## First KIA Laureate Fundamental Research

Field: Medicine

Researcher: Prof. Tofy Mussivand

Nationality: Iranian expatriate residing in Canada

Date of birth: 02/12/1942

Position: Professor of Surgery Faculty of Medicine University of Ottawa, Heart Institute

Scientific affiliation: Ottawa Heart Institute

Research work title: 1-Cardiovascular 2-Heart Failure Treatment

3-Medical Devices

**Abstract:** Professor Mussivand has been working in several areas. He invented 31 technologies of which 20 are patented/in process. Below is a short list of the major current projects that he is working on:

## **CURRENT PROJECTS**

CO2 Adsorbent, Portable DNA Extraction, Electronic-Nose Disease Detection, Heart Failure Treatment, Stent Deployment, Electrolyte Detection, Sterilization Device, Remote Biotelemetry, Thorascopy Simulation, Circulatory Support, Patient Care Simulation, Neuro Chip Transcutaneous Energy Transfer.

**Biography:** Professor Mussivand is an internationally acclaimed scientist, educator, humanitarian and inventor, short list of his breakthroughs:

WORLDS' FIRST: Mussivand invented 31 discoveries (20 patented/processing). for the first time in the world he invented:

- 1. Artificial Heart: Invented First implantable heart
- 2. Heart Recovery: Published first clinical evidence, saving countless lives. 3. Thermal Therapy: Pioneered stimulating cells natural healing.
- 4. Clot Prevention & blood forces:
- 5. Invented Fingerprints DNA extraction
- 6. Developed optical Electrolytes Detection:
- 7. Developed eliminating infections.
- 8. Alzheimer Blood Flow: Published hypothesis.
- 9. Published Seminal Clinical Complications Solutions.

## AWARDS/HONOR EXAMPLES:

NRC Award (2001). ,NSER Award (2000), OCRI, Award (1999), OLSC, Awards (1999) and (1997), MEDEC, Medical Achievement (1998), Brazilian Surgeons, Award (1998), named Mussivand Symposium 10 years, Japan Transplantation Society Award, Society, Thoracic Surgeons: permanent plaque & tree in Hippocrates Park for Mussivand Greece (2008), Scientific Academies: Fellow of many, Society of Cardio-Thoracic Surgeons: Elected President, Media Coverage: TVS ABC, CBC, History, Discovery Scientific American, others. A TV documentary depicting his life: Shepherd Dream, Science and Technology advising last 3 prime ministers, Supervised 600 residents, fellows, Publications/Presentations: 500.

