Awards 18

In Memoriam 22

Invited Speaker Abstracts 23

Oral Abstracts 47

Poster Abstracts 67

Participant List 151

After two years of planning, the meeting has finally arrived and we would like to extend a warm welcome to all of you eosinophiles that have made the journey to Oxford for the 8th Biennial Symposium of the International Eosinophil Society, Inc. This is a particularly auspicious year for eosinophils as there are a number of anti-eosinophil treatments that are reaching an advanced state of development.

As in prior years, the meeting will be a potpourri of the latest advances in basic and clinical research, presented as state-of-the-art talks by leaders in the field, cutting edge lectures on new findings, and oral presentations and posters taken from the submitted abstracts. There will be plenty of opportunities for discussion during the three poster sessions, and prizes for the best posters and oral presentations of new work by trainees. New to this meeting is a session on eosinophil methodology designed for scientists starting out in the field who wish to learn how to interrogate eosinophil function. The final day of the meeting will be devoted to the 6th in a series of satellite clinical workshops focused on the diagnosis and treatment of hypereosinophilic syndromes.

Of course, there will be some free time in the afternoons to mingle with colleagues amidst the glories of Oxford under what we hope will be warm sunny skies, although this being England that is far from certain.

Finally, we would like to extend a special greeting and our gratitude to the meeting sponsors, without whom this meeting would not have been possible.

We hope you enjoy the meeting.

Amy Klion
President

Andrew Wardlaw
Scientific Program Director

ACKNOWLEDGEMENTS

We would like to thank the following corporations, institutions, foundations, societies and individuals who contributed to the Symposium:

SYMPOSIUM SUPPORTERS

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Speaker Travel Support

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Roche

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National Institutes of Health

Funding for this conference was made possible [in part] by 1R13AI106160-01 from the National Center for Advancing Translational Sciences and the National Institute of Allergy and Infectious Diseases. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

We thank the following individuals for their outstanding fundraising efforts on behalf of the IES.

Steven Ackerman, Andrew Wardlaw, Tim Williams

In Kind Donation

Foley Family Wines

Coffee Breaks

Coffee breaks are included in the registration fee for attendees and will be served daily. Coffee will be served in the Arco Room; please check the Scientific Program for exact times.

Continuing Professional Development (CPD)

The 8th Biennial Symposium has been approved by the Federation of the Royal Colleges of Physicians of the United Kingdom for 30 category 1 (external) CPD credit(s).

Education Sessions

All education sessions will take place in the O'Reilly Theatre located in the Sloane Robinson Building.

Evaluations

Evaluation forms will be sent via email following the meeting.

Meals

Breakfast, lunch and dinner will be available for those attendees who booked accommodations at Keble College or who purchased the meal plan separately. Please note that additional meals will not be available for purchase onsite. All meals will take place in the Dining Hall Building.

Poster Sessions

All poster sessions will take place in the Douglas Price Room located in the Sloane Robinson Building. An assortment of beverage and snacks will be served. Poster presenters will stand next to their posters during their assigned session and be available for questions and discussions.

Registration

The registration desk will be located in the Sloane Robinson Building on all days of the Symposium.

Hours:

Saturday, 13 July	15:00-20:00
Sunday, 14 July	07:30-13:30
	14:30-19:30
Monday, 15 July	07:30-13:00
	15:00-17:30
Tuesday, 16 July	07:00-12:30
	13:30-17:30
Wednesday, 17 July	08:00-12:00
	13:00-14:00

Social Events

Welcome Reception

Saturday, 13 July, 18:00-19:30

The Welcome Reception will be held at Keble College outside in the Liddon Quad. If weather does not permit the event to be outside, the reception will be in the Arco Building. Refreshments and appetizers will be provided.

Pitt Rivers Museum Reception

Monday, 15 July, 19:30-21:00

The Pitt Rivers Museum displays archaeological and anthropological collections of the University of Oxford. The museum is located within walking distance from the College. Refreshments and appetizers will be provided.

Speaker Preview Room

A speaker preview room will be available for you to review and make changes to your slides. Speakers will need to bring their presentation on a USB flash drive and will upload their presentation in the session room.

SPEAKER DISCLOSURES

The following speakers have declared no financial conflict of interest:

Rafeul Alam
Christianne Bandeira-Melo
Sarah Bettigole
Derek K. Chu
Van Trung Chu
Nicola Diny
Kimberly Dyer
Neda Farahi
Sophie Fillon
Gerald Gleich
Matthieu G. Groh
Grzegorz Helbig
Cory Hogaboam
Elizabeth Jacobsen
Jean Emmanuel Kahn
A. Barry Kay
Paneez Khoury
Fanny A. Legrand
Kelly G. Magalhães
Jun Miyata
Jenny Mjösberg
Josiane S. Neves
Caroline M. Percopo
Senbagavalli Prakash Babu
Helene Rosenberg
Hans-Uwe Simon
Christof Straub
Peter Valent
Catherine Vial
Yui-Hsi Wang
Lian Willetts
Tina W. Wong

The following speakers have disclosed a financial conflict of interest:

Steven Ackerman
APFED, Grant Support; NASP/FAAN Research Foundation, Grant Support

Judith Appleton
NIH, Grant Support; USDA, Grant Support

Bruce Bochner
Allakos, Advisory Board, Stock; Merck, Advisory Board; Teva, Consultant; Sanofi-Aventis, Consultant; United States Diagnostic Standards, Consultant; Medicis, Consultant; Pharmacyclics, Consultant; Hoffman-LaRoche, Consultant; Tarsa Therapeutics, Consultant; Glycomimetics, Stock; Elsevier, Royalties; UpToDate, Royalties; NIH, Grant

