



2019-2020

Annual Report

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Letter from the Director

We are pleased to provide you with our 2019-20 Annual Report, which outlines the respiratory health research and knowledge translation activities conducted by the Respiratory Research Centre (RRC) between July 2019 and June 2020.

In spite of the challenges imposed by COVID-19, members of the RRC have been hard at work improving respiratory health through education, engagement and research. Highlights of this year's report include: graduate student support, sponsorship of a Kairos Blanket exercise for RRC members to enhance our understanding and relationships with the Indigenous community, research funding initiatives (such as Team Building and COVID Rapid Response Grants), research seminars and COVID-19 virtual discussion forums. Our James Lind Alliance Priority Setting Partnership on Adult Obstructive Sleep Apnea is now nearing completion and will result in a patient- and clinician-centred agenda for research and public education on this important topic.

We are excited to continue implementing our mission and expanding our methods for engaging with patients and families, community agencies, policy makers, and the academic community as we move into the next year.

Sincerely,



DR. DONNA GOODRIDGE, RN,
PH.D.



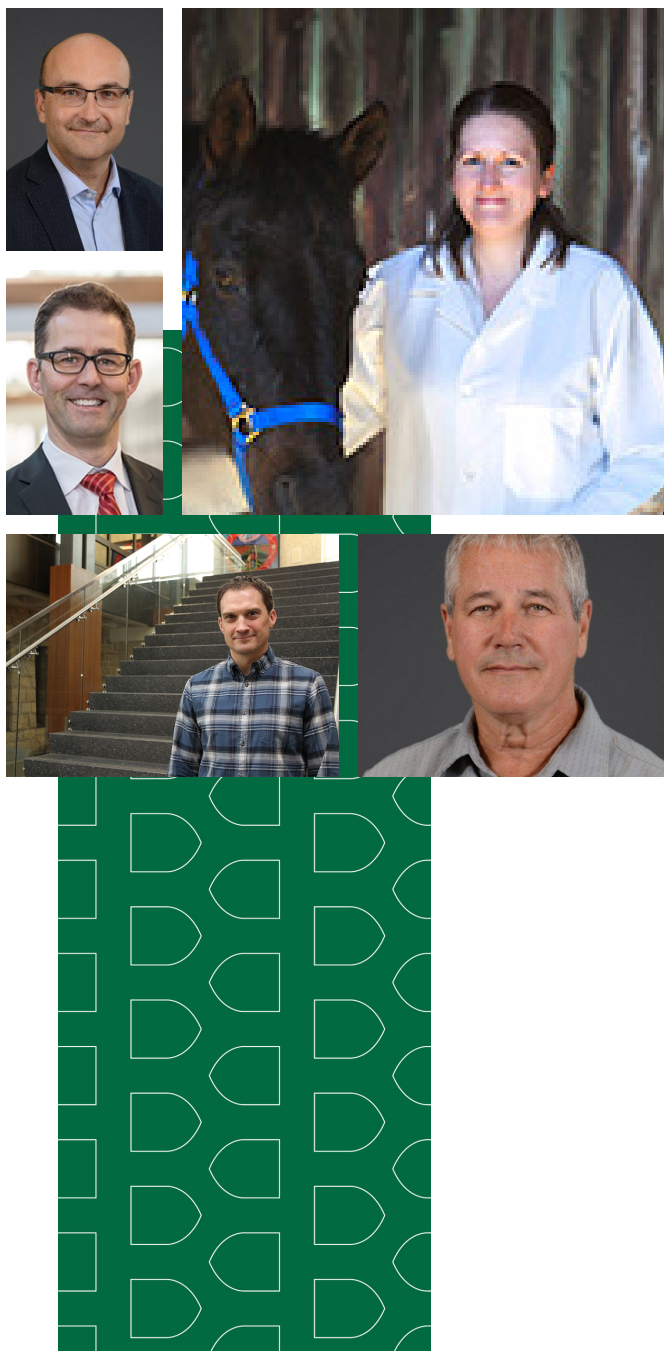
UNIVERSITY OF SASKATCHEWAN

Respiratory Research Centre

COLLEGE OF MEDICINE

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Governance



The RRC is governed by the Executive Committee which comprised of the Director and 4 academic/research members. The primary role of the Committee is the design and development of activities which align with the RRC's research mandate. This includes the development and implement strategies to foster inter-disciplinary research and promotion of public awareness and engagement of external partners.

