

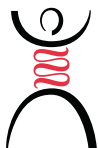
RESEARCH WE FUND & STRATEGIC RESEARCH INITIATIVES

Aida Fernandes, VP Research & Patient
Programs

October 2015

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Agenda

- Research Primer
- Research Programs Overview
- Genetic, Environmental, Microbial (GEM) Project
- Promoting Access and Care through Centres of Excellence (PACE)

What We Do



RESEARCH



**PATIENT
PROGRAMS &
SERVICES**



**ADVOCACY &
AWARENESS**

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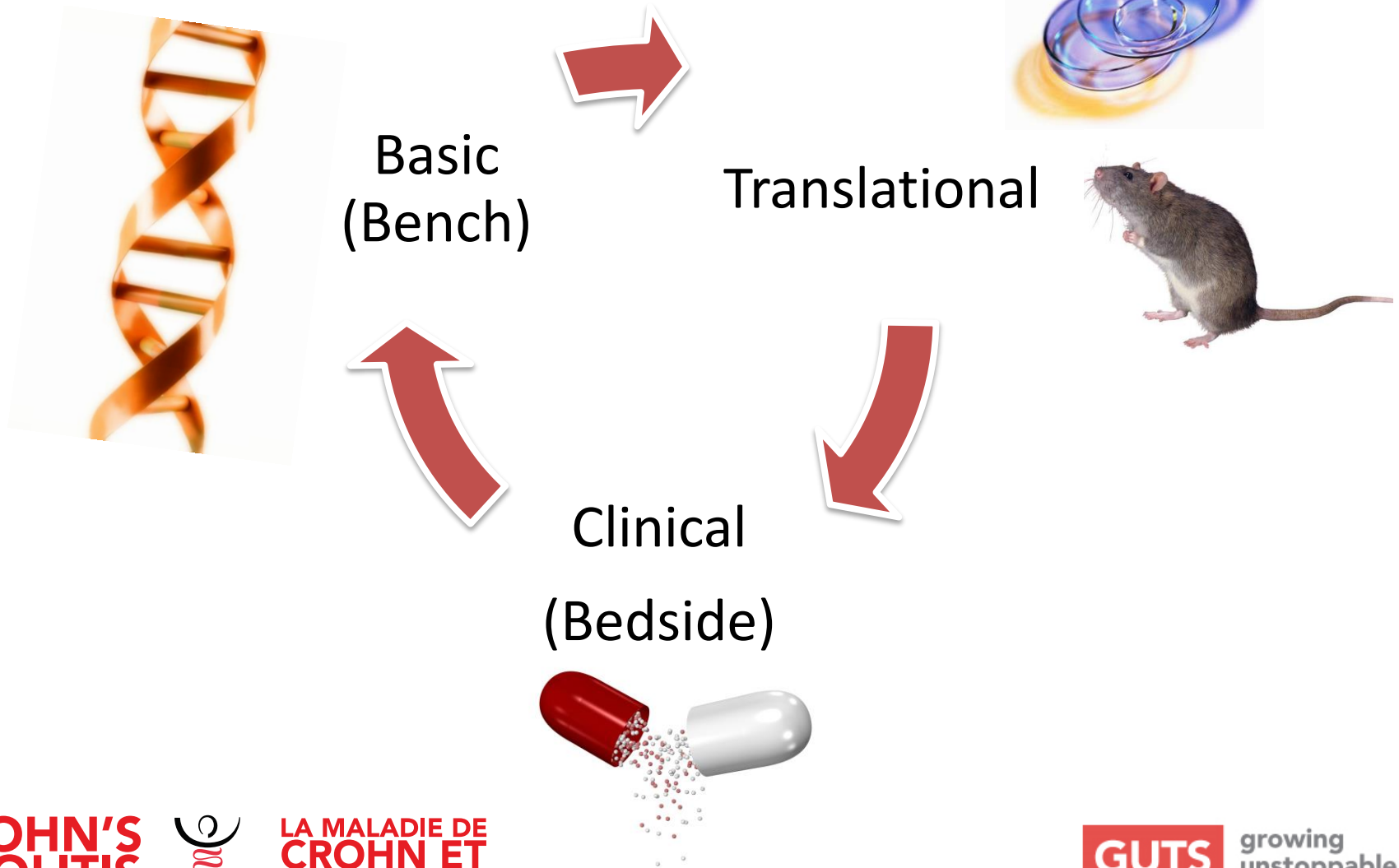
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Research Cycle



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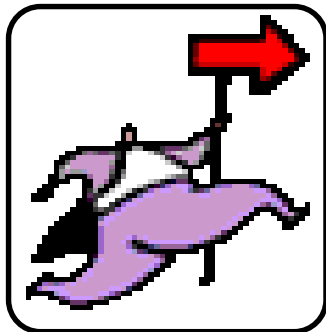
How to fund research?