Ester Boix
Ministerio de Educación, Spanish Government, Research Support; Generalitat de Catalunya, Research Support

William Busse
Merck, Advisory Board; Amgen, Consultant; Novartis, Consultant; GlaxoSmithKline, Consultant; MedImmune, Consultant, Genentech, Consultant; National Institutes of Health, Principal Investigator

Nick Cross
Novartis, Honorarium, Research Support

John Fahy
Merck, Consulting; Regeneron, Consulting; Pathway Therapeutics, Consulting; Boehringer Ingelheim, Consulting; Cytokinetics, Consulting; University of Calgary, Honorarium; US National Institutes of Health, Research Grants

Akos Heinemann
Austrian Science Funds, Research Grant; Austrian National Bank, Research Grant; Protaffin PLC, Research Grant

Mats Johansson
Guidepoint Global, Consulting Fee; NIH, Co-investigator

Hirohito Kita
Novartis, Honoraria; Merck Sharp & Dohme (MSD), Honoraria; GlaxoSmithKline, Honoraria; NIH, Research Grant; Mayo Foundation, Research Grant

Amy Klion
Bill and Melinda Gates Foundation, Subcontractee

Leo Koenderman
Dutch Asthma Foundation, Grant; Dutch CF Foundation, Grants; Dutch Organization Fun. Research, Grants

James Lee
Amgen, Consultant; Cephalon, Consultant; NIH, Research Support; American Heart Association, Research Support; Laboratoires d'Excellence, Proposal Review Jury Member

John Matthews
Genentech, Inc, employee

Andrew McKenzie
Janssen, licensed anti-IL-25 antibody

Parameswaran Nair
Cellometrics, Advisor; Accufilter, Patent; GlaxoSmithKline, Investigator; Novartis, Investigator; AstraZeneca, Investigator

Donald Raible
MedImmune, employee

Marc Rothenberg
Teva Pharmaceutical, Royalty; Immune Pharmaceutical, Consultant; NIH, Principal Investigator; Department of Defense, Collaborating Investigator; US-Israel Binational Foundation, Co-Principal Investigator

Florence Roufosse
GlaxoSmithKline, Consultant

Alex Straumann
Falk, Study Sponsor, Consultant; Oxagen, Study Sponsor; Pfizer, Consultant

Andrew Wardlaw
Pfizer, research grant; GlaxoSmithKline, research grant; Teva, Honorarium

Peter Weller
GlaxoSmithKline, Consultant; NIH, principal investigator for grants

Michael Wechsler
GlaxoSmithKline, Research Support, Consultant; Merck, Consultant; Novartis, Consultant; Boston Scientific, Consultant; NIH, Research Support

Nives Zimmerman
NIH, Grant Support

SATURDAY, 13 JULY

16:45-17:00 Welcome

Amy Klion, United States, President
Andrew Wardlaw, United Kingdom, Scientific Program Chair

Chair: Timothy Williams, United Kingdom

17:00-18:00
The early days of the discovery of the eosinophil
A. Barry Kay, United Kingdom

Welcome Reception *– 18:00-19:30 (Liddon Quad)*

Dinner *– 19:30-21:00 (Dining Hall)*

20:00-21:00
Eosinophil Jeopardy – An eosinophil quiz
Bruce Bochner, United States

SUNDAY, 14 JULY

Breakfast *– 07:00-08:00 (Dining Hall)*

Session 1: Control of eosinophil production – 08:00-10:00

Chairs: David Broide, United States
Stephane Esnault, United States

08:00-08:30
State of the art: Mechanisms involved in Th2 related inflammatory responses
Andrew McKenzie, United Kingdom

08:30-09:00
Cutting edge: Type 2 innate lymphoid cells in pulmonary inflammation
Hirohita Kita, United States

09:00-09:15
Abstract speaker
The transcription factor XBP-1 is a critical regulator of eosinophil development
Sarah Bettigole, United States

09:15-09:30
Abstract speaker
Genetic basis of familial eosinophilia
Senbagavalli Prakash Babu, United States

09:30-10:00
Cutting edge: Human innate immune cells
Jenny Mjösberg, Sweden

Coffee Break *– 10:00-10:30 (Arco Room)*

SUNDAY, 14 JULY — CONTINUED

Session 2: The immunoregulatory role of eosinophils – 10:30-12:30

Chairs: Patricia Bozza, Brazil
Lisa Spencer, United States

10:30-11:00
State of the art: Eosinophil regulation of tissue microenvironment: Roles in repair, remodeling and fibrosis
Steven Ackerman, United States

11:00-11:30
Cutting edge: Eosinophils as a novel cell source of prostaglandin D2: Autocrine role in allergic inflammation
Christianne Bandeiro-Melo, Brazil

11:30-11:45
Abstract speaker
Activated eosinophils release high mobility group box 1 protein (HMGB1), a novel immunoregulatory mediator with airway inflammatory cell-activating capabilities
Alexander Kurosky, United States

11:45-12:00
Abstract speaker
A role for eosinophils in promotion of B cell proliferation
Tina Wong, United States

12:00-12:30
Cutting edge: Biomarkers of eosinophil activation
Mats Johansson, United States

