

# Curriculum Vitae

David Zev Isaac Cherney

**A. Date Curriculum Vitae is Prepared: May 31, 2017**

## B. Biographical Information

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### 1. EDUCATION

#### Degrees

2004 - 2008	Doctor of Philosophy, Renal Physiology, Diabetic Nephropathy, Institute of Medical Science, University of Toronto
1995 - 1999	Doctor of Medicine (MDCM), Medicine, McGill University, Montreal, Quebec

#### Postgraduate, Research and Specialty Training

2004 - 2008	Doctor of Philosophy, Renal Physiology, Diabetic Nephropathy, Institute of Medical Science, University of Toronto, Toronto, Ontario, Canada, Supervisor(s): Dr. Judith Miller, University of Toronto
2003 - 2005	Fellowship, Clinical Nephrology, University of Toronto, Toronto, Ontario, Canada
2002 - 2003	Chief Medical Resident, Internal Medicine, Dept of Medicine, University Health Network and Mount Sinai Hospital, Toronto, Ontario, Canada
2000 Oct - 2000 Nov	1-month research-elective block (allocated on a competitive basis), Renal Physiology, Dept of Medicine, St. Michael's Hospital, Toronto, Ontario, Canada, Supervisor(s): Dr. Mitchell Halperin
2000 Apr - 2000 May	1-month research-elective block, Renal Physiology, Dept of Medicine, St. Michael's Hospital, Toronto, Ontario, Canada
1999 - 2003	Medical Resident, Internal Medicine Postgraduate Year 1-4, Dept of Medicine, University of Toronto, Toronto, Ontario, Canada

#### Qualifications, Certifications and Licenses

2004 - 2008	Clinician Investigator Program - University of Toronto, Research in Renal Physiology, Royal College of Physicians and Surgeons of Canada, Ontario, Canada
2003 - 2005	Certificate of Special Training in Nephrology, FRCP(C), Nephrology, Royal College of Physicians and Surgeons of Canada, Ontario, Canada

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- 1999 - 2003 Internal Medicine Resident, FRCP(C), Internal Medicine, Royal College of Physicians and Surgeons of Canada, Ontario, Canada, License / Membership #: 562812
- 1999 - 2000 Qualifying Examination Parts I and II, Medicine, Medical Council of Canada, Toronto, Ontario, Canada

## 2. EMPLOYMENT

### Current Appointments

- 2014 Jul 1 - present Scientist, Nephrology, University Health Network, Faculty of Medicine, Toronto General Hospital Research Institute, Ontario, Canada
- 2014 Jul - present Associate Staff - Cross Appointment, Nephrology, Pediatrics and Nutritional Sciences, Faculty of Medicine, The Hospital for Sick Children, Toronto, Ontario, Canada
- 2014 - present Associate Professor, Medicine, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada
- 2008 Jul 1 - present Active Staff, Nephrology, Medicine, University Health Network, Toronto, Ontario, Canada
- 2008 Jul 1 - present Associate Staff, Nephrology, Department of Medicine, Faculty of Medicine, Mount Sinai Hospital, Toronto, Ontario, Canada
- 2008 - present Clinician Scientist, Medicine, Faculty of Medicine, University of Toronto, University Health Network, Toronto, Ontario, Canada

### Previous Appointments

#### HOSPITAL

- 2002 - 2003 Chief Medical Resident, Medicine, Medicine, University of Toronto, Mount Sinai and Toronto General Hospitals, University of Toronto

#### UNIVERSITY

- 2008 - 2014 Assistant Professor, Medicine, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada

## 3. HONOURS AND CAREER AWARDS

### Distinctions and Research Awards

#### NATIONAL

##### Received

- 2008 May **Selection for Oral Presentation as one of Top Ten Nephrology Trainee Research Projects**, Canadian Society of Nephrology Meeting. (Research Award)  
*for the abstract "Endothelial Nitric Oxide Synthase Gene Polymorphisms and the Renal Hemodynamic Response to L-Arginine".*
- 2007 May **Top Renal Trainee Abstract Award**, Canadian Society of Nephrology Meeting, Halifax, Nova Scotia, Canada. (Research Award)  
*for the abstract "Gender Differences in Renal Response to Cyclooxygenase 2 Inhibition in Type 1 Diabetes". Total Amount: 1,250 CAD*
- 2005 May **First Prize, Renal Trainee Clinical Research Project**, Canadian Society of Nephrology Meeting, Calgary. (Research Award)  
*for study "Gender Differences in Renal Responses to Hyperglycemia and Angiotensin Converting Enzyme Inhibition in Type 1 Diabetes".*

PROVINCIAL / REGIONAL

Received

2005 Jul **Ontario Graduate Scholarship in Science and Technology (OGSST) Award**, Department of Medicine. (Distinction)  
*salary support award for PhD studies - "Mediators of Renal Hyperfiltration in Type 1 Diabetes Mellitus".*

LOCAL

Received

2017 May (TRAINEE AWARD) **Amar K Sen Award for Highest Ranked PhD Thesis in the Department of Physiology to Dr. Yuliya Lytvyn** (Research Award). **Department of Physiology**, University of Toronto

2017 March **William Goldie Prize and Travel Award for Research** (Research Award). Department of Medicine, University of Toronto (\$3000.00)

2008 May **Selection for Oral Presentation**, Annual Department of Medicine Charles Hollenberg Day. (Research Award)  
*for the abstract "Endothelial Nitric Oxide Synthase Gene Polymorphisms and the Renal Hemodynamic Response to L-Arginine".*

2006 Jun **Best Poster Award, Clinician Scientist Research Day**, University of Toronto Renal Trainee Research Day. (Research Award)  
*"Impact of Renin Angiotensin System Modulation on Renal Hemodynamic Function in Type 1 Diabetes Mellitus".*

2006 Jun **First Prize, Renal Trainee Clinical Research Project**, University of Toronto Renal Trainee Research Day. (Research Award)  
*"Impact of Renin Angiotensin System Modulation on Renal Hemodynamic Function in Type 1 Diabetes Mellitus".*

2006 May **Honorable Mention**, Institute of Medical Science Research Day. (Research Award)  
*for abstract: "Modulation of Prostaglandins Normalizes Glomerular Filtration Rate in Hyperfiltering Patients With Type 1 Diabetes Mellitus".*

2005 Jun **First Prize, Renal Trainee Basic Science Research Project**, University of Toronto Renal Trainee Research Day. (Research Award)  
*"Gender Differences in Renal Responses to Hyperglycemia and Angiotensin Converting Enzyme Inhibition in Type 1 Diabetes".*

2002 Jun **Great Internal Medicine Case Competition Winner**, University Health Network/Mount Sinai Hospital, University of Toronto. (Research Award)  
*Presented at Medical Grand Rounds: "An Unusual Case of Adult Respiratory Distress Syndrome".*

