# Krembil **Research Institute**

2017 Research Fact Sheet

## About the Krembil Research Institute (Krembil)

Krembil is the research arm of the Toronto Western Hospital. Research is conducted in the Krembil Discovery Tower-a nine-storey, stateof-the-art research and clinical centre with an award-winning design. Krembil is located just north of the intersection of Bathurst and Dundas, in downtown Toronto.



#### **Research Areas**



Research at Krembil is focused on developing new insights into innovative treatments for chronic debilitating conditions that include neurological diseases, vision disorders and arthritis.

## Foundations



Funds from the Toronto General & Western Hospital Foundation contribute to research, education and patient care programs at Krembil and the Toronto Western Hospital.

## Selected Research Advancements



A Tale of Two Molecules Dr. Mohit Kapoor identified two molecules-microRNA-181a-5p and microRNA4454-that are elevated in individuals with osteoarthritis and could serve as markers of disease. Nakamura A, et al. JCO Insight. 2017.



Improving Outcomes Certain immune cells originating from the gut may be linked to ankylosing spondylitis. Dr. Robert Inman found that these cells were enriched at sites of inflammation in the joints. Gracey E, et al. Ann Rheum Dis. 2016.

#### Researchers



**36** Senior Scientists 12 Scientists 16 Affiliate Scientists 31 Clinician Investigators 122 Clinical Researchers 2 Emeritus 219 Total Researchers

#### Support



## Trainees



### **Research Funding**





#### **Research Space**



146,568 sq. ft.

#### **Peer-Reviewed Publications**









Seeing Cell Transplantation Dr. Valerie Wallace showed for the first time that cells injected into the retina to partially rescue vision do not actually integrate into the tissue; rather, their cell contents are transferred to existing cells. Ortin-Martinez A, et al. Stem Cells. 2017.



Reading One's Brain Using magnetic resonance imaging, Dr. David Mikulis found a way to predict localized brain areas 'at risk' for stroke-like damage implicated in age-related intellectual decline. Sam K. et al. Ann Neurol. 2016.