***Lunch and Networking** – 12:30-14:30 (Dining Hall)*

***Coffee Break** – 14:30-15:00 (Arco Room)*

Session 3: Eosinophils as effector cells – 15:00-17:00

Chairs: Allison Fryer, United States
Ariel Munitz, Israel

15:00-15:30
State of the art: Eosinophil effector function
Hans-Uwe Simon, Switzerland

15:30-16:00
Cutting edge: Role of prostanoids in eosinophil recruitment
Akos Heinemann, Austria

16:00-16:15
Abstract speaker
EMR1: A novel therapeutic target for eosinophilic disorders
Fanny Legrand, United States

16:15-16:30
Abstract speaker
Eosinophil degranulation is regulated by VAMP-7-mediated exocytosis, *in vivo*
Lian Willetts, United States

16:30-17:00
Paul Bertics Lectureship Presentation and Lecture
William Busse, United States

SUNDAY, 14 JULY — CONTINUED

Poster Session I - 17:00- 19:00 (Douglas Price Room)

Control of eosinophil production

1 **Rapamycin potently and specifically inhibits il-5+ th2 cell proliferation by a mTORC1/S6 kinase1 dependent mechanism**
Calman Prussin

2 **Putting brakes on eosinophil development: RhoH in health and disease**
Christina Stoeckle

3 **Thymic stromal lymphopoietin promotes human eosinophil-basophil lineage commitment: A key role for tumor necrosis factor-alpha**
Claudia C.K. Hui

4 ***In vivo* eosinophil labeling shows a circulatory lifespan of 66-84 hours**
Tamar Tak

5 **Differential promoter usage and regulation of the human IL-5RA gene in developing eosinophil progenitors**
Fan Kimberly Gao

6 **Reveiling the death pathway leading to eosinophil cytolysis**
Susanne Irene Radonjic-Hoesli

7 **Mechanism of Siglec-8-mediated cell death in IL-5-activated eosinophils: Role for ROS-enhanced MEK/ERK activation**
Nives Zimmermann

8 **"Self-recognition" via paired immunoglobulin-like receptors is fundamental for eosinophil homeostasis**
Netali Ben Baruch- Morgenstern

9 **Optimized protocols for eosinophil progenitor studies**
Kaila Schollaert

10 **Effects of hypoxia on eosinophil degranulation, apoptosis, and sensitivity to glucocorticosteroids**
Linsey Porter

11 **Dexpramipexole decreases blood eosinophils: Results of two clinical trials in patients with amyotrophic lateral sclerosis**
Mary Sullivan

12 **Micrornas control transcriptional networks that regulate eosinophil differentiation**
Ming Yang

The immunoregulatory role of eosinophils

13 **Do eosinophils have a role in graft-versus-host disease?**
Christine Wenneras

14 **Eosinophils control the resolution of inflammation throuth the 12/15-lipoxygenase pathway**
Makoto Arita

15 **The association of eosinophils and their cationic proteins to cancer and cancer development**
Kristin Blom

16 **Mouse intestinal eosinophils have an antigen presenting cell phenotype and acquire lumenal antigen**
Kalmia Smith Buels

17 **Differential eosinophil activation in chronic and acute graft versus host disease may depend on altered cytokine responses**
Jennie Andersson

18 **Induction of malignant plasma cell proliferation by eosinophils**
Tina Wong

19 **Implication of innate immune receptors in eosinophil tumoricidal activity**
Solène Gatault

20 **Using the allergic immune system to target cancer: activity of IGE antibodies specific for human CD20 and MUC1**
Pearline Teo

SUNDAY, 14 JULY — CONTINUED

Eosinophilic GI disease

47 Eosinophil phenotype in ulcerative colitis with concomitant primary sclerosing cholangitis depends on T-cell subsets in the intestine
Maria Lampinen

48 Most eosinophils are undergoing cytolysis in eosinophilic esophagitis
Gerald Gleich

49 Treatment of eosinophilic esophagitis with the CRTH2-antagonist OC000459: A novel therapeutic principle
Alex Straumann

50 The esophageal string test quantifies luminal eosinophil and chemokine biomarkers reflective of esophageal inflammation in adults with eosinophilic esophagitis
Steven Ackerman

51 regulation of blood eosinophil phenotypes by topical corticosteroids in patients with eosinophilic esophagitis
Christine Lingblom

Eosinophils in host defense

52 The eosinophil cationic protein, an eosinophil granule protein effective against mycobacteria
Ester Boix

53 Glycosylation modulates the antimicrobial activity of human eosinophil cationic protein native forms
Ester Boix

54 Eosinophils: An unforeseen protagonist in influenza infection
Amali Samarasinghe

55 The role of eosinophils in immunity to the trematode helminth schistosoma haematobium
Shona Wilson

56 Th-mRSVG, modified RSVG protein from RSV A2, induces protection against RSV without immunopathogenesis
In Su Cheon

Teva Sponsored Symposium – 19:00-20:30

19:00-19:05
Welcome and Introduction
David Price, United Kingdom

19:05-19:25
Uncontrolled moderate-to-severe asthma in patients with eosinophilic disease
David Price, United Kingdom

19:25-19:55
Burden of moderate- to-severe asthma: The economic impact
Jon Campbell, United States

19:55-20:25
Role of IL-5 in moderate-to-severe asthma, biomarkers and the evidence for anti-IL-5 therapy
Michael Wechsler, United States

20:25–20:30
Conclusions and Close
David Price, United Kingdom

Dinner *(Teva Symposium Attendees) - 20:30-21:30 (Dining Hall)*

MONDAY, 15 JULY

Breakfast *- 07:00-08:00 (Dining Hall)*

Session 4: Eosinophilic GI disease – 08:00-10:00

Chairs: Elizabeth Jacobsen, United States
Calman Prussin, United States

08:00-08:30
State of the art: Pathogenesis of eosinophilic esophagitis
Marc Rothenberg, United States