2001 Jun **Outstanding Housestaff Award**, Mount Sinai Hospital, University of Toronto. (Distinction)

2001 Jun **Third Prize in the 2nd Annual Department of Medicine Research Competition**, University Health Network/Mount Sinai Hospital, University of Toronto. (Research Award)  
*for the paper entitled "How Should We Manage and Monitor Patients with Hypertensive Urgencies and Emergencies? A Review of the Literature".*

1999 Jun **Alexander D. Stewart Prize**, McGill University. (Distinction)  
*Awarded to the member of the graduating class, who, in the opinion of the Faculty and students, presents in every respect the highest qualifications to practice the profession.*

1999 Jun **J. Francis Williams Prize in Medicine and Clinical Medicine**, McGill University. (Distinction)  
*Awarded, on the recommendation of the Department of Medicine, to the student with the highest standing in the Internal Medicine clerkship in the Practice of Medicine component of*

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*the curriculum.*

- 1999 Jun **Mona Bronfman Sheckman Prize**, McGill University. (Distinction)  
*Awarded, on the recommendation of the Department of Psychiatry, to the student with the highest academic standing in Psychiatry.*
- 1997 Jun **Nickerson Prize in Pharmacology**, McGill University. (Distinction)  
*In recognition of outstanding academic performance in the course Pharmacology and Therapeutics and understanding of the subject.*
- 1995 - 1999 **Faculty of Medicine Dean's Honour List**, McGill University. (Distinction)
- 1994 - 1999 **Hugh Brock Undergraduate Entrance Scholarship**, McGill University. (Distinction)  
*Total Amount: 12,500*

## Teaching and Education Awards

LOCAL

Received

- 2013 May **Excellence in Clinical Teaching Award**, Faculty of Medicine, Wightman-Berris Academy.  
(Specialty: Nephrology)
- 2007 Jul - 2008 Jun **Wightman-Berris Academy**, Dept of Medicine, Faculty of Medicine, University Health Network. (Postgraduate MD, Core Program, Specialty: Medicine)  
*New Faculty Excellence in Teaching.*
- 2003 Jun **Outstanding Housestaff Award**, Faculty of Medicine, Mount Sinai Hospital, University of Toronto
- 2003 Jun **University Health Network Clinical Teaching Award**, University of Toronto
- 2003 Jun **Wightman-Berris Academy Award for Excellence in Clinical Teaching**, University of Toronto

## Student/Trainee Awards

INTERNATIONAL

Received

- 2016 Nov - 2017 Jun Nephrology, renal physiology, Primary supervisor, Awardee Name: Yuliya Lytvyn. American Society of Nephrology, United States  
*ASN Kidney TREKS (Tutored Research and Education for Kidney Scholars) Scholarship.*  
*Total Amount: 1,000*
- 2014 Nov - 2015 Jun Nephrology, renal physiology, Primary supervisor, Awardee Name: Yuliya Lytvyn. American Society of Nephrology, United States  
*ASN Kidney TREKS (Tutored Research and Education for Kidney Scholars) Scholarship.*  
*Total Amount: 1,000*
- 2014 Nov **Travel Award**, Nephrology, Awardee Name: Yuliya Lytvyn. American Society of Nephrology  
Travel Award, Ontario, Canada  
*Total Amount: 800 USD*
- 2009 Apr **President's Presenter Award**, Nephrology, Research supervisor, Awardee Name: Yoav Yinon. Society of Gynecologic Investigation, Orlando, Florida, United States  
*Research fellow award for project "Understanding the Mechanisms for Increased Cardiovascular Risk in Women with a History of Pre-eclampsia and Intra-uterine Growth Restriction – An Assessment of Post-partum Endothelial Function". Total Amount: 1,000 USD*

NATIONAL

Received

- 2016-2019 **Fellowship Award**, Pharmacology, Awardee Name: Yuliya Lytvyn. Canadian Diabetes Association Award, Ontario, Canada  
*Total Amount: 150,000 CAD*
- 2016-2017 **Fellowship Award**, Pharmacology, Awardee Name: Yuliya Lytvyn. BBDC Postdoctoral Fellowship Award, Ontario, Canada  
*Total Amount: 40,000 CAD*
- 2015 Dec **The Canadian Society of Endocrinology and Metabolism**, Endocrinology, renal physiology, Primary supervisor, Awardee Name: Dr. Julie Lovshin (post-doctoral Student, \$30,000), United States  
*2015 The Canadian Society of Endocrinology and Metabolism Dr. Fernand Labrie Fellowship Research Award. Total Amount: 30,000 CAD*
- 2015 May **Travel Award (ADA Meeting)**, Nephrology, Awardee Name: Yuliya Lytvyn. Canadian Institutes of Health Research Travel Award, Ontario, Canada  
*Total Amount: 1,500 CAD*
- 2015 Apr **Top Trainee Award, Canadian Society of Nephrology**, Nephrology/Renal Physiology, Primary supervisor, Awardee Name: Yuliya Lytvyn, BHSc. Canadian Society of Nephrology, Ontario, Canada  
*Top Trainee Award, Canadian Society of Nephrology for project "Uric acid and hemodynamic function in diabetes". Total Amount: 1,000 CAD*
- 2014 Nov **Fellowship Award**, Pharmacology, Awardee Name: Yuliya Lytvyn. Queen Elizabeth II/Dr. Arnie Aberman Scholarship in Science and Technology Scholarship Award, Ontario, Canada  
*Total Amount: 15,000 CAD*
- 2014 Nov **Travel Award (ASN Meeting)**, Nephrology, Awardee Name: Yuliya Lytvyn. Canadian Institutes of Health Research Travel Award, Ontario, Canada  
*Total Amount: 1,500 CAD*
- 2010 Mar **Top Trainee Award, Canadian Society of Nephrology**, Nephrology/Renal Physiology, Co-primary supervisor, Awardee Name: Ayodele Odutayo, BHSc. Canadian Society of Nephrology, Ontario, Canada  
*Top Trainee Award, Canadian Society of Nephrology for project "Transdermal Contraception (EVRA Patch) and the Renin Angiotensin System". Total Amount: 1,000 CAD*

LOCAL

Received

- 2016 Nov **Travel Award**, Nephrology, Awardee Name: Yuliya Lytvyn. BBDC Travel Award, University of Toronto, Ontario, Canada  
*Total Amount: 1,000 CAD*
- 2016 Nov **Travel Award**, Nephrology, Awardee Name: Harindra Rajasekeran. BBDC Travel Award, University of Toronto, Ontario, Canada  
*Total Amount: 1,000 CAD*
- 2016 Sept **Postgraduate Awards**, Nephrology, Awardee Name: Yuliya Lytvyn. Postgraduate Awards Committee at the Faculty of Medicine – Ontario, Canada  
*Total Amount: 1,400 CAD*
- 2016 July **Postgraduate Award**, Nephrology, Awardee Name: **Harindra Rajasekeran. Banting & Best Diabetes Centre-Novo Nordisk Studentship**, Department of Physiology, University of Toronto, Ontario, Canada  
*Total Amount: 13,600 CAD*

