



August 21, 2013

TO: Residents, Fellows and Graduate Students  
Pulmonary Research Group  
Pulmonary Division  
Airway Inflammation Team

FR: Paige Lacy, PhD  
Director, Pulmonary Research Group  
University of Alberta

**RE: Research Day** Wednesday, November 20<sup>th</sup>, 2013  
**Poster Presentations:** **Lobby Level 1, Katz Building** – 13:00-16:00  
**BJ Sproule Lectureship:** Classroom F (2J4.02 WMC) – 16:00-17:00  
Dr. Jack Gauldie,  
Distinguished Professor, Department of Pathology and Molecular  
Medicine, Director Centre for Gene Therapeutics, McMaster  
University.

The Fifth Annual Pulmonary Research Day will be held on Wednesday, November 20<sup>th</sup> in the Lobby Level 1, Katz Building from 13:00-16:00 pm with poster presentations by Residents, Fellows and Graduate Students in Pulmonary Medicine (pediatric and adult). Coffee and snacks will be served during the Research Day. Dr. Jack Gauldie, McMaster University, has agreed to join us as the invited BJ Sproule Lecturer.

The call for abstracts is attached and the **deadline for all abstracts is Thursday, October 31<sup>st</sup>, 2013**. Abstracts detailing proposed or completed primary research being conducted in Pulmonary Medicine will be considered for presentation.

For further information, contact: Thandi at 780-492.4554 or [thandi.mabindisa@ualberta.ca](mailto:thandi.mabindisa@ualberta.ca).

We look forward to your participation.

Sincerely,

Paige Lacy, PhD  
Director, Pulmonary Research Group  
Professor, University of Alberta

**Pulmonary Research Group (PRG)**  
Department of Medicine, Faculty of Medicine and Dentistry

**PULMONARY RESEARCH DAY**  
**University of Alberta**  
**Department of Medicine**

**Edmonton, AB**  
**November 20, 2013**

**FORMS OF SUBMISSION**

Abstracts related to the objectives and topics of Pulmonary Medicine will be considered as poster presentations. Please note that, during the poster presentation there will be judging of the posters by members of the Pulmonary Research Group. Two clinical and two basic science posters (one each from a graduate student and one from a postdoctoral or clinical fellow) will be selected to receive awards, which will be presented before the BJ Sproule Lecture in Classroom F (2J4.02 WMC).

**INSTRUCTIONS FOR PREPARING ABSTRACTS**

- The abstract must be submitted *electronically* (MS Word format) as follows  
to Thandi ([thandi.mabindisa@ualberta.ca](mailto:thandi.mabindisa@ualberta.ca))
- Provide title in CAPS;
- List author names as follows: Last name, Initials (e.g., Vliagoftis H, Befus D, Bloggs S, Smith K)
- Provide the institutional affiliation, address, city and province of the presenting author only;
- Underline the presenting author;
- The abstract must contain, in the following order (Each heading should be in CAPS):
  - INTRODUCTION
  - METHODS
  - RESULTS
  - CONCLUSIONS
- Text of abstract: keep abbreviations to a minimum (and define when first used);
- Tables must be formatted as regular text;
- Maximum length: 2000 characters (approximately 300 words);
- All authors must meet the guidelines for authorship outlined in: Uniform requirements for manuscripts submitted to biomedical journals(N Engl J Med 1997; 336(4): 309-15);
- The original abstract will be reproduced directly from the typed script so there can be no subsequent alterations;

**INSTRUCTIONS FOR PREPARING SUBMISSION**

All abstracts must be emailed for receipt on or before **Thursday, October 31<sup>st</sup>**.

**NOTIFICATION**

All presenters will be notified regarding the time they will meet with the judges by e-mail prior to the Research Day.

Abstract Example:

**INHALED SERINE PROTEASES AND THEIR RECEPTORS IN ALLERGIC SENSITIZATION AND AIRWAY INFLAMMATION**

Vliagoftis H, Abel M, and Hollenberg MD

Pulmonary Research Group, Department of Medicine, University of Alberta, Edmonton, AB  
Canada

**INTRODUCTION:** Many common aeroallergens are serine proteases or are inhaled together with serine proteases. Many of the serine proteases associated with allergens, such as house dust mite, cockroach and fungal proteases, have the ability to activate Protease-Activated Receptor-2 (PAR-2), a receptor implicated in a variety of inflammatory processes. We hypothesized that PAR-2 activation in the airways during the encounter of a foreign antigen is important for the development of allergic sensitization and allergic airway inflammation.

**METHODS:** We developed a model of allergic sensitization to cockroach antigens following mucosal exposure to cockroach extracts in the absence of an adjuvant. Mice received cockroach extracts daily for 5 days (sensitization phase), rested for 5 days and then were challenged with cockroach extracts for another 4 consecutive days (challenge phase).

**RESULTS:** Mucosal exposure to cockroach extract induced airway hyperresponsiveness (AHR), and eosinophilic airway inflammation. These mice also total IgG and IgE and antigen-specific IgG. Administration of an anti-PAR-2 blocking antibody either during the sensitization or the challenge phase inhibited the development of AHR and airway inflammation.

**CONCLUSIONS:** Both mucosal allergic sensitization to aeroallergens and the resulting allergic airway inflammation are PAR-2-dependent.