

# RESEARCH FACTS

## Investments 2013

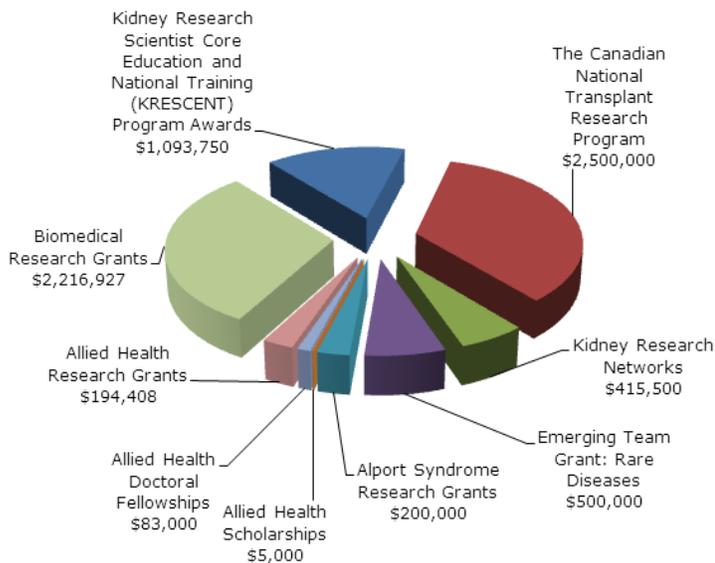
92 Research Projects Supported

**\$4,000,000** invested by The Kidney Foundation of Canada in research, plus over **\$3,000,000** more by partners.

Since 1964, The Kidney Foundation has invested over **\$110 million** to support kidney-related research.

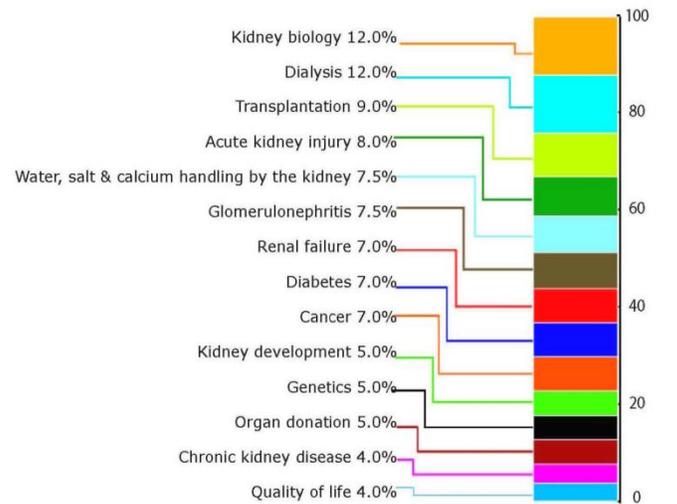


### Total Grants Awarded July 2013 - June 2014



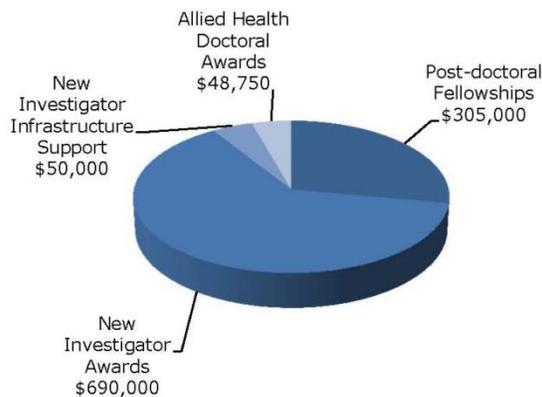
The Grant totals include funds disbursed directly by the Alport Syndrome Foundation (USA), the Canadian Institutes of Health Research (CIHR), Kidney Cancer Canada, the NephCure Foundation as well as the organizations mentioned below for the KRESCENT Program.

