

HEART AND STROKE FOUNDATION

RESEARCH MILESTONES THAT MATTER



1954

Dr. Wilfred Bigelow performs first successful open heart surgery on a patient in Canada at Toronto General Hospital using a surgical technique developed through a Foundation research grant.

1964

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

1968

The first heart transplant surgery, made possible as a result of research funded by the Heart and Stroke Foundation, is performed in Canada.



1976

Dr. Henry Barnett conducts first clinical trial using Aspirin to prevent strokes. Dr. Barnett begin negotiations to greatly increase focus on funding stroke research.

1983

Foundation-funded researcher Dr. Robert Côté perfects the Canadian Neurological Scale, a clinical tool that measures neurological deficit following an acute stroke. The scale is now used in Canada and all over the world.



1990

Foundation researchers discover first genetic link to premature heart disease.

2000

Research by Alberta’s Dr. Lori West reveals that, unlike adults, newborns are able to accept hearts from incompatible donors.

Foundation-funded project discovers that ACE inhibitors 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. The Foundation immediately begins translating the findings into public health education programs aimed at preventing heart disease and stroke before they occur.



2006

Researchers identify important gender differences in the development of hypertension.

2010

A report by Dr. Hans Krueger finds that 1–2% reduction in heart disease and stroke risk factors over 15 years translates into \$3.5 billion in savings in direct and indirect health care costs in Manitoba alone.

2015

A Foundation-funded research discovery, which uses a procedure called endovascular thrombectomy (ET) to treat major strokes caused by blood clots, cuts death by 50% and significantly reduces disability in survivors.

Research funded by the Heart and Stroke Foundation (HSF) has contributed to a significant decline in deaths caused by cardiovascular disease.

The Foundation establishes a Summer Medical Student Scholarship program to attract the brightest young minds to cardiovascular research and ensure sustainability of progress in treating heart disease and stroke.

1963

Diagnosing heart disease becomes easier thanks to ECG telemetry, technology funded by the Foundation that allows doctors to monitor patients’ hearts remotely while they go about their daily activities.

1965



Foundation-funded researchers discover that prostaglandin E2, a naturally occurring substance, could maintain a unique feature of fetal circulation, giving surgeons much-needed time to repair defects in the hearts of newborns.

1976

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

1980

Foundation researchers pioneer the use of the clot busting drug tPA for heart attacks and develop a new surgical technique for treating irregular heartbeats.

1987



Human genome mapped with Foundation funding, including identification of more than 84,000 DNA sequences related to heart disease and stroke.

1997



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

2003

Foundation researchers discover the gene responsible for heart arrhythmias.

2005

Foundation-funded research enables first-ever in-utero surgery to correct congenital heart defects.

2009



Foundation-funded researchers discover the cause of increased calcium in the heart, a condition which can lead to an irregular heartbeat and sudden death — opening the doors to new treatments.

2014