- 2016 July **Postgraduate Award**, Nephrology, Awardee Name: **Yuliya Lytvyn**. Queen Elizabeth II/Dr. Arnie Aberman Scholarship in Science and Technology University of Toronto, Ontario, Canada – DECLINED in favour of CDA award  
*Total Amount: 13,600 CAD*
- 2015 Nov **Travel Award**, Nephrology, Awardee Name: Yuliya Lytvyn. Book Committee Travel Award, Department of Pharmacology, University of Toronto, Ontario, Canada  
*Total Amount: 1,000 CAD*
- 2015 Jun **2015 Whiteside Award to Mr Ron Har (MSc Student)**, Renal physiology, Primary supervisor, Awardee Name: Ron Har. University of Toronto, Institute of Medical Sciences  
*It is awarded annually to a graduating IMS Master of Science student who has made outstanding scholarly contributions.*
- 2015 Jun **Postgraduate Awards**, Nephrology, Awardee Name: Marko Skrtic. Postgraduate Awards Committee at the Faculty of Medicine – Chisholm Memorial Fellowship, Ontario, Canada  
*Total Amount: 2,800 CAD*
- 2015 Jun **Postgraduate Awards**, Nephrology, Awardee Name: Yuliya Lytvyn. Postgraduate Awards Committee at the Faculty of Medicine – Javenthey Soobiah Scholarship, Ontario, Canada  
*Total Amount: 1,400 CAD*
- 2015 Jun **Studentship Award**, Pharmacology, Renal Physiology, Awardee Name: Yuliya Lytvyn. 2015-2016 Heart & Stroke/Richard Lewar Centre of Excellence Studentship, Ontario, Canada  
*Yuliya Lytvyn (ranked unanimously #1 by the committee). Total Amount: 15,000 CAD*
- 2015 Jun **Studentship Award**, Pharmacology, Renal Physiology, Awardee Name: Yuliya Lytvyn. University of Toronto Fellowship (UTF) tenable in the Department Pharmacology, Ontario, Canada  
*Total Amount: 2,000 CAD*
- 2015 May **Travel Award (ADA Meeting)**, Nephrology, Awardee Name: Yuliya Lytvyn. Banting and Best Diabetes Centre, Ontario, Canada  
*Total Amount: 1,000 CAD*
- 2015 Apr **Travel Award (ADA Meeting)**, Nephrology, Awardee Name: Yuliya Lytvyn. University of Toronto SGS, Ontario, Canada  
*SGS Conference Grant Application – to attend the upcoming ADA Conference in Boston (\$570). Total Amount: 570 CAD*
- 2014 Nov **Fellowship Award**, Pharmacology, Awardee Name: Yuliya Lytvyn. University of Toronto Fellowship tenable in the Department of Pharmacology and Toxicology, Ontario, Canada  
*Total Amount: 5,000 CAD*
- 2014 Nov **Travel Award**, Nephrology, Awardee Name: Yuliya Lytvyn. Book Committee Travel Award, Department of Pharmacology, University of Toronto, Ontario, Canada  
*Total Amount: 1,000 CAD*
- 2014 Nov **Travel Award (ASN Meeting)**, Nephrology, Awardee Name: Marko Skrtic. Banting and Best Diabetes Centre, Ontario, Canada  
*Total Amount: 1,000 CAD*
- 2014 Nov **Travel Award (ASN Meeting)**, Nephrology, Awardee Name: Yuliya Lytvyn. Banting and Best Diabetes Centre, Ontario, Canada  
*Total Amount: 1,000 CAD*
- 2014 May **Travel Award**, Nephrology, Awardee Name: Marko Skrtic. Banting and Best Diabetes Centre, Ontario, Canada  
*Total Amount: 1,000 CAD*
- 2014 **Travel Award**, Nephrology, Awardee Name: Marko Skrtic. Mack Foundation UHN Bursary, Ontario, Canada  
*Total Amount: 2,500 CAD*
- 2013 Nov **Travel Award**, Nephrology, Awardee Name: Ron Har. Banting and Best Diabetes Centre, Ontario, Canada  
*Total Amount: 1,000 CAD*

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- 2013 Jun - 2013 Jul      **Hollenberg Research Day Competition**, Nephrology - Gastroenterology, Supervisor, Awardee Name: Vithika Sivabalasundaram. University Health Network, Toronto, Ontario, Canada  
*Awarded for manuscript describing the resotran as a cause of acute interstitial nephritis (also submitted to the World Journal of Gastroenterology).*
- 2013 Jun                    **Travel Award**, Nephrology, Awardee Name: Ron Har. Banting and Best Diabetes Centre, Ontario, Canada  
*Total Amount: 1,000 CAD*
- 2013 May                    **Travel Award**, Nephrology, Awardee Name: Ron Har. School of Graduate Studies, Ontario, Canada  
*Total Amount: 350 CAD*

#### 4. PROFESSIONAL AFFILIATIONS AND ACTIVITIES

##### Professional Associations

- 2009 - present            **Member**, The American Physiological Society
- 2003 - present            **Member**, American Society of Nephrology
- 2001 - present            **Member**, Canadian Society of Nephrology
- 1999 - present            **Member**, Canadian Medical Association
- 1999 - present            **Member**, Ontario Medical Association
- 1999 - present            **Member**, Royal College of Physicians and Surgeons of Canada

##### Administrative Activities

###### INTERNATIONAL

###### National Kidney Foundation

- 2012 Jul 1 - 2014 Jun      Spring Sessions Clinical Meetings - Planning Committee Member, National Kidney Foundation, United States.

###### LOCAL

###### McGill University

- 1998 Jul - 1999 Jun      **Student co-representative**, Committee for the Standards of Behaviour in the Learning Environment, to provide a forum where issues relating to the learning environment can be discussed and advice given to the Dean's executive, Faculty of Medicine, Dept of Medicine
- 1998 Jul - 1999 Jun      **Student co-leader**, Introduction to the Patient course, designed to introduce junior medical students to biopsychosocial medicine, Faculty of Medicine, Dept of Medicine
- 1997 Jul - 1998 Jun      **Chairperson**, Class of 1999 committee to select medical students for the Faculty of Medicine Entrance Committee, Quebec, Canada.
- 1996 Jul - 1997 Jun      **Student representative**, Faculty of medicine curriculum committee, Faculty of Medicine, Dept of Medicine, Undergraduate MD, Ontario, Canada.