08:30-09:00
Cutting edge: Eosinophils and the gut microbiome
Sophie Fillon, United States

09:00-09:15
Abstract speaker
A critical role for small intestinal eosinophils in initiating food allergic Th2 immunity
Derek Chu, Canada

09:15-09:30
Abstract speaker
Determination of the molecular phenotype of esophageal mucosal inflammation in children with eosinophilic esophagitis using a 1-hour esophageal string test
Steven Ackerman, United States

09:30-10:00
State of the art: Steroids versus allergen avoidance in the management of EO
Alex Straumann, Switzerland

Coffee Break *– 10:00-10:30 (Arco Room)*

Session 5: Eosinophils in host defense – 10:30-12:30

Chairs: Paige Lacy, Canada
Francesca Levi-Schaffer, Israel

10:30-11:00
State of the art: Eosinophils in host defense
Kimberley Dyer, United States

11:00-11:30
Cutting edge: Role of eosinophils in parasitic host defense
Judith Appleton, United States

11:30-11:45
Abstract speaker
Purinergic receptor P2Y12 functional roles in human isolated eosinophils and in the schistosomal host response
Josiane Neves, Brazil

11:45-12:00
Abstract speaker
Schistosomal-derived lysophosphatidylcholine triggers IL-13 and TGF β secretion by eosinophils through 15-lipoxygenase dependent mechanisms
Kelly Magalhães, Brazil

12:00-12:30
Cutting edge: Structural elements of ECP important in host defense
Ester Boix, Spain

Lunch and Networking *– 12:30-14:45 (Dining Hall)*

MONDAY, 15 JULY — CONTINUED

IES Business Meeting (All are Welcome) – 14:45-15:30

Session 6: Animal models of eosinophilic lung disease – 15:30-17:00

Chairs: Joan Cook-Mills, United States
Eva Sturm, Austria

15:30-16:00
Cutting edge: Pathogenesis of allergic fungal lung disease
Cory Hogaboam, United States

16:00-16:30
Cutting edge: Genetically manipulated mouse models of asthma
James Lee, United States

16:30-16:45
Abstract speaker
Novel IL-9-producing innate helper cells promote IgE-mediated experimental food allergy
Yui-Hsi Wang, United States

16:45-17:00
Abstract speaker
Eosinophils are essential for progression of autoimmune myocarditis to dilated cardiomyopathy
Nicola Diny, United States

Poster Session II – 17:00-19:00

Eosinophils as effector cells

21 Development of a suspension array assay in multiplex to simultaneously measure serum levels of eosinophil granule proteins
Michelle Makiya

22 RHO and RAC are essential for secretion of eoinophil-associated RNases from human and mouse eosinophils
Revital Shamri

23 Thymic stromal lymphopoietin stimulates the formation of eosinophil extracellular traps
Dagmar Simon

24 Enzymatic analysis mouse eosinophil associated ribonuclease 11
Kelsey Yamada

25 IL-5 family cytokines and eotaxin polarize suspended eosinophils to form the nucleopod, a unique uropod containing the nucleus
Adrian Han

26 Clustering of IL-5 family cytokine receptors on eosinophil nucleopod and the association between eosinophil priming and polarization
Adrian Han

27 IL-33 stimulates IL-25 release by human blood eosinophils
Fanny Legrand

28 Notch signaling mediates GM-CSF-primed human eosinophil transendothelial migration through a non-canonical signaling pathway impacting ERK phosphorylation
Linying Liu

29 Adiponectin attenuates human eosinophil adhesion and chemotaxis
Shigeharu Ueki

30 Trapping capacity and stability of eosinophil extracellular DNA nets
Shigeharu Ueki

MONDAY, 15 JULY — CONTINUED

31 Leptin activates eosinophil leukotriene C4 synthesizing machinery: Role of PI3K and endogenous RANTES
Tatiana Luna

32 The prostaglandin D2 receptors DP and CRTH2 cooperatively regulate NFAT and SRE
Miriam Peinhaupt

33 Eosinophil granule stability and viability are critically dependent on cystatin F
Colin Watts

34 Lectin affinity-based separation of variants of Eosinophil Cationic Protein (ECP)
Jenny Rubin

35 Involvement of the cannabinoid receptor 2 in the activation and chemotaxis of human eosinophils
Robert Frei

36 The effect of HMGB1 on mouse eosinophils: Viability, chemotaxis and the expression of RAGE, TLR2 and TLR4
Kimberly Dyer

37 The C-terminus of CCR3 modulates cell surface expression and functional responses to the eotaxin family of chemokines
James Pease

38 Calcitriol reduces eosinophil cytolysis and release of cytotoxic granules
Francis Davoine

39 N-glycosylation of NOX2 mediates its trafficking to the cell surface and induces ROS-dependent surface up-regulation of BLT1 during exocytotic degranulation in human eosinophils stimulated with LTB4
Arim Min

40 Characterization of the inflammasome proteins in human eosinophils
Renata Nesi

41 The role of cryptococcus neoformans capsule in modulation of eosinophils activation
Thaís Amanda Pinho Silva

42 CD48 partially mediates staphylococcus aureus induced eosinophil activation
Yael Minai-Fleminger

43 An essential role for RAB27A in eosinophil exocytosis: Implications for airway hyperresponsiveness
Paige Lacy

44 2-arachidonoyl-glycerol activates human eosinophils: involvement of IL-5, CB2 receptors, and eicosanoids
Nicolas Flamand