Open vs. Targeted Research



Open

- Investigator-initiated
- Curiosity/hypothesis-driven
(The question determines the experiment)



Targeted

- Directed research
- Research question, problem or theme specified in advance

How we choose which research to fund?



STEP 1: Call for Proposals

To Canada-based researchers and healthcare professionals

STEP 2: Grant Review

Committee of experts and lay persons review and rank applications on scientific merit and relevancy

STEP 3: Funding Approved

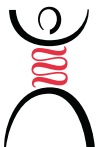
CCC Board approved funding for highly-ranked projects based on availability of funds

STEP 4: Accountability

Grant recipients provide annual progress and financial reports

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How do we monitor research progress?

- Annual progress and financial reports
- Publish findings in scientific journals & present in medical conferences
- Success in obtaining funding from federal government grants
- Partnerships with industry & governments to leverage donations
- Research Report (**2015 Coming Soon!**)



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Crohn's and Colitis Canada's Research Programs



Building Capacity

- Summer studentships (BSc)
- Studentships (PhD, MSc)
- Fellowships (Post Doc)
- Salary Awards (MD/PhD)
- Chairships



Supporting Innovation

- Grants-in-Aid (GIAs or Discovery Grants)
- Innovations Grants



Targeting Research

- GEM
- PACE
- CIHR Signature Initiatives



Moving Knowledge into Practice

- Meeting of the Minds / Future Directions
- Impact of IBD Report
- Conference Grants

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Newly Awarded Grants-in-Aid



Jean-Eric Ghia,
University of
Manitoba

- Co-Investigators: Drs. Charles Bernstein & Kung Sam
- How the hormone, Semaphorin 3E, regulates gut inflammation



Stephen Girardin,
University of
Toronto

- What is the role of the gene, NOD2, in Crohn's disease



Nicola Jones, The
Hospital for Sick
Children

- Co-Investigators: Drs. Dana Philpott & Anne Griffiths
- How Vitamin D increases risk of IBD

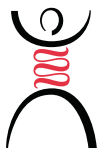


Alan Lomax,
Queen's University

- Mechanisms of diarrhea & pain in IBD

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Newly Awarded Grants-in-Aid



Derek McKay,
University of Calgary

- Using immune cells to treat IBD



Michael Surette,
McMaster University

- Co-Investigators: Drs. Paul Moayyedi & Christine Lee
- Improving fecal transplant therapy in UC



Eytan Wine,
University of Alberta

- Co-Investigators: Drs. Gane Wong, Jens Walter & Leo Dieleman
- Using patient antibodies to find bacteria that cause IBD in children

40 Years of Progress

- 350+ grants awarded to date that have improved our understanding of diagnosing and treating disease
- 350+ training awards for students and fellows fostering the next generation of researchers and clinicians
- 2 chairships at University of Calgary and McMaster University, establishing them as world-renowned Centres of Excellence
- Discovery of new genes associated with Crohn's and colitis
- Uncovering of new pathways involved in uncontrolled inflammation
- Understanding of links between brain and gut and role of microbiome in disease progression

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THE GEM PROJECT

genetic environmental microbial

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What is GEM?



GENETIC
predisposition



ENVIRONMENTAL
influences

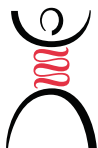


MICROBIAL
interactions



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GOAL

Assemble a cohort of individuals at high risk of developing Crohn's and follow them to identify disease triggers