###### University Health Network

- 2011 Jan - 2011 Jun 30      Research Ethics Board Member, Toronto, Ontario, Canada.
- 2016 Jul - present          **Member**, TGHRI Selection Committee, University of Toronto, (committee chair, Dr. Mansoor Husain), Ontario, Canada

###### University of Toronto

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2016 Jul - present	<b>Member</b> , University of Toronto Department of Medicine Research Committee (committee chair - Dr. Michael Farkouh), Ontario, Canada.
2016 Jul - present	<b>Member</b> , University of Toronto Department of Medicine Awards Committee (committee chair - Dr. Michael Farkouh), Ontario, Canada.
2010 Jul - 2014	<b>Member</b> , University of Toronto Nephrology Program Committee for Trainees in Academic Difficulty, Ontario, Canada.
2009 Jul - present	<b>Member</b> , University of Toronto Nephrology Program Fellow Selection Committee University of Toronto, Faculty of Medicine, Dept of Medicine, Nephrology, Ontario, Canada.
2009 Jul - present	<b>Member</b> , University Health Network nephrology service debriefing, Faculty of Medicine, Dept of Medicine, Nephrology, Postgraduate MD, Ontario, Canada.
2004 Jul - 2005 Jun	<b>Nephrology Fellow representative</b> , Committee on Postgraduate Training in Nephrology, Faculty of Medicine, Dept of Medicine, Nephrology, Postgraduate MD, Ontario, Canada.
2002 Jul - 2003 Jun	<b>Co-Chief Resident representative</b> , University Health Network Internal Medicine Resident Training Committee, Faculty of Medicine, Dept of Medicine, General Internal Medicine, Postgraduate MD
2002 Jul - 2003 Jun	<b>Chief Medical Resident Representative</b> , Acute Resuscitation Committee, Faculty of Medicine, Dept of Medicine, General Internal Medicine, Multilevel Education
2001 Jul - 2002 Jun	<b>Co-Chief Resident representative</b> , Mount Sinai Hospital Internal Medicine Resident Training Committee
2001 Jul - 2002 Jun	<b>Member</b> , Resident Executive Committee for the 2nd and 3rd Annual Internal Medicine R2 Teaching to Teach Retreat, Faculty of Medicine, Dept of Medicine, General Internal Medicine, Postgraduate MD
2001 Jul - 2002 Jun	<b>Co-designer</b> , Pain Management Initiative, a multidisciplinary effort aimed at improving the quality of pain management in clinical practice, Faculty of Medicine, Dept of Medicine, General Internal Medicine, Multilevel Education <i>Resident co-chair.</i>
2000 Jul - 2003 Jun	<b>Resident representative</b> , University Health Network Internal Medicine Resident Training Committee, Faculty of Medicine, Dept of Medicine, General Internal Medicine
1999 Jul - 2000 Jun	<b>Student representative</b> , Committee on Postgraduate Training in Core Internal Medicine, Faculty of Medicine, Dept of Medicine

## Peer Review Activities

### EDITORIAL BOARDS

#### Editorial Board Member

2017 Jan – 2019 Jan Clinical Journal of the American Society of Nephrology

### GRANT REVIEWS

#### External Grant Reviewer

2017 Feb – present	Medical Research Council UK Ad Hoc Reviewer
2016 Jan - present	Operating Grants committee – Kidney Foundation of Canada
2016 Jan - present	"Health Professional Awards - Fellowships" committee of the CIHR
2016 Jan - present	Diabetes UK - operating grants competition, Diabetes UK Foundation, Number of Reviews: 1
2015 Feb - present	Canadian Institutes of Health Research, KRESCENT Award selection committee – Kidney Foundation of Canada
2014 Dec - present	Canadian Institutes of Health Research, Canadian Institutes of Health Research - DOL Panel
2014 Dec	Juvenile Diabetes Research Foundation Operating Grant Competition, Juvenile Diabetes Research Foundation Operating Grant Competition, Number of Reviews: 1

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2014 Dec Juvenile Diabetes Research Foundation Operating Grant Competition, Juvenile Diabetes Research Foundation (Australia) Operating Grant Competition, Number of Reviews: 1  
2011 - present St. Michael's Hospital, Animal Care Committee - St. Michael's Hospital, Number of Reviews: 1  
2010 - present Canadian Institutes of Health Research, External reviewer for the CIHR China/Canada Joint Health Research Initiative, Number of Reviews: 3

Internal Grant Reviewer

2013 Dec - 2014 Canadian Institutes of Health Research, Canadian Institutes of Health Research - Clinical Investigation D Panel  
2013 Feb - 2015 Canadian Diabetes Association, Canadian Diabetes Association National Committee - Personnel Awards Panel  
2011 - 2016 Banting and Best Diabetes Centre Research Committee permanent member  
2010 Kidney Foundation of Canada, Grant panel reviewer for the Kidney Foundation of Canada – Pfizer Canada Cardio-Renal Research Award, Number of Reviews: 4

Member

2014 Jul - present Juvenile Diabetes Research Foundation Operating Grant Competition, Juvenile Diabetes Research Foundation – Australia – Diabetes Complications RFA Competition Operating Grant Panel, Number of Reviews: 10

Reviewer

2010 Kidney Foundation of Canada, Grant Reviewer for the Kidney Foundation of Canada, Number of Reviews: 1

MANUSCRIPT REVIEWS

Reviewer

2017 June – present European Journal of Heart Failure  
2017 Jan – present Journal of the American College of Cardiology  
2016 Jan - present British Journal of Pharmacology  
2016 Jan - present New England Journal of Medicine  
2016 Jan - present Canadian Journal of Kidney Health and Disease  
2016 Jan - present Journal of Clinical Endocrinology and Metabolism  
2016 Jan - present Clinical Therapeutics  
2016 Jan - present Journal of Diabetes and its Complications  
2016 Jan - present Cardiovascular Diabetology  
2016 Jan - present PLoS One  
2016 Jan- present Pharmacology Research & Perspectives  
2015 Jan - present Current Medical Research & Opinion  
2015 Jan - present Expert Review of Endocrinology & Metabolism  
2015 Jan - present Lancet Diabetes and Endocrinology  
2014 Jan - present American journal of Kidney Disease  
2014 Jan - present American Journal of Physiology - Renal Physiology  
2014 Jan - present Circulation  
2014 Jan - present Clinical and Experimental Hypertension  
2014 Jan - present Diabetes Obesity and Metabolism  
2014 Jan - present Journal of the American Society of Nephrology  
2014 Jan - present Obesity  
2013 Jan - present Canadian Journal of Pharmacology and Physiology  
2013 Jan - present Clinical Journal of the American Society of Nephrology