### Grant Distribution by Research Areas of Focus 2013 - 2014



Does not include the KRESCENT Program

### Total KRESCENT Awards by Program July 1, 2013 - June 30, 2014



KRESCENT total includes amounts disbursed directly by Canadian Institutes of Health Research (CIHR) \$479,184, Fonds de la recherche en santé du Québec (FRSQ) \$67,454, Canadian Diabetes Association \$35,000, Universities and Research Institutes \$125,000, Canadian Child Health Clinician Scientist Program (CCHCSP) \$17,500 and New Brunswick Health Research Foundation (NBHRF) \$24,000.

In 2012, The Kidney Foundation embarked on the public phase of a \$73 million New Challenge Campaign, a special initiative to increase investment in key areas including research. The Pearson family made a donation of \$250,000 over 5 years to support research awards in the area of nephrotic syndrome. Theirs is one of the largest multi-year commitments to date towards the campaign.



1964 **50** 2014  
ANNIVERSARY

# RESEARCH

## Kidney Foundation-Funded Accomplishments

### Basic Science

- Dr. Daniel Bichet's research led to a major breakthrough in the early detection of *diabetes insipidus*, a condition that causes dehydration and death in infants. This landmark research can now be applied to many other diseases.
- Dr. Todd Alexander discovered an important link between high sodium intake and calcium depletion, which causes kidney stones.
- Dr. Mathieu Lemaire identified a new mechanism for addressing abnormal blood clotting and kidney failure. These findings will have direct implications for the treatment of people diagnosed with atypical Hemolytic Uremic Syndrome.

### Clinical Research

- In the 1990s, The Kidney Foundation funded the first randomized clinical trial of nocturnal dialysis versus hemodialysis, which went on to show that the former actually provides better outcomes and lowers cardiac risks for patients on dialysis.
- In 2013, the world's first gene therapy clinical trial for Fabry Disease was established. Fabry Disease is a rare genetic disease that can lead to kidney failure.

### Population Health and Health Systems

- Researchers Todd Alexander and Marcello Tonelli found that people who have had kidney stones are twice as likely to need dialysis or a kidney transplant later in life.
- A team of Canadian researchers, together with patients and caregivers, conducted the first dialysis patient research priorities survey of its kind ever made available to Canadians. The survey results will help chart the future of dialysis research in Canada.

### Transplantation Research

- The Kidney Foundation co-funded the first national transplant research program which will address barriers to tissue and organ donation and will improve health outcomes for transplant recipients in Canada.

### Training the next generation of research leaders through the The Kidney Research Scientist Core Education and National Training Program (KRESCENT)

- Since 2005, the KRESCENT Program has supported kidney research trainees in a variety of important areas, including detection of acute kidney injury and its consequences, clinical trials on renal vasculitis (disorders related to inflammation of blood vessels), and ways to enhance kidney donation for transplant.
- Over 40 new kidney researcher scientists have been trained since the start, in 2005, of the national training program KRESCENT.
- 70% of KRESCENT Postdoctoral Fellows have secured positions in Canada; and 100% of KRESCENT New Investigators have secured peer-reviewed grant support – far higher than one would see in the traditional peer-reviewed funding environment.
- Allied health researcher, Mr. Morteza Ahmadi worked on the design, fabrication and characterization of a nanotechnology-based wearable artificial kidney for full renal replacement therapy. His goal is to change the quality of life for patients living with kidney failure.
- KRESCENT New Investigator, Dr. Matthew James' recent findings show that heart attack treatments carry no increased risk for kidney disease patients, clarifying the safety of these lifesaving therapies as part of their treatment.
- Dr. Susan Samuel, a New Investigator, helped establish a national infrastructure to conduct high quality clinical trials to find the best treatments for children with nephrotic syndrome in the future.
- Dr. Sandra Turcotte, a New Investigator, is currently working on the inactivation of VHL – a tumor suppressor which could lead to a new type of targeted therapy for the treatment of renal cell carcinoma (kidney cancer).

For more examples of The Kidney Foundation's research investments and accomplishments, visit [www.kidney.ca](http://www.kidney.ca).