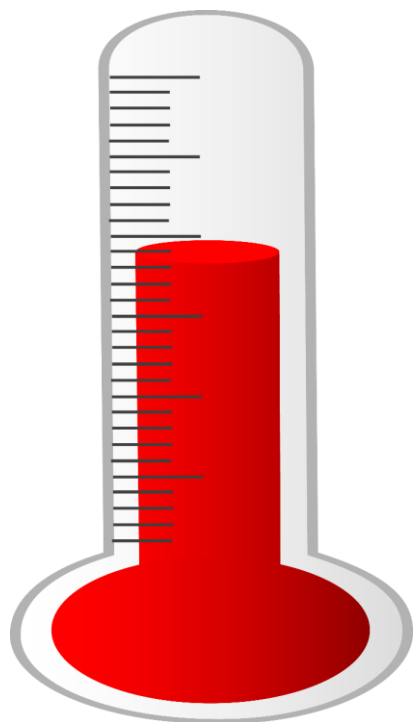
STRATEGY

Accelerate subject recruitment through site expansion (Canada, USA, international) to reach target of 5,000 subjects

OUTCOME

Uncover triggers of Crohn's disease and guide development of transformative treatments

GEM Progress



- We're almost there - So far, we've reached **75%** of our goal
- 82 recruitment sites internationally
- 3,700/5,000 subjects recruited



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Who can join GEM?

- Are between 6-35 years old
- Have a sibling and/or parent with Crohn's disease
- Are not diagnosed with inflammatory bowel disease (IBD), irritable bowel syndrome (IBS), or diabetes

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What's involved?

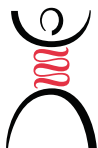


2 short clinic visits
to collect:

- Demographic information
- Medical history
- Information about diet
- Blood, stool, urine samples

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How can you help?

- Register at gemproject.ca and locate your local recruitment centre
- Promote GEM Project at Chapter meetings, events, communications
- Visit GEM booth on Saturday to learn more

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PACE

Promoting Access and Care
through Centres of Excellence

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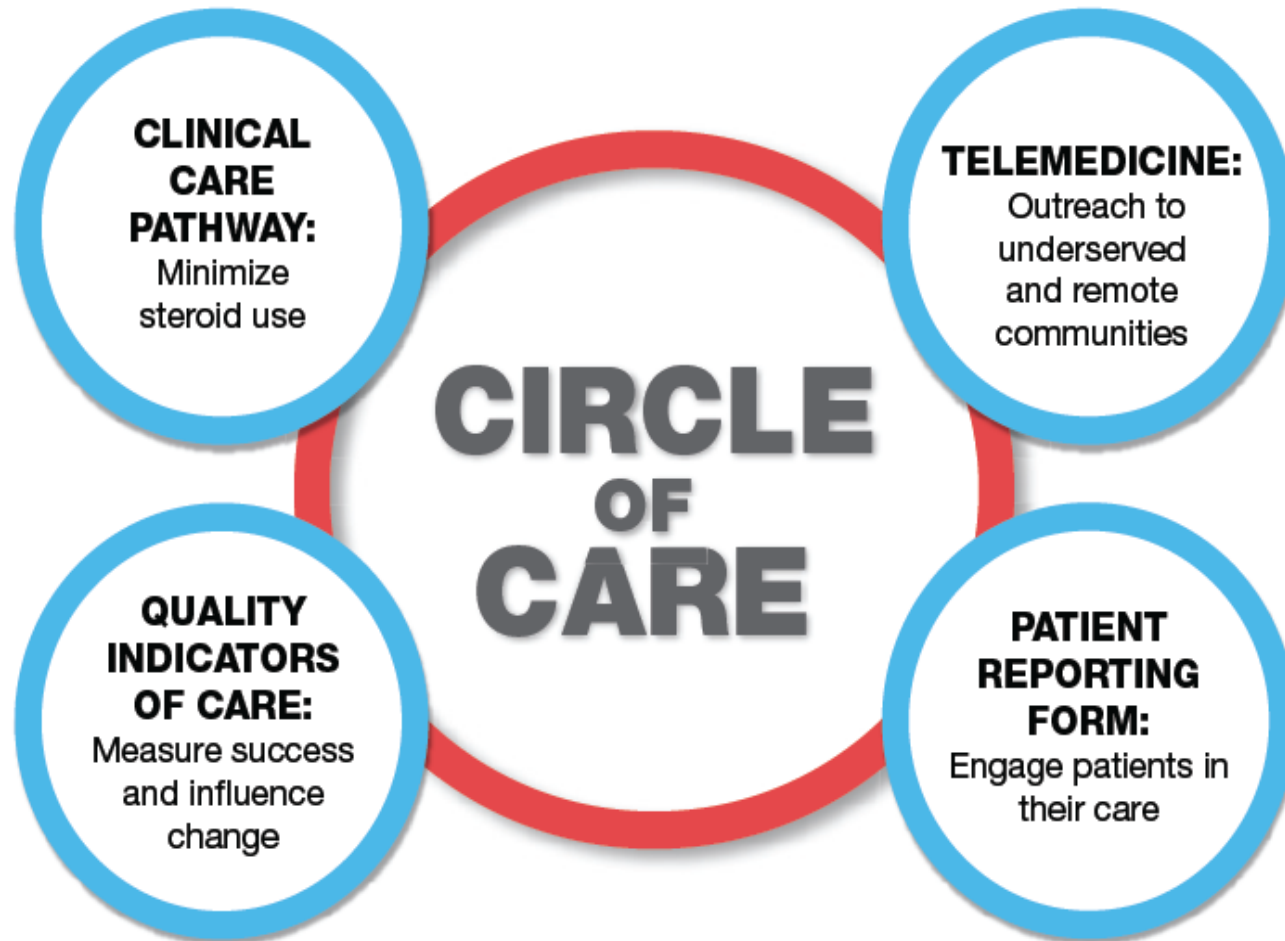
What is PACE?