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2013 Jan - present	Diabetes
2013 Jan - present	Diabetes Research and Clinical Practice
2013 Jan - present	Journal of the American Society of Nephrology
2013 Jan - present	Nutrients
2012 Jul 1 - present	Hypertension Research
2012 - present	Diabetes Technologies and Therapeutics
2012 - present	Endocrine
2012 - present	Metabolism
2011 Jan - present	Journal of Huazhong University of Science and Technology
2011 - present	Clinical and Investigative Medicine
2011 - present	Diabetologia
2010 - present	Diabetes/Metabolism Research and Reviews
2010 - present	Diabetic Medicine
2010 - present	Kidney and Blood Pressure Research
2010 - present	Kidney International
2010 - present	Research and Reports in Endocrine Disorders
2007 - present	Diabetes Care
2002 - 2004	Journal of General Internal Medicine

PRESENTATION REVIEWS

Reviewer

2017 Jan – present	Abstract Reviewer for the International Diabetes Federation (IDF)
2016 Jul - present	American Society of Nephrology - abstract review panel for Scientific Sessions
2013 Jul - present	American Diabetes Association - abstract review panel for Scientific Sessions
2013 Jul - present	American Heart Association - abstract review panel for Scientific Sessions
2012 Jul 1 - 2014 Jun	National Kidney Foundation, National Kidney Foundation Clinical Meetings - abstract review panel

GRADUATE FELLOWSHIPS

Reviewer

2011 - present	Banting and Best Diabetes Centre Research Committee permanent member
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NATIONAL KIDNEY FOUNDATION TRAINEE ABSTRACT AWARDS

Reviewer

2013 Apr – 2015	National Kidney Foundation, National Kidney Foundation - 2013 Spring Clinical Meetings
2013 Apr	<b>Judge for Trainee Abstract Awards Competition.</b> National Kidney Foundation Spring Clinical Meetings. National Kidney Foundation. Orlando, United States. (Trainee Abstract Awards Competition)

TRAVEL AWARDS COMMITTEE

Reviewer

2011 - present	Banting and Best Diabetes Centre Research Committee permanent member
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## C. Academic Profile

### 1. RESEARCH STATEMENTS

2008 Jul - present

#### RENAL HYPERFILTRATION IN EARLY TYPE 1 DIABETES MELLITUS.

Thematic focus areas:

1. The pathophysiology of renal hyperfiltration in early type 1 diabetes.
2. The link between renal hyperfiltration and systemic vascular dysfunction in type 1 diabetes.
3. Early urinary biomarkers of nephropathy in type 1 diabetes.

Methodological focus: Human integrative physiology and mechanistic studies, pilot clinical trials

Thematic focus area details:

1. The pathophysiology of renal hyperfiltration in early type 1 diabetes: Renal hyperfiltration is a risk factor for the initiation and progression of diabetic renal disease, and continues to be a major area of interest in my laboratory. The two major physiological hypotheses that may explain the hyperfiltration state are the "vascular hypothesis" and the "tubular hypothesis". To study vascular factors, my initial studies focused on the effect of ACE inhibitor monotherapy, which failed to abolish renal hyperfiltration (JASN 2006). To further clarify the importance of post-glomerular factors, I subsequently used an investigational protein kinase C-beta inhibitor (ruboxistaurin) and demonstrated a partial reduction in hyperfiltration when this agent was added to an ACE inhibitor (Diabetes Care 2009; Canadian Journal of Physiology and Pharmacology 2012). My more recent work in this area has focused on the use of direct renin inhibitors and dual therapies, which have little effect of renal hemodynamic function in young patients with type 1 diabetes (Diabetes Care 2010; Diabetes Care 2012). This shifted our focus from post-glomerular to pre-glomerular factors, such as cyclooxygenase 2 and nitric oxide. Inhibition of cyclooxygenase 2 or nitric oxide reduced hyperfiltration but did not completely correct this hemodynamic abnormality (Diabetes 2008; American Journal of Physiology-Renal 2008; American Journal of Physiology-Regulatory Integrative and Comparative Physiology 2012). Finally, to study the tubular hypothesis, I have recently completed a phase III study with a novel sodium-glucose co-transport inhibitor called "empagliflozin". This trial is the first time that renal hemodynamic responses to sodium-glucose co-transport inhibitors have been measured in humans (abstract presented at the American Diabetes Association meeting, 2013). The goal of this study was to determine the effect of empagliflozin on renal hyperfiltration in young patients with type 1 diabetes, thereby clarifying the importance of the tubular hypothesis in humans with type 1 diabetes. We demonstrated for the first time in humans that stimulation of tubuloglomerular feedback with empagliflozin reduced hyperfiltration. Furthermore, the magnitude of the effect was similar to that of ACE inhibition in our previous work, suggesting a powerful renal protective effect. This work has been submitted to Circulation (impact factor 14.8) and is currently in revision.

2. The link between renal hyperfiltration and systemic vascular dysfunction in type 1 diabetes: In addition to effects in the renal microcirculation, I have demonstrated that renal hyperfiltration is associated with macrovascular abnormalities, including changes in blood pressure, endothelial function and arterial stiffness (Diabetes Care 2010; American Journal of Physiology-Regulatory Integrative and Comparative Physiology 2012). These observations suggest that renal hyperfiltration represents a diffuse, systemic change in vascular function which may contribute to the accelerated risk of chronic kidney disease in these patients. The link between renal hyperfiltration and systemic vascular dysfunction, including endothelial function and left ventricular abnormalities is being examined in a larger cohort of type 1 diabetes and healthy control participants as part of the Adolescent Type I Diabetes Cardio-

Renal Intervention Trial (“AdDIT”). The observational cardiorenal component of this trial is the subject of my graduate student’s thesis (Mr. R. Har). This work is in part possible because of the use and validation of cystatin C (rather than inulin) as a dynamic marker of renal hyperfiltration that can be assessed within a clinical context. The use of cystatin C in this context was first reported by my research team (Diabetic Medicine 2010; Clinical and Experimental Hypertension 2012).

