

# Research Breakthroughs



Life-saving advances made possible by you.

**1964**

Dr. William Mustard develops surgical procedure to correct "blue baby syndrome," a previously lethal heart defect.

**1968**

One of the first heart transplant surgeries in Canada is performed.



**1976**

Prostaglandin E2 gives surgeons much-needed time to repair defects in the hearts of newborns.

**1980**

Dr. Adolfo de Bold discovers atrial natriuretic factor (ANF), the hormone that controls high blood pressure, sparking a revolution in blood pressure research.

**1987**

A new surgical technique helps treat irregular heartbeats.



**1990**

First genetic link to premature heart disease is discovered.



**1999**

Clot-busting drug tPA used to treat ischemic stroke – one of the biggest life-saving breakthroughs.

**2000**

ACE inhibitors are found to significantly reduce the risk of heart attacks and strokes.

**2004**

INTERHEART study, led by Dr. Salim Yusuf, discovers the existence of nine modifiable risk factors that account for over 90% of heart attacks worldwide.

**2006**

Researchers identify important gender differences in the development of high blood pressure.



**2014**

Researchers discover the cause of increased calcium in the heart, which can lead to an irregular heartbeat and sudden death.

**1954**

Dr. Wilfred Bigelow performs first successful open heart surgery in Canada, using a technique developed through a Heart & Stroke research grant.



**1965**

Diagnosing heart disease becomes easier thanks to ECG telemetry, which allows doctors to monitor patients' hearts remotely while they go about daily activities.



**1976**

Dr. Henry Barnett conducts first clinical trial using Aspirin™ to prevent strokes.

**1983**

Dr. Robert Côté perfects a clinical tool that measures neurological deficits following an acute stroke. This Canadian Neurological Scale is now used all over the world.



**1987**

Researchers pioneer the use of the clot-busting drug tPA for heart attacks.

**1997**

Human genome mapping reveals more than 84,000 DNA sequences related to heart disease and stroke.



**2000**

Dr. Lori West discovers that, unlike adults, newborns are able to accept hearts from incompatible donors.

**2003**

Canadian Stroke Strategy, a joint initiative with the Canadian Stroke Network, revolutionizes stroke management with a new integrated approach to prevention, treatment and rehabilitation.

**2005**

The gene responsible for heart arrhythmias is found.



**2009**

World's first in-utero surgery to correct congenital heart defects is performed in Canada.

**2015**

ESCAPE Trial Treating major strokes by removing blood clots through blood vessels cuts deaths by 50% and significantly reduces disability in survivors.