45 CMRF-35-like molecule 1 (CLM-1) regulates eosinophil homeostasis by suppressing cellular chemotaxis
Itay Moshkovits

46 CMRF35-like molecule 1 (CLM-1) is required for IL-33-induced eosinophil activation
Dana Shik

Pitt Rivers Museum Social – 19:30-21:00 (Appetizers & Cocktails)

TUESDAY, 16 JULY

Breakfast *- 07:00-08:00 (Dining Hall)*

Session 7: Eosinophilic respiratory disease – 08:00-12:30

Chairs: Bruce Bochner, United States
Michel Laviolette, Canada

08:00-08:30
Cutting edge: Phenotyping eosinophilic asthma
John Fahy, United States

08:30-09:00
Cutting edge: Mepolizumab and reslizumab in the treatment of asthma
Andrew Wardlaw, United Kingdom

09:00-09:15
Abstract speaker
The role of type 2 innate lymphoid cells and IL33 in persistence of asthma
Rafeul Alam, United States

09:15-09:30
Abstract speaker
Use of 111-indium-labelled autologous eosinophils to establish *in vivo* **kinetics of human eosinophils**
Neda Farahi, United Kingdom

09:30-10:00
Cutting edge: Benralizumab in the treatment of eosinophilic lung disease
Donald Raible, United States

Coffee Break *– 10:00-10:30 (Arco Room)*

Chairs: Rafeul Alam, United States
John Fahy, United States

10:30-10:45
Abstract speaker
Activated eosinophils protect against a lethal respiratory virus infection
Caroline Percopo, United States

10:45-11:00
Abstract speaker
Adoptive transfer of activated pulmonary eosinophils is sufficient to restore Th2 pulmonary inflammation in eosinophil-deficient PHIL mice in a model of acute asthma
Elizabeth Jacobsen, United States

11:00-11:30
Cutting edge: Identification of the eosinophil phenotype using point-of-care biomarkers
Parameswaran Nair, Canada

11:30-11:45
Abstract speaker
Impaired P2X1 receptor function in eosinophils from asthmatic patients
Catherine Vial, United Kingdom

11:45-12:00
Abstract speaker
Dysregulated synthesis of protectin D1 in eosinophils from patients with severe asthma
Jun Miyata, Japan

12:00-12:30
Cutting edge: Lebrikizumab in the treatment of asthma
John Matthews, United States

Lunch and Networking *– 12:30-13:30 (Dining Hall)*

TUESDAY, 16 JULY — CONTINUED

Session 8: Eosinophil laboratory techniques – 13:30-15:00

Chair: Simon Hogan, United States

13:30-15:00

Human and mouse eosinophils: Isolation, generation and related applications
Helene Rosenberg, United States

It's Christmas in July: The availability and utility of eosinophil-specific regents and mouse models from Lee Laboratoaries
James Lee, United States

Methods for translational eosinophil research: From the bench to bedside and back
Leo Koenderman, The Netherlands

Flow cytometry of eosinophils: From identification to functional assays
Nives Zimmerman, United States

***Coffee Break** – 15:00-15:30 (Acro Room)*

Session 9: IES award lectures – 15:30-17:00

Chair: Amy Klion, United States

15:30-16:00

Gleich Award Presentation and Lecture
Van Trung Chu, Germany

16:00-17:00

Ehrlich Award Presentation and Lecture
Peter Weller, United States

Poster Session III - 17:00-19:00

Animal models of eosinophilic lung disease

57 Eosinophils influence the inflammatory phenotype of asthma in an inducible knock-in eosinophil-deficient mouse model of asthma
Elizabeth Jacobsen

58 Impaired airway eosinophil migration into the paratracheal lymph nodes in LTC4 synthase-deficient mice
Haibin Wang

59 A mouse with efficient expression of CRE-recombinase exclusively in eosinophils
Alfred Doyle

60 Mice deficient in the alpha 2,3 sialyltransferase ST3gal-III selectively manifest enhanced allergic eosinophilic airway inflammation
Takumi Kiwamoto

61 A novel method to explore eosinophil *in vivo* trafficking in the mouse
Eva Sturm

62 Maternal alpha-tocopherol supplementation of allergic female mice inhibits allergic inflammation in offspring
Joan Cook-Mills

63 Ozone induced airway hyperreactivity is exacerbated by blockade of eosinophil recruitment into lungs
Sarah Wicher

64 Mouse models to study mechanisms of eosinophil secretion during inflammatory responses
Kennedy Bonjour

65 Directed delivery of antigen to respiratory mucosal surfaces; A mouse model to address local and remote mucosal effects in allergic airway inflammation
Maytal Bivas-Benita

66 Prevention of inflammatory colitis by a recombinant enzyme from the schistosome helminth parasite: Induction of A Th2 response with eosinophils and alternatively activated macrophages
Virginie Driss

TUESDAY, 16 JULY — CONTINUED

Eosinophilic respiratory disease

67 The clinical profile of UK asthma patients with raised blood eosinophils
David Price

68 Aspirin-induced asthma sub-phenotypes identified by latent class analysis
Grazyna Bochenek

69 Identification of genes expressed by human airway eosinophils after an *in vivo* allergen challenge
Stephane Esnault

70 Semaphorin 7A is expressed on human airway eosinophils after segmental allergen challenge *in vivo* and is upregulated by the common ß chain cytokines *in vitro*
Stephane Esnault