3. Early urinary biomarkers of nephropathy in type 1 diabetes: Inflammation plays a critical role in the early pathogenesis of diabetic nephropathy. In animal models of diabetes, hyperglycemia and high intraglomerular pressure increase shear stress and renal inflammation. To further clarify the role of “pre-clinical” factors that may contribute to the initiation of renal disease in humans, we examined the role of acute clamped hyperglycemia on urinary cytokines/chemokines, and demonstrated a significant increase in inflammatory biomarkers after 6 hours of clamped hyperglycemia (Diabetes Care 2011). We have gone on to demonstrate that a similar panel of urinary cytokines/chemokines is associated with the transition from microalbuminuria to macroalbuminuria in a larger cohort of adolescent patients with type 1 diabetes (Diabetic Medicine 2012). Finally, we have reported that renal hyperfiltration is associated with an increase in the urinary excretion of cytokines/chemokines, suggesting a central role for hyperfiltration and shear-stress in the pathogenesis of early, pre-clinical renal inflammatory and fibrosis (Diabetologia 2013). This body of work has demonstrated an association between early, pre-clinical hemodynamic abnormalities in the renal and systemic circulations. In addition, my more recent work has suggested that hyperfiltration is associated with an increase in the urinary excretion of cytokines/chemokines and that these inflammatory factors may precede the onset of microalbuminuria. This urinary biomarker work has therefore provided a mechanistic link between hyperglycemia-related pathways, renal hyperfiltration, microalbuminuria and inflammation, which had only been previously observed in experimental models. The translation of this work to humans with diabetes suggests that future trials should consider measuring hyperfiltration and investigating pharmacologic methods that may suppress both renal hyperfiltration and inflammation. This approach is already underway in the AdDIT study cohort.

## 2. TEACHING PHILOSOPHY

### IMPACT AND RELEVANCE OF WORK:

My philosophy of teaching and education centers on the follow concepts:

1. Define teaching objectives: in lectures, small group sessions and in the patient care setting, I define what I hope the student will learn over the course of the interaction. In small group sessions, I believe it is also critical to determine what the student hopes to learn during the interaction, and to understand the student's level of knowledge. Once known, these factors can help to guide the discussion at a level of complexity and depth that is appropriate for the audience.
2. Interactive learning: During bedside teaching and in lectures, I depend on asking questions of students to encourage them to think independently and critically about the area of discussion.
3. Focusing on key messages: I place an important emphasis on summarizing key messages during bedside teaching and in formal sessions, and end the interaction with important take-home messages in an effort to encourage retention of information and highlight concepts.
4. Focus on scientific basis and basic physiology: During bedside teaching and in formal sessions, I always begin with basic mechanistic principles before moving on to clinical discussions.

In summary, over the next five years, I plan to continue my current clinical teaching activities and to expand my graduate level teaching. The project of my current MSc candidate student (R. Har), is progressing well and he has also been awarded two salary support awards in the first six months of his degree. I also plan to recruit a PhD student into the renal physiology laboratory.

## D. Research Funding

### 1. GRANTS, CONTRACTS AND CLINICAL TRIALS

#### PEER-REVIEWED GRANTS

##### FUNDED

2017 Nov - 2019 Nov	<b>Principal Investigator. ERADICATE-HF. \$1,830,850 CAD.</b> [Grants]
2017 Jan - 2021 Jan	<b>Steering Committee Member and UHN Site Principal Investigator.</b> Sotagliflozin and Effects on Renal Outcomes in Patients with Chronic Kidney Disease. Sanofi. Funding TBC [Grants]
2017 Jan - 2021 Jan	<b>Canadian National Lead Investigator and UHN Site Principal Investigator.</b> An International, Multicentre, Double-Blind, Placebo-Controlled Study to Evaluate the Effect of Dapagliflozin on the Incidence of the composite of >50% sustained decline in GFR, entering ESRD, Cardiovascular or Renal Death in Patients with Albuminuria (UACR 200-5000 mg/g) and Renal Impairment (eGFR 25-75 ml/min). AstraZeneca. Funding TBC [Grants]
2016 Nov - 2017 Nov	<b>Principal Investigator.</b> Metabolomic effects of SGLT2 inhibition in patients with diabetes. Boehringer Ingelheim. <b>\$208,000 USD.</b> [Grants]
2016 Nov - 2018 Nov	<b>Co-Principal Investigator (with Hiddo Heerspink).</b> The DIAMOND Study". AstraZeneca. <b>1,630,853 Euros (\$2,272,153.85 CDN).</b> [Grants]
2016 April - 2021 April	<b>Co-Investigator.</b> SPOR Network in Diabetes and its Related Complications. CIHR. <b>\$25,000,000.</b> [Grants]

David Zev Isaac CHERNEY

- 2016 Jul - 2017 Jul **Principal Investigator.** Renal and systemic vascular hemodynamic function and end-organ complications in kidney-pancreas transplant recipients. Banting and Best Diabetes Centre (BBDC). 49,985 CAD. [Grants]
- 2016 Nov - 2017 Nov **Principal Investigator.** The effects of SGLT2 inhibition on plasma atrial natriuretic peptide levels in patients with diabetes. Boehringer Ingelheim. **\$27,000 CAD.** [Grants]
- 2015 Nov - 2018 Nov **Principal Investigator.** The TRANSLATE Study”: Treating to Reduce Albuminuria and Normalize hyperfiltration in focal. AstraZeneca. 121,661.33 CAD. [Grants]
- 2015 Oct - 2018 Oct **Principal Investigator.** The INDORSE Study: INhibition on Dipeptidyl Peptidase IV: Outcomes on Renal Sodium Excretion. Merck. 572,751.41 CAD. [Grants]
- 2014 Oct - 2018 Oct **Principal Investigator.** Blockade of acE and Treatment With Empagliflozin – Effects on hyperfiltration in Type 1 Diabetes: The BETWEEN-T1D Study. CIHR. 731,224 CAD. [Grants] *Additional funding from Boehringer Ingelheim – approximately \$1,000,000.*
- 2014 Oct - 2015 Oct **Co-Investigator.** Diabetes SPOR - seed funding. CIHR. SPOR Grant Competition. PI: Dr. Gary Lewis. 50,000 CAD. [Grants]
- 2014 Jul - 2016 Jul **Co-Investigator.** Endothelial Progenitor Cells and Diabetic Nephropathy. Banting and Best Diabetes Centre – Heart and Stroke Richard Lewar Centre of Excellence, University of Toronto. PI: Kim Connelly. Collaborator(s): Richard Gilbert. 250,000 CAD. [Grants] *Operating grant.*
- 2014 Jun - 2017 Jul **Co-Investigator.** Microalbuminuria and Retinopathy in Gestational Diabetes. Canadian Institutes of Health Research (CIHR). PI: Dr. Baiju Shah. Collaborator(s): Shah, Baiju; Hladunewich, Michelle; Feig, Denise; Lipscombe, Lorraine; Radha Kohly, Radha; Herer, Elaine. 313,509 CAD. [Grants] *Operating Grant.*
- 2013 Oct - 2018 Oct **Co-Investigator.** A Pilot Study of Allopurinol to Prevent GFR Loss in Type 1 Diabetes: the PERL Study. NIH-NIDDK. Operating Grant (complications). PI: Alessandro Doria. Collaborator(s): Maahs, David; Caramori; Luiza; Mauer, Michael; Busui, Rodica; Perkins, Bruce; Lajer, Maria; Galecki, Andrzej; **Cherney, David**; Spaulding, Harry. 24,300,000 USD. [Grants] *Operating Grant.*
- 2013 Oct - 2016 Oct **Principal Investigator.** A deep phenotyping approach to assess the effect of uric acid lowering in patients with uncomplicated type 1 diabetes mellitus. CIHR. 331,107 CAD. [Grants]
- 2013 Jul - 2013 Oct **Principal Investigator.** Uric acid lowering and skin biomarkers in diabetes – a pilot study. Kidney Foundation of Canada. 12,500 CAD. [Grants]
- 2012 Dec - 2016 Mar **Co-Principal Investigator.** Creation of the Canadian 50-Year Medallist Deep Phenotyping Cohort. Juvenile Diabetes Research Foundation. Collaborator(s): Drs. **David Cherney** and Bruce Perkins are co-Principal Investigator. 802,224 CAD. [Grants] *Operating Grant.*
- 2012 Jul - 2016 Jun **Co-Investigator.** The Cardiorenal Syndrome in Congestive Heart Failure: Mechanistic Insights. Canadian Institutes of Health Research. PI: Dr. John Parker. 750,000 CAD. [Grants] *Operating Grant.*