- First **national network** of leading IBD Centres of Excellence across 3 provinces in Canada
- Improve IBD **patient outcomes & address current gaps** through research and clinical care
- Provide evidence to **change public healthcare** system
- \$2.5 M initiative over 4 yrs (supported by CCC & pharma)

What are gaps in patient IBD care?

- Patients do not have access to specialized care when they need it
 - GI referrals is critical to timely diagnosis
 - Early visit with IBD specialist reduces risk of surgery & hospitalization
- Patients across Canada do not have equal access to best care
 - Early and ongoing access to specialized IBD care is lacking in rural/remote communities
- Chronic steroid use is too high
 - $\frac{3}{4}$ of IBD patients referred to an IBD centre are on chronic steroid therapy

What are PACE programs



Who's involved in PACE?

HOSPITAL AFFILIATED INSTITUTIONS



Alain Bitton

• McGill University



Richard Fedorak

• University of Alberta



Geoffrey Nguyen

• Mount Sinai Hospital



Remo Panaccione

• University of Calgary



Walter Reinisch

• McMaster University

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Questions?

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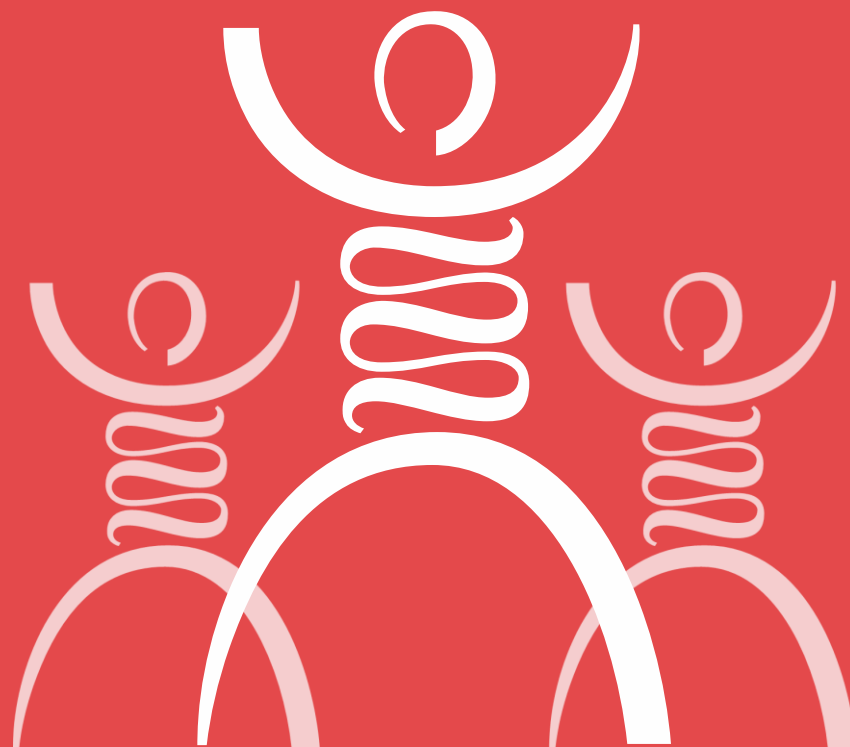


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