71 Whole body counting to quantify the distribution and fate of Indium-111-labelled eosinophils in healthy and asthmatic volunteers
Chrystalla Loutsios

72 Eosinophil and nasal allergen challenge
Trevor Hansel

73 Role of CCL26 in the recruitment of human eosinophils: A putative role in asthma severity
Nicolas Flamand

74 During inflammation refractory eosinophils stay in peripheral blood while activated counterparts dwell in tissue
Bart Hilvering

Hypereosinophilic disease

75 PEG-interferon treatment of eosinophilic otitis media-report of 2 cases
Joseph Butterfield

76 Gleich's syndrome of the gut: A new disorder or an under-recognized phenomenon?
Paneez Khoury

77 Hematologic malignancies in patients with hypereosinophilia and hypereosinophilic syndrome
Catherine Weiler

78 Evaluation of effects of PDGFR-blocking tyrosine kinase inhibitors on growth and migration of neoplastic eosinophils in FIP1L1/PDGFRA+ Chronic Eosinophilic Leukemia (CEL)
Irina Sadovnik

79 The WHO classification of mastocytic diseases does not incorporate disease such as ETV6-ABl1: A distinct genet ic group
Finella Brito-Babapulle

80 Clozapine induced eosinophilia with perimyocarditis
Urs Steiner

81 Is peripheral blood eosinophilia being investigated appropriately? A retrospective review of 89 patients
Melanie York

82 Causes of an eosinophilia presenting to a specialist hypereosinophilic clinic
Melanie York

83 Unexpected cytokine profiles suggest differential roles of eosinophilopoietin-producing T cells in peripheral blood eosinophilia and hypereosinophilia
Christina Stoeckle

84 Invasive cutaneous trichophyton rubrum infection associated with blood and tissue eosinophilia in the setting of a CARD9 deficiency
Florence Roufosse

***Dinner** – 19:30-21:00 (Dining Hall)*

WEDNESDAY, 17 JULY

Satellite Clinical Workshop

***Breakfast** – 07:00-08:15 (Dining Hall)*

Session 10: Hypereosinophilic disease – 08:15-12:00

Chairs: Jean Emmanuel Kahn, France
Princess Ogbogu, United States

08:15-08:45
State of the art: Diagnostic issues in HES; The example of CSS
Michael Wechsler, United States

08:45-09:00
Abstract speaker
Orthotopic heart transplantation in patients with eosinophil granulomatosis with polyangiitis: Report on nine cases
Matthieu Groh, France

09:00-09:30
State of the art: End organ manifestations: Are they useful for differential diagnosis
Gerald Gleich, United States

09:30-10:00
Cutting edge: HES as a multidisciplinary disorder
Grzegorz Helbig, Poland

***Coffee Break** – 10:00-10:30 (Arco Room)*

Chairs: Florence Roufosse, Belguim
Andrew Wardlaw, United Kingdom

10:30-12:00
Grand round: Illustrative case histories in HES
Florence Roufosse, Belgium
Andrew Wardlaw, United Kingdom

***Lunch** (additional fee) - 12:00-13:30*
First official meeting of the Clinical Subgroup of the IES

Session 11: Myeloproliferative diseases involving eosinophils – 13:30-15:30

Chair: Joseph Butterfield, United States

13:30-14:00
Establishment of an international network of investigators of eosinophil associated myeloproliferative disorders
Peter Valent, Austria

14:00-14:15
Abstract Speaker
Predictors of responsiveness to imatinib in hypereosinophilic syndrome
Paneez Khoury, United States

14:15-14:45
Clinical manifestations and biomarkers of eosinophil-associated myeloproliferative disease
Jean Emmanuel Kahn, France

14:45-15:15
What do genetic mutations tell us about the pathogenesis and treatment of eosinophilic associated myeloproliferative disease
Nick Cross, United Kingdom

15:15-15:30
Wrap-up

PAUL BERTICS LECTURESHIP

Paul was the Robert Turell Professor of Physiology (endowed chair), Kellett Professor of Biomolecular Chemistry at the University of Wisconsin (UW). Paul was extremely dedicated to the students at UW serving as chair of Medical School admissions for years, instructing over 3,000 medical students, training over 55 graduate and postdoctoral students and mentoring countless undergraduates. He received numerous awards, including the student-selected UW Medical School teaching award twice and the UW Distinguished Teaching Award - Chancellor's Teaching Award. Paul was an editor of the Journal of Immunology and the Chief Science Advisor of Platypus Technologies, Fitchburg.

Dr. Paul Bertics was a distinguished scientist focused on understanding molecular and biochemical mechanisms of inflammatory cells, especially eosinophils. He was an active member of the International Eosinophil Society and attended all meetings. We have established this award to remember Paul's contribution to our field not only for his scientific excellence, but also because of his love of teaching and mentoring students.

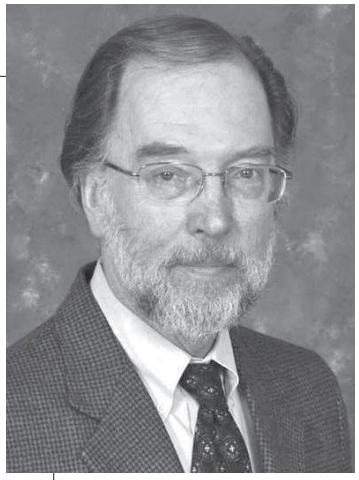
It is an honor to present the first Paul Bertics Award to Dr. William W. Busse who was a personal friend, colleague and mentor of Dr. Bertics. Dr. Busse was also a graduate of UW and its medical school. Following an internship at Cincinnati General Hospital, he completed a residency in Internal Medicine and fellowship in Allergy and Immunology at UW, and has been on its faculty since 1974. He has served as head of the Allergy and Clinical Immunology Section (1978-2004) and George R. and Elaine Love Professor and Chair of Medicine (2005-2009).