- 2012 Jul - 2013 Jun **Co-Investigator.** Microalbuminuria and Retinopathy in Gestational Diabetes. Canadian Institutes of Health Research (CIHR). PI: Dr. Baiju Shah. Collaborator(s): Shah, Baiju; Hladunewich, Michelle; Feig, Denise; Lipscombe, Lorraine; Radha Kohly, Radha; Herer, Elaine. 100,000 CAD. [Grants]  
*Operating Grant.*
- 2012 Jun - 2017 Jun **Co-Investigator.** A Pilot Study of Allopurinol to Prevent GFR Loss in Type 1 Diabetes: the PERL Study. Juvenile Diabetes Research Foundation. Operating Grant (complications). PI: Alessandro Doria. Collaborator(s): Maahs, David; Caramori, Luiza; Mauer, Michael; Busui, Rodica; Perkins, Bruce; Lajer, Maria; Galecki, Andrzej; **Cherney, David**; Spaulding, Harry. 905,235 USD. [Grants]  
*Operating Grant.*
- 2011 Jan - 2016 Jun **Co-Investigator.** Adolescent Type I Diabetes Cardio-Renal Intervention Trial (AddIT): Study 1. Randomized Controlled Trial (Urinary Proteomics Investigations)  
Study 2. Follow-up of Non-Randomized Low Risk Subjects  
Ancillary Study: Urinary Inflammatory Markers in Adolescents with Type 1 Diabetes. Juvenile Diabetes Research Foundation. Clinical Coordinating Trials Network, Southern Ontario. PI: Dr. Denis Daneman. 234,196.5 CAD. [Grants]  
*Operating Grant.*
- 2010 Jul - 2013 Jul **Principal Investigator.** Hemodynamic and Molecular Mechanisms of Hyperfiltration in Type 1 Diabetes Mellitus. Heart and Stroke Foundation of Canada. 236,385 CAD. [Grants]  
*Operating Grant.*
- 2009 Jan - 2014 Jan **Principal Investigator.** Renal biomarkers in uncomplicated type 1 diabetes mellitus. University of Toronto. Dean's Fund. Collaborator(s): Heather N. Reich. 9,660 CAD. [Grants]  
*Operating Grant.*
- 2008 Mar - 2013 Mar **Co-Investigator.** Hemodynamic Modulation in Type I Diabetes Mellitus. Canadian Institutes of Health Research (CIHR). PI: Miller, Judith and **Cherney, David**. Collaborator(s): Dr. Etienne Sochett. 522,900 CAD  
*Operating Grant.*
- 2006 Jul - 2009 Jul **Co-Principal Investigator.** Mechanisms of Progression of Renal Disease in Diabetes. Canadian Diabetes Association. PI: Miller, Judith and **Cherney, David**. Collaborator(s): Dr. Bernard Zinman. 275,736 CAD. [Operating Grant]  
*Operating Grant.*
- 2005 Jul - 2007 Jul **Co-Investigator.** Effect of Protein Kinase C Inhibition on Renal and Peripheral Hemodynamic Function in Patients with Type 1 Diabetes Mellitus. Heart and Stroke Foundation of Canada. 128,000 CAD. [Operating Grant]  
*Operating Grant.*
- AWARDED BUT DECLINED
- 2007 Mar - 2009 Mar **Co-Investigator.** Hemodynamic Modulation in Type I Diabetes Mellitus. Heart and Stroke Foundation of Canada. 125,000 CAD. [Operating Grant]  
*Operating grant.*

## NON-PEER-REVIEWED GRANTS

### FUNDED

- 2016 July - present **Principal Investigator.** Cardiac, Renal, Metabolic and Endocrine Fellowship in Diabetes Complications. Janssen – funding for postdoctoral fellow training. 76,000 CAD. [Industrial Grants]
- 2014 Nov - present **Principal Investigator.** Ambulatory blood pressure in type 1 diabetes. Cadillac Fairview Charitable Foundation. 20,000 CAD. [Donations]
- 2011 Jun - 2014 Jun **Principal Investigator.** The effect of sodium-glucose cotransport inhibition in type 1 diabetes mellitus: a pilot study. Boehringer-Ingelheim Investigator Initiated Project. Collaborator(s): Bruce Perkins. 912,394.38 CAD. [Industrial Grants]  
*Operating Grant.*
- 2009 Jan - 2011 Jan **Co-Investigator.** Systems Biology Approaches to Identify Potential Novel Candidate Cardiorenal Biomarkers. Merck Frosst Investigator Initiated Study Program Grant. PI: Liu, Peter. Collaborator(s): Dr. Heather Reich, Dr. James Scholey. 71,347 CAD. [Operating Grant]  
*Operating Grant.*

## 2. SALARY SUPPORT AND OTHER FUNDING

### Personal Salary Support

- 2017 – 2020 University of Toronto, Department of Medicine Merit Award - \$40,000 per year
- 2010 - 2015 Joint Kidney Research Scientist Education and National Training Award - Canadian Diabetes Association New Investigator Award. Kidney Foundation of Canada/CIHR/Canadian Society of Nephrology. 320,000 CAD. Ontario, Canada. (Specialty: Nephrology).
- 2008 - 2010 Kidney Foundation of Canada New Investigator Award (Scholarship). Kidney Foundation of Canada. 90,000 CAD. Ontario, Canada. (Specialty: Nephrology).

