



UNIVERSITY OF SASKATCHEWAN

# Respiratory Research Centre

COLLEGE OF MEDICINE

MEDICINE.USASK.CA/RESPIRATORYRESEARCH

## Annual Report (October 2017-June 2018)

The following report provides a summary of the work of the RRC during the above time period.

### Governance

An interim Steering Committee comprised of Drs. Darcy Marciniuk, Rob Skomro, John Gordon and Erika Penz provided oversight to the Centre between September, 2017 and March, 2018. Three meetings of the steering committee were held in this time frame.

In March, 2018, an open call for nominations and Terms of Reference for the Executive Committee (formerly Steering Committee) were circulated to all members of the RRC. Drs. Rob Skomro, John Gordon, Mark Fenton and Josh Lawson were acclaimed as Executive Committee members.

A Strategic Planning Session for the Executive Committee has been planned for September 10, 2018 and will be professionally facilitated by Laura Soparlo. The intent of this session is to provide guidance to the RRC over the next three years.

### Official Launch of the RRC

On October 16, 2017, the Respiratory Research Centre (RRC) celebrated its official opening with an event at Marquis Hall on the University of Saskatchewan Campus with over 70 guests in attendance. Nicole Nelson, a VIP Breathe Ambassador with the Lung Association of Saskatchewan, shared her patient journey to highlight the critical importance of respiratory research for improving outcomes of patients living with respiratory conditions. Diagnosed with Familial Idiopathic Pulmonary Fibrosis at the age of 18, Nicole received a double lung transplant three years ago. Her inspiring and powerful story was given a standing ovation by the audience.

Other highlights of the launch included keynote speakers Dr. Paul Jones and Dr. Brian Rowe, Scientific Director of the CIHR Institute of Circulatory and Respiratory Health. Dr. Jones is a world-renowned expert in COPD based at the University of London in the UK and the author of widely used symptom tools such as the St. George's Respiratory Questionnaire and the COPD Assessment Tool (CAT). Dr. Jones highlighted new developments in the areas of Patient-Reported Outcomes in COPD. Dr. Rowe described the evolving landscape of research funding in respiratory health in Canada.

Presentations by four University of Saskatchewan researchers concluded the afternoon. Dr. Erika Penz (College of Medicine) shared findings from a study using administrative health data on the lung cancer experience in Saskatchewan, while Dr. Julia Montgomery (Western College of Veterinary Medicine) provided an overview of research she is conducting to improve equine health. Insights into cigarette and e-cigarette data use using "big data" were highlighted by Dr. Nate Osgood (College of Arts and Science, Department of Computer Science). Dr. Mark Fenton

(College of Medicine) described his program of respiratory research involving First Nations People in Saskatchewan.

The launch received media coverage from Global Saskatoon, CTV, the Star Phoenix and CJWW.

### **Membership**

The RRC membership stands at 55 academics and health care professionals.

### **University-Approved Centre Logo**

Two meetings were held with the University of Saskatchewan Communications Department to review the institutional branding requirements and secure an approved logo for the Centre.

### **New Staff Member**

A position description for the position of Research Coordinator was developed in collaboration with the Manager, OVDR and Human Resources in the College of Medicine. Interview took place in September, 2017 and we were pleased to welcome Mr. Thilina Bandara in the position of half-time Research Coordinator beginning in November, 2017.

### **Website Development**

Our website (<https://medicine.usask.ca/respiratoryresearch/index.php>) was developed after extensive consultation with the Communications Department, College of Medicine.

The website is used as a tool to communicate relevant funding opportunities, advertise workshops and seminars and to profile outstanding respiratory researchers at the University of Saskatchewan. To date, the website features profiles of the following researchers: Juan Ianowski, Brian Graham, Darcy Marciniuk, and Rob Skomro. We will continue to interview and feature stories on respiratory researchers within the province.

RESPTREC/The Lung Association of Saskatchewan has kindly allowed us to share their news feed highlighting current advances in respiratory research.

### **SHRF-LAS “Ideas that Inspire” Research Grant Competition**

The Lung Association of Saskatchewan partnered with the Saskatchewan Health Research Foundation to fund four one year research grants of \$25,000 each for interdisciplinary teams conducting human health and translation research projects. The RRC Director and Research Coordinator met several times with these valued partners to draft the grant guidelines, discuss award adjudication and reviewers and finalize competition details.

The following researchers were successful in this competition:

Mark Fenton (PI) College of Medicine, University of Saskatchewan: **Synchrotron Imaging to Characterize Chronic Allograft Rejection in a Swine Orthotopic Lung Transplantation Model**

Shelley Kirychuk (PI) College of Medicine, University of Saskatchewan Ambient Air Quality and Respiratory Health in Saskatchewan: **Ambient Air Quality and Respiratory Health in Saskatchewan: The influence of PM2.5**

Joshua Lawson (PI) College of Medicine, University of Saskatchewan: **Patterns of exposure to conventional and electronic cigarette smoking and their relationship to lung health outcomes among children and adolescents**

Holly Mansell (PI) College of Pharmacy and Nutrition, University of Saskatchewan: **Pharmacokinetics of Apixaban + Tacrolimus or Cyclosporine in Lung Transplant Recipients**

Erika Penz (PI) College of Pharmacy and Nutrition, University of Saskatchewan; Nathaniel Osgood (Co-PI) Department of Computer Science, University of Saskatchewan: **An examination of patient reported outcomes in COPD patients utilizing a novel mobile application**

Robert Skomro (PI) College of Medicine, University of Saskatchewan; Juan Ianowski (Co-PI) College of Medicine, University of Saskatchewan: **Study of the Pathogenesis and Progression of Bleomycin-Induced Idiopathic Pulmonary Fibrosis in the Distal Airway and Alveoli Using Synchrotron-Based Imaging.**

The recipients of this award will be honored at the planned RRC Networking event to be held on September 13, 2018.