Dr. Busse's research interests have focused on the mechanism of asthma with particular interests in eosinophilic inflammation and rhinovirus-induced asthma for which he has had long-standing NIH support. He is also the Principal Investigator on an NIH-NIAID Inner City Asthma Consortium, which is funded to study immune-based therapy for asthma in inner-city children.

Dr. Busse has been the director on the American Board of Allergy and Immunology (1989-1995). He was on the Advisory Council, National Institutes of Health, National Heart, Lung and Blood Institute (1996-2000). Dr. Busse was a member of the Expert Panel on the Guidelines for the Diagnosis and Management of Asthma (1989, 2002), and is presently chair of this group, and a member of the Board of External Experts, National Heart, Lung and Blood Institute (2006-present). From 1994-2004, he was on the AAAAI Board of Directors and served as President of the AAAAI in 2000-2001.

Dr. Busse's awards include election into the Association of American Physicians, the Folkert Belzer Life Achievement Award, the American Thoracic Society Award for Scientific Accomplishments, and the Citation Award for Achievement from UW.

Recipient of the 2013 Bertics Lectureship



THE PAUL BERTICS LECTURESHIP
INTERNATIONAL EOSINOPHIL SOCIETY, INC.
2013

William W. Busse, MD

Paul was a distinguished eosinophil researcher and an active member of the IES. He was a dear friend and colleague to many of the members of our society.

Dr. Van Trung Chu will receive the second Gerald Gleich prize to be awarded at the 8th Biennial Symposium of the International Eosinophil Society, Inc. in Oxford, UK. The prize was specifically created to recognize individuals who have published high impact findings during the intervals since the preceding meeting. This award was named in honor of our esteemed colleague, Dr. Gerald Gleich, whose career has been devoted to the exploration of the eosinophilic leukocyte and to the elucidation of its role in health and disease. The prize is bestowed by a consulting committee and Dr. Gerald Gleich.

Dr. Van Trung Chu was selected on the basis of his first-authored publication "Eosinophils are required for the maintenance of plasma cells in the bone marrow", Nat Immunol. 2011 12(2):151-159. doi: 10.1038/ni.1981. The work was carried out in the laboratory of Dr. Claudia Berek of the Deutsches Rheuma-Forschungszentrum, Institut der Leibniz-Gemeinschaft, Berlin, Germany. In this work, Dr. Chu and Dr. Berek showed that in the bone marrow, eosinophils are required for the maintenance of long-lived plasma cells. Therefore, eosinophil-directed therapy might provide a new therapeutic approach for the treatment of autoimmune diseases and other diseases in which plasma cells contribute to the pathogenesis. Dr. Chu's research currently focuses on eosinophil-plasma cell interaction. We are pleased that Dr. Chu will be joining us at the meeting to receive this award.

Recipient of the 2013 Gleich Award

THE GERALD J. GLEICH AWARD
INTERNATIONAL EOSINOPHIL SOCIETY, INC.
2013

Van Trung Chu, PhD

In recognition of the most intriguing, high impact finding related to eosinophil biology published in the years 2011-2013.

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EHRLICH LECTURESHIP

The Ehrlich Lectureship is awarded at the Biennial Eosinophil Symposia of the International Eosinophil Society, Inc. to an individual(s) who has made seminal scientific contributions to research on the eosinophil and related allergy/immunology fields in terms of eosinophil biochemistry, development, cellular, molecular, structural or immunobiology and/or the participation of the eosinophil in the pathogenesis of Eosinophil-associated allergic or parasitic diseases and hypereosinophilic syndromes.

Peter F. Weller, M.D. is Chief of the Divisions of Infectious Diseases and Allergy and Inflammation and Vice-Chair for Research in the Department of Medicine at Beth Israel Deaconess Medical Center. He is a Professor of Medicine at Harvard Medical School, and a Professor of Immunology and Infectious Diseases at the Harvard School of Public Health. Dr. Weller received his M.D. degree from Harvard Medical School and completed his medical training at the Peter Bent Brigham Hospital, his infectious diseases training at the Laboratory of Parasitic Diseases, National Institutes of Health and at Massachusetts General Hospital and his allergy training at the Brigham and Womens' Hospital. He is board-certified in internal medicine, infectious diseases and allergy and immunology. Dr. Weller's research studies have focused on delineating basic mechanisms of leukocyte functioning in forms of inflammation. The two principal areas of investigation are: 1) the immunobiology of eosinophilic leukocytes, and 2) the intracellular regulation and compartmentalization of inducible mediators of inflammation in neutrophils and other leukocytes. These investigations are pertinent to the roles of eosinophils in allergic and anti-parasite immune responses and to the cellular biology of leukocytes underlying their functions in infectious and immune inflammatory responses.

Recipient of the 2013 Ehrlich Lectureship

PAUL EHRLICH LECTURESHIP
INTERNATIONAL EOSINOPHIL SOCIETY, INC.
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Peter F. Weller, MD

For seminal work in the field of eosinophil immunobiology and physiology and outstanding contributions to the understanding of the role of eosinophils in health and disease.

