



2015 CANADA GAIRDNER AWARDS HONOUR TOP MEDICAL DISCOVERIES AROUND THE WORLD

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TORONTO, ON (March 25, 2015) - The Gairdner Foundation is pleased to announce the winners of the 2015 Canada Gairdner Awards, recognizing some of the most significant medical discoveries from around the world.

Among the world's most esteemed medical research prizes, the awards distinguish Canada as a leader in science and provide a \$100,000 (CDN) prize to each scientist for their work. The Canada Gairdner Awards promote a stronger culture of research and innovation across the country, inspiring the next generation of researchers.

The selections for the **Canada Gairdner International Awards**, recognizing individuals from various fields for seminal discoveries or contributions to medical science, are:

- **Shimon Sakaguchi, Distinguished Professor, Vice Director, Laboratory of Experimental Immunology, WPI Immunology Frontier Research Center, Osaka University, Osaka, Japan**

Awarded “for his discovery of regulatory T cells, characterization of their role in immunity and application to the treatment of autoimmune diseases and cancer.”

The work: To stay healthy our immune system needs to discriminate between itself and invaders (non-self). When unable to differentiate between the two, the immune system destroys healthy cells or tissues causing autoimmune diseases. Dr. Sakaguchi discovered regulatory T (Treg) cells which help maintain order in the immune system and act as a ‘self-check’ to prevent excessive reactions as without Treg cells the body would attack the healthy cells and die. He was the first to determine their molecular basis and function.

The impact: Within his laboratory, Dr. Sakaguchi demonstrated that increasing the number of Treg cells can prevent and treat autoimmune diseases. Further, Treg cells suppress the immune system against cancer and there are now several clinical trials within this area.

The Canada Gairdner Awards will be presented at a dinner in Toronto on October 29th, 2015 as part of the Gairdner National Program, a two week lecture series given by Canada Gairdner Award winners at more than 22 universities from St John's to Vancouver. The National Program reaches students across the country, making the superstars of science accessible and inspiring the next generation of researchers.

“The Canada Gairdner Awards distinguish Canada as a leader in biomedical research, raising the profile of science both nationally and on the world stage,” said Dr. John Dirks, President and Scientific Director, Gairdner Foundation. “This year’s winners are an exceptional example of the wide implications cell discovery can have on future translational discoveries.”

The Gairdner Foundation: Making Science Matter

The Canada Gairdner Awards were created in 1959 to recognize and reward the achievements of medical researchers whose work contributes significantly to improving the quality of human life. They are Canada's only globally known and respected international science awards, and Gairdner is the only national organization that consistently brings the world's best biomedical researchers to Canada to share their ideas and work with scientists across the country. In so doing, it enlarges networks and enhances Canada's international reputation, while providing a realistic and unbiased benchmark for Canada's leading scientists. All winners are chosen by an international adjudication committee and all choices are deemed final.