

CHRD 2024: Abstract Submission Form

Presenter Name

Jana Slaght

Presenter Status

Non-Trainee

Role in the project

Design

Write Abstract

Research Category

Community Health / Policy

Title

Implementing a Team Science Approach to Advance Discoveries for Pediatric Type 2 Diabetes in Canada

Background

Type 2 diabetes (T2D) is one of the fastest growing pediatric conditions in Canada. The bio-psycho-social factors involved in the etiology, treatment and prevention of pediatric T2D are unique relative to adult-onset T2D. Few studies exist describing team science to studying prevention and treatment strategies for pediatric T2D.

Objective

We present a 9-year case study (2012-2021) of a transdisciplinary team established with a particular focus on advancing discoveries related to improving our understanding of and care for families affected by pediatric-onset T2D.

Methods

Using a social network analysis, where the nodes represent individual researchers and the edges represent co-authorship relations, we examine the impact of team formation on scientific publications. We also describe trends in funding, trainee development and results from anti-racism surveys from 2022-2023.

Results

The network consisted of 15 nodes (9 clinical, 6 fundamental) in 2012 and 2019. Scientific publications studied increased from 49 (2012) to 438 (2019). Network pairwise relationships remained consistent over time (29 in 2012-2014 to 28 in 2019-2021). Network density, the proportion of relations relative to total possible relations within the network, increased by a factor of 1.4 between 2012-2014 (0.28) and 2015-2019 (0.39), then decreased back to 0.27 as the team size increased by 25%. Annual external funding increased 5-fold and trainee graduation rates increased 3-fold from 2012-2019. Team commitment to anti-racism training resulted in 2-4-fold increased rates of patient engagement in publications, grant funding and diversity of speakers invited to present.

Conclusion

Creating a team of transdisciplinary scientists increased scientific output, collaboration among researchers, funding for pediatric T2D-specific research and the culture of anti-racism in research funding, education and scientific publications.

Do you have a table/figure to upload?

No

Authors

Name	Email	Role	Profession
Jana Slaght	jslaght@chrim.ca	Presenting Author	Research Coordinator
Stephanie Mantharack	smanthan@chrim.ca	Co Author	Research Coordinator
Barret Monchka	Barret.Monchka@umanitoba.ca	Co Author	Data Analyst
Allison Dart	ADART@exchange.hsc.mb.ca	Co Author	Associate Professor
Vernon Dolinsky	VDolinsky@chrim.ca	Co Author	Full Professor
Jonathan McGavock	jmcgavock@chrim.ca	Co Author	Full Professor
the DREAM Theme	dream@chrim.ca	Co Author	