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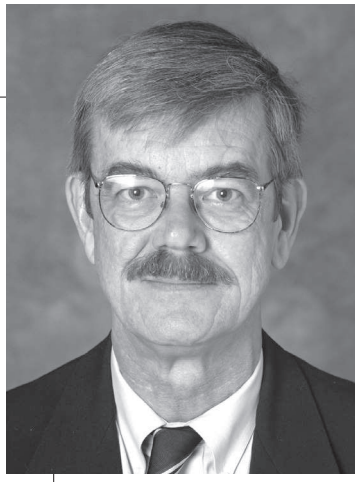
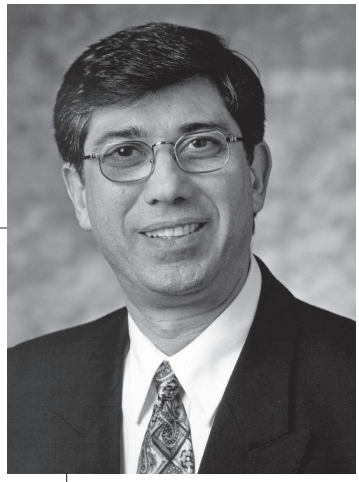


2013 International Eosinophil Society Service Award to Redwan Moqbel, PhD

The International Eosinophil Society, Inc., its leaders and members present to Professor Redwan Moqbel the distinguished Service Award both for his cardinal leadership in helping found and advance the International Eosinophil Society, Inc. and for his career-long contributions to innovative studies of the immunobiology of eosinophils. Redwan's early research focused on helminth immunity and evolved with a longstanding focus on eosinophils to embrace novel studies of eosinophils pertinent to allergic inflammation. Redwan's professional career developed early in London and thereafter was noted by his professorial and leadership roles in both Alberta and Mannitoba, Canada. Throughout his career, eosinophil immunobiology remained central to his interests and research; he contributed substantially to advancing our understanding of varied aspects of eosinophil functioning and of mentoring trainees.

In the evolution of the International Eosinophil Society, Inc., Redwan was a central contributor. Following an eosinophil meeting in Lund, Sweden in 1999, there was a consensus amongst eosinophil immunobiologists that a more formal Society needed to be created. To this end, Redwan stepped up and organized the first International Eosinophil Society, Inc. meeting in Banff, Alberta in 2001. Redwan served as Secretary of the nascent International Eosinophil Society, Inc. from 2001-2003 and then as the Society's President from 2003-2005. During his leadership the Society progressively developed and mounted successful biennial meetings. Redwan was also critically involved in helping formalize the International Eosinophil Society, Inc. with adoption of a requisite Constitution and Bylaws and more recently professional management. In addition to what is evident in Redwan's official roles in the International Eosinophil Society, Inc. we also recognize his many behind the scenes contributions to benefit the International Eosinophil Society, Inc. from surviving published challenges to roles of eosinophils in asthma (and consequent loss of funding support) to his sagacious and devoted advocacy to assuring that the global community of eosinophil immunobiologists would have a societal home in the International Eosinophil Society, Inc.



SERVICE AWARD
INTERNATIONAL EOSINOPHIL SOCIETY, INC.
2013

Redwan Moqbel, PhD

In recognition of dedicated service to the International Eosinophil Society, Inc. and to the larger community of eosinophil scientists

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IN MEMORIAM

Paul Bertics, PhD

Paul was a distinguished eosinophil researcher, and an active member of the IES and a regular attendee at our biennial meetings. He was a dear friend and colleague to many of the members of our society. A memorial lectureship at the biennial IES meeting is being planned and contributions to this are being accepted. Paul was a 1974 graduate of Carlsbad High School, Carlsbad, Calif., and received his Magna cum laude B.S. with highest honors in biochemistry from the University of California, Los Angeles in 1978, his PhD in physiological chemistry in 1984 from the University of Wisconsin-Madison, and his postdoctoral training at the University of California, San Diego from 1984-86. Paul joined the UW faculty in 1986 and held the Robert Turell Professor of Physiology (endowed chair), Kellett Professor of Biomolecular Chemistry, a member of the Executive Committee of the UW Comprehensive Cancer Center, and a Co-Director in the Material Sciences Research Center in the UW School of Engineering. Paul was extremely dedicated to the students at the UW serving as chair of Medical School admissions for years, instructing over 3,000 medical students, training over 55 graduate and postdoctoral students and mentoring countless undergraduates.

Frederick (Freddy) Hargreave, MD, MB, FRCPC, FRCP

He was born in Hong Kong and completed his medical school training at the University of Leeds (Leeds, United Kingdom). After completing his initial clinical training, Freddy moved to London in 1964 to work as a house officer in respiratory medicine with Dr. Ej Moran Campbell at the Hammersmith Hospital. Freddy Hargreave joined the Department of Medicine at McMaster University (Hamilton, Ontario) in 1969, and was based at the Firestone Institute for Respiratory Health (Hamilton), where he spent his entire career. Within 10 years, the studies led by Freddy Hargreave had changed the way that asthma was diagnosed, and had paved the way to future studies that have revolutionized its treatment. In particular, Dr. Don Cockcroft (who was Freddy's first clinical fellow) described the methodology for the measurement of airway hyper-responsiveness in asthma. Together, they demonstrated that this was a crucial component of the disease and present in all patients who had current symptoms. They also showed that the degree of airway hyper-responsiveness was related to the amount of treatment needed to manage asthma. The article describing this methodology is a citation classic, having been cited almost 1,800 times.

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