For the 2019-2020 academic term, the Executive Committee members included:

Dr. Rob Skomro, MD, FRCPC Professor, Division Head, Respiriology, Critical Care and Sleep Medicine

Dr. Mark Fenton, MD, FRCPC Associate Professor, Respiriology, Critical Care and Sleep Medicine

Dr. Josh Lawson, BSc, MSc, PhD Professor, Canadian Centre for Health and Safety in Agriculture (CCHSA), Dept. of Medicine - Director of Research

Dr. John Gordon, BSc, PhD. Professor, Respiriology, Critical Care and Sleep Medicine (Sabbatical)

Dr. Julia Montgomery, Associate Professor, Department of Large Animal Clinical Sciences (Interim)

MEMBERSHIP

ACADEMIC

51

STUDENT

7

AFFILIATES &
E-NEWS
SUBSCRIBERS

58

PATIENT
PARTNERS

6

Membership to the RRC is open to clinicians, faculty, patient partners, students and organizational/community partners. Each year, the RRC undergoes its member renewal process where individuals have the opportunity to indicate level of membership as one of the following: Academic, Student, or Affiliate Members. This renewal process allows the RRC to more appropriately gauge levels of participation and determine eligibility for RRC-initiated funding opportunities.



RRC Updates



James
Lind
Alliance

Priority Setting Partnerships



SCPOR Saskatchewan Centre for
Patient-Oriented Research

The James Lind Alliance (JLA) is a UK-based non-profit initiative that brings patients, carers and clinicians together to identify and prioritize evidence uncertainties. The aim is to make sure that health research funders are aware of the issues that matter most to the people who need to use the research in their everyday lives.

Last fall, after weeks of planning and promotion with our diverse Steering Group, the RRC launched the first online survey for the Priority Setting exercise. 690 patient, family and clinician respondents submitted over 1100 questions for our prioritization process.

The RRC is now in the phases of evidence checking and preparation for our second online survey to rank the most important research questions of Saskatchewan patients and bring those to our final workshop next winter.



Left: Dr. Donna Goodridge (JLA Chair) and Dr. Robert Skomro (Steering Group Member) sit down with CTV News to discuss the JLA PSP.

Right: (SG members from left to right): Dr. Robert Skomro, Dave Parkalub, Dr. Donna Goodridge, Britney Duncan, Katherine Cowan (JLA Advisor), Myrna Briggs, Bill Hails, Sarah Fang and Kendra Ulmer - Not pictured: Dr. Mark Fenton, Candace Skrapek, Karen Webb, Janice Newman, Bill Schaffel, Andre Letendre, Jaimie Peters and Dawn Demchenko



Patient Partner Advisory Council



Pictured clockwise from top left: Bill Schaffel (Chair), Dave Parkalub, Karen Webb, Janice Newman, Candace Skrapek, & Bill Hails

The RRC established the Patient Partner Advisory Council to provide service to and engages patients and their families in Saskatchewan affected by respiratory illness so that research decisions are timely, and relevant and aimed at addressing patient priorities.

The Council meets bi-monthly and serves to: educate and raise awareness about respiratory research; participate in respiratory research priority-setting initiatives; and, participate as advisors on respiratory research projects.

Graduate Student Award



Kayla Cropper, Msc Student

This academic year, the RRC hosted the Graduate Student Award in conjunction with COMGRAD. The successful applicant was Master's student Kayla Cropper. Kayla is completing her graduate studies in Physiology at USask. She is currently conducting clinical research in the Asthma Lab under Dr. Cockcroft and Dr. Davis on the role of muscarinic receptors in asthma and asthma treatment. She recently convoked with a BSc of physiology and pharmacology and was awarded high honours from the U of S. Her honours project focused on the effects of chronic Atrovent use in mild asthmatics.

KNOWLEDGE TRANSLATION HIGHLIGHTS



RESEARCH SEMINARS

As part of the RRC mission to build knowledge and understanding of respiratory health and well-being the Centre held a series of research seminars to foster discussion and innovation between members and the public.

November 20th, 2019

“Searching for biomarkers of Obstructive Sleep Apnea
lessons from the Canadian Sleep and Circadian Network”

Presenters: Dr. Robert Skomro, MD, FRCPC & Aleksandra Franczak, MSc candidate

December 11th, 2019

“The difficulty in diagnosing preschool asthma”

Presenter: Dr. Darryl Adamko, MD, FRCPC

February 11th, 2020

Graduate Student Presentations

Presenters: Flinn Herriot, MSc Student & Hussain Aslan, PhD student

April 21st, 2020

“Respiratory Implications of COVID-19: A Saskatchewan
Perspective”

Presenter: Dr. Erika Penz, MD, MSc, FRCPC

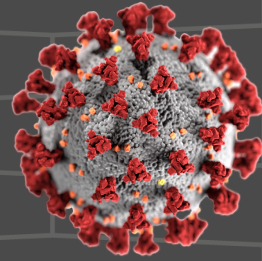
June 2nd, 2020

“COVID-19 Research at VIDO-InterVac”