### **RRC Graduate Student Award Competition**

This award providing funding to studies who have demonstrated academic and research excellence and who are planning to pursue a respiratory health research that reflects the aims of the RRC. Guidelines and application packages were developed for this competition. Two meetings were held with the Assistant Dean of graduate Studies, College of Medicine to discuss alignment of this competition with the College of Medicine's CoMGRAD awards.

The competition closed March 30, 2018, with the adjudication meeting held May 3, 2018. Applications were of high quality.

While the intent was to fund one doctoral and one Master's level student, we received no applications from Master's student. The decision was thus made to use the \$40,000 to fund several doctoral students. One doctoral student received the full scholarship, while two other received partial scholarships to top up existing scholarships.

The following students were awarded funding: Razi Mahmood (School of Public Health; Supervisor Jean Moraros); Upkardeep Pandher (CCHSA, College of Medicine; Supervisor Shelley Kirychuk) and Brendan Murray (College of Medicine; Supervisor Juan Ianowski). Students receiving funding will be honored at the planned RRC Networking event to be held in September, 2018.

### **Academic Credit for RESPTREC**

RESPTREC is a well-recognized training program focusing on asthma, COPD, spirometry and chronic disease education. It is designed to help health professionals develop the knowledge, skills and competencies required to empower people and their caregivers to optimally manage their chronic disease.

In response to a request to explore the possibility of the University of Saskatchewan offering academic credit for the RESPTREC program offered through the Lung Association of Saskatchewan, the Executive Director met several times with the Chair of the University Academic Programs Committee (APC) as well as with faculty from RESPTREC and the CEO of the Lung Association of Saskatchewan between November and April. After exploring the possible opportunities that seeking academic credit might hold for the RESPTREC program, the decision was made not to pursue academic credit at the present time.

### **Canada Research Chair Submission**

A joint submission from Shelley Kirychuk and the RRC was developed for a Chair in Respiratory Sciences and Inhalation Exposures. The submission was presented with other submissions from the College of Medicine to the Provost on May 17, 2018.

### **Research Seminars**

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| November 21, 2017 | Topic: Cystic fibrosis swine fail to secrete airway surface liquid in response to inhalation of pathogens<br><br>Presenter: Dr. Juan Ianowski, Department of Physiology, College of Medicine |
| February 13, 2018 | Topic: Childhood asthma across an urban-rural gradient<br><br>Presenter: Dr. Josh Lawson, Department of Medicine, College of Medicine  |
| April 10, 2018    | Topic: Understanding the burden of lung cancer using a health economic lens<br><br>Presenter: Dr. Erika Penz, Department of Medicine, College of Medicine                                    |
| June 5, 2018      | Topic: Allergen-specific dendritic cell immunotherapy of asthma and other immunologic diseases<br><br>Presenter: Dr. John Gordon, Department of Medicine College of Medicine                 |

### **Health Economics Workshop**

In keeping with the mandate of the RRC to promote interdisciplinary and intersectoral research that is attentive to health care expenditure and value, as well as addressing the educational needs of researchers, the RRC sponsored a Health Economics Workshop on May 24, 2018. The workshop was presented by Dr. Erika Penz and Visiting Scholar Dr. Wanrudee Isaranuwachai. Dr. Isaranuwachai is the Research Scientist and Director, Centre for Excellence in Economic Analysis Research, St. Michael's Hospital and an Assistant Professor in the Institute of Health policy, Management and Evaluation at the Dalla Lana School of Public Health, University of Toronto.

Twenty-seven faculty, health care professionals and graduate students attended the workshop, which received excellent evaluations and requests for follow-sessions.

We gratefully acknowledge financial support from the Event Fund, Office of the Vice-Dean of Research College of Medicine for hosting this event.

### **Community Engagement**

The Director of the RRC was elected to the Board of Directors, Lung Association of Saskatchewan (LAS) in May, 2018. She is also member of the Medical Advisory Committee and has participated in a Meet the Researcher dinner with donors. In addition, the Director serves as a BREATHE Ambassador for the LAS advancement campaign.

### **Knowledge Translation Pilot – Practitioner/Researcher Engagement**

As knowledge translation and health equity are both central to the RRC mandate, the Center is keen to capitalize on opportunities to mobilize high-quality social epidemiology regarding respiratory health outcomes. As such, we are embarking on a pilot KT initiative to translate respiratory-related health inequalities highlighted in 2018 Public Health Agency of Canada report *Key Health Inequalities in Canada: A National Portrait*. This initiative will involve the production of fact sheets that: a.) Make explicit the report's results on Asthma, Tuberculosis, Smoking, Exposure to Second-hand Smoke, and Lung Cancer health inequalities in Canada, and b.) Provide expert commentary from RRC members on the clinical and research implications of these findings in Saskatchewan. This content is will summarize key Canadian findings to the RRC members and audience and-large and provide an opportunity for members to profile their expertise through a publically-available medium.