Presenter: Dr. Volker Gerds, DVM, PhD

KNOWLEDGE TRANSLATION HIGHLIGHTS

COVID-19 DISCUSSION FORUMS



April 28th, 2020

"Development of a novel filter for medical ventilators"

Presenter: Dr. Daniel Chen, Ph.D., P.Eng. Professor & Graduate Chair for Biomedical Engineering, Mechanical, Biomedical

"A biobank repository of plasma and tissue specimens of COVID positive and case control patients"

Presenter: Dr. Marilyn Kinloch, BSc, MD, FRCPC, Department of Pathology and Laboratory Medicine

May 19th, 2020

"Understanding the Role of Ventilation and Carbon Dioxide in Virus pathogenesis and transfer"

Presenter: Dr. Shelley Kirychuk, BScN, MSc, MBA, PhD Associate Professor

"Computational Fluid Dynamics – a tool for studying airflows in bio-medical applications"

Presenter: Dr. Donald Bergstrom, B.Sc., M.Sc., Ph.D., P.Eng. Professor, Mechanical

KNOWLEDGE TRANSLATION HIGHLIGHTS



KAIROS BLANKET EXERCISE

In an effort to enhance our understanding and relationships with our Indigenous community, the RRC hosted the KAIROS Blanket Exercise in cooperation with the Saskatchewan Health Authority and cultural advisors. The blanket exercise is an interactive learning experience that explores the historic and contemporary relationship between Indigenous and non-Indigenous peoples in Canada.

Testimonials

"I'm happy I signed up, and really appreciated the interactive/experiential style of gaining a deeper knowledge/awareness of the Indigenous perspective. Thanks so much for making this opportunity available!"

-Duane Minish, CCHSA

Sincere thanks for hosting the Kairos Blanket Exercise. When it came time to share our feelings about the exercise during the second half, I had a hard time expressing myself. I had so much swimming through my mind – quite impactful! I am so grateful for the experience, truly!

-Trent Litzenberger, LAS

"I found the blanket exercise allowed for a much deeper level of understanding of the specific colonial actions and resulting effects on Indigenous peoples and communities. I think all the participants agreed that we all had some knowledge of events, but to hear the personal stories and “see” the population slowly be made smaller and smaller was really impactful. It also really highlighted the resilience of the peoples and communities."

-Erin Prosser-Loose, USask

RRC Funding Initiatives

Team Building Grant

The 2019 Team building Grant (TBG) was developed with the purpose to encourage collaborative research by providing \$25,000 in funding for inter-disciplinary teams conducting human health and translational research projects with the aim of applying that knowledge for the benefit of patients.

2019 Award Recipients

- Dr. Shelley Kirychuk
Project Title: "Effects of Low elevations of CO2 on lung infection and inflammation"
- Dr. Erika Penz
Project Title: "Animal-Assisted Therapy in Advanced Chronic Obstructive Pulmonary Disease (COPD): an exploratory study"
- Dr. Anderson Tyan
Project Title: "Development and testing of a novel transbronchial lung parenchymal biopsy tool"
- Dr. Donna Goodridge
Project Title: "Treatment acceptance and adherence in patients with Obstructive Sleep Apnea: Examining the roles of health literacy and self-efficacy."

RRC Funding Initiatives

COVID -19 Rapid Response

The COVID -19 Rapid Response funding opportunity was jointly sponsored by the OVDR and the RRC with the capital purpose to provide funding to catalyze small-scale, time-sensitive research projects focused on contributing to the response to the COVID-19 pandemic to mitigate the spread of COVID-19 and/or its negative consequences on people and communities. Grants awarded totaled \$115,700.

RRC Member Award Recipients

Abonyi, Sylvia - *Virtual Kehokatownin in the time of Covid-19 among Île-à-la-Crosse Seniors and Elders in Saskatoon*

Butcher, Scotty - *Strong Bodies, Strong Minds: Strengthening the Body and Mind at Home during the COVID-19 Pandemic*

Goodridge, Donna - *Health Literacy, Deferred and Virtual Health Care Visits and Health Concerns of Tenants in Social Housing during the COVID-19 Pandemic*

Katselis, George - *Detection of Salivary Biomarkers of 2019 Novel Coronavirus Using Mass Spectrometry-based Proteomics*

Kirychuk, Shelley - *Optimizing Ventilation Parameters in Order to Test Ventilation as a Population-Level Protection Measure in Controlling Airborne Viruses*

Mansell, Holly - *A Qualitative Assessment of Home-Based Education for Patients Awaiting Lung Transplantation, in the Era of COVID-19*



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