### Trainee Salary Support

- 2013 - 2014 Banting and Best UHN Fellowship Award. Trainee Name: Mr. Ron Har. University of Toronto. 21,000 CAD. Ontario, Canada. (Specialty: Physiology).
- 2013 - 2014 Hilda and William Courtney CLAYTON Paediatric Research Fund Award. Trainee Name: Mr. Ron Har. University of Toronto. 5,000 CAD. Ontario, Canada. (Specialty: Physiology).
- 2013 - 2014 QEII - GSST graduate student award - DECLINED in favour of other awards. Trainee Name: Mr. Ron Har. University of Toronto. 15,000 CAD. Ontario, Canada. (Specialty: Physiology).
- 2012 - 2013 Institute of Medical Science Open Fellowship Award. Trainee Name: Mr. Ron Har. University of Toronto. 5,000 CAD. Ontario, Canada. (Specialty: Physiology).
- 2012 - 2013 Banting and Best UHN Fellowship Award. Trainee Name: Mr. Ron Har. University of Toronto. 20,000 CAD. Ontario, Canada. (Specialty: Physiology).

- 2005 - 2008                      Kidney Research Scientist Education and National Training Award. Trainee Name: David Cherney. Kidney Foundation of Canada/CIHR/Canadian Society of Nephrology. 195,000 CAD. Ontario, Canada. (Specialty: Nephrology).
- 2005 - 2007                      Canadian Institutes of Health Research Fellowship - DECLINED. Trainee Name: David Cherney. Canadian Institutes of Health Research. 100,000 CAD. Ontario, Canada. (Specialty: Nephrology).
- 2005 - 2007                      Kidney Foundation of Canada Biomedical Fellowship - DECLINED. Trainee Name: David Cherney. Kidney Foundation of Canada. 90,000 CAD. Ontario, Canada. (Specialty: Nephrology).

## E. Publications

### 1. MOST SIGNIFICANT PUBLICATIONS

1. **Cherney DZ**, Jiang S, Har R, Lai V, Scholey JW, Sochett EB, Reich HN. The effect of aliskiren alone and in combination with ramipril on renal hemodynamic function, endothelial function and arterial stiffness in patients with type 1 diabetes mellitus. *Diabetes Care*. 2012;35:2324-2330. Responsible for study rationale, performed experiments, analyzed data, drafted and edited manuscripts, acted as corresponding author. Impact Factor 8.1. **Principal Author**.

*This manuscript described, for the first time, the effects of direct renin inhibition with and without an ACE inhibitor on renal and systemic vascular function in patients type 1 DM under different conditions of clamped euglycemia and hyperglycemia. This publication also demonstrated the feasibility of measuring renal hemodynamic function, endothelial function, arterial stiffness and circulating neurohormone levels in a single sitting.*

2. **Cherney DZ**, Reich HN, Jiang S, Har R, Hebert R, Nasrallah R, Lai V, Scholey JW, Sochett EB. Hyperfiltration and the effect of nitric oxide modulation on renal hemodynamic and endothelial function in humans with uncomplicated type 1 diabetes. *American Journal of Physiology – Regulatory Integrative and Comparative Physiology*. 2012;303:R710-718. Responsible for study rationale, performed experiments, analyzed data, drafted and edited manuscripts, acted as corresponding author. Impact Factor 3.336. **Principal Author**.

*RAS inhibition failed to abolish hyperfiltration in subjects with uncomplicated type 1 DM, suggesting an important role for additional efferent constrictors (such as protein kinase C-beta), and for afferent vasodilators, such as prostaglandins. While inhibition of vasodilatory prostaglandins with a selective COX2 inhibitor partially reduces hyperfiltration (Cherney et al. Diabetes, 2008), GFR did not normalize. We therefore went on to look at other afferent factors including nitric oxide and demonstrated that blockade of this pathway exerts a modest effect on hyperfiltration, thus implicating other neurohormonal and tubular factors. Tubular factors, including the effect of tubuloglomerular feedback, are now being actively investigated in my laboratory using novel SGLT2 inhibitors.*

3. **Cherney DZI**, Scholey JW, Sochett EB, Bradley TJ, Reich HN. The acute effect of clamped hyperglycemia on the urinary excretion of inflammatory cytokines/chemokines in uncomplicated type 1 DM: a pilot study. *Diabetes Care*. 2011;34:177-180. Responsible for study rationale, performed experiments, drafted and edited manuscripts, acted as corresponding author. Impact Factor 8.1. **Principal Author**.

*This paper described, for the first time, the effect of short-term clamped hyperglycemia on the urinary excretion of cytokines/chemokines. This observation provided a mechanistic link between hyperglycemia-induced early renal functional changes, such as hyperfiltration, and injurious molecular pathways, such as inflammation and fibrosis. In collaboration with investigators at The Hospital for Sick Children, we have subsequently reported that hyperfiltering patients exhibit higher levels of these harmful factors, and that the highest tertile of normoalbuminuria is associated with higher levels of urinary cytokines/chemokines (Har//Cherney et al. Diabetologia, 2013; Cherney et al. Diabetic Medicine, 2012). Finally, in our most recent publication in this area, we demonstrated that urinary cytokine/chemokine responses to hyperglycemia are reversible with RAAS inhibition (Cherney et al. Diabetologia, 2013). This body of work therefore suggests an association between hyperglycemia, shear stress and the initiation of "clinical" renal disease.*

4. **Cherney DZI**, Lai V, Dekker MG, Slorach C, Sochett EB, Bradley TJ. The Effect of Renal Filtration Status on Arterial Stiffness in Humans with Uncomplicated Type 1 Diabetes Mellitus. *Diabetes Care*;33:2068-2070, 2010. Responsible for study rationale, performed experiments with Dr. Bradley, analyzed data, drafted and edited manuscripts, acted as corresponding author. Impact Factor 8.1. **Principal Author**.

*This paper described the presence of systemic vascular dysfunction in patients with early type 1 DM and renal hyperfiltration. Following this paper, we reported that hyperfiltration is associated with changes in endothelial dysfunction that are likely on the basis of abnormal nitric oxide bioavailability (Cherney et al. AJP-RICP, 2012; Cherney et al. Diabetes Care, 2010). These observations have suggested that renal hyperfiltration represents a state of generalized vascular dysfunction rather than an isolated early renal abnormality, which may be the basis for higher blood pressure values within the normal range in hyperfilterers (Yang//Cherney. PLoS One, 2013). These findings are being extended to a more "clinical" cohort of young type 1 diabetes patients in the AdDIT Study. If similar endothelial function and arterial stiffness abnormalities are observed in hyperfiltering patients outside of controlled laboratory conditions, then our findings may lead to earlier methods of identifying high-risk individuals prior to the onset of albuminuria or hypertension.*

5. **Cherney DZI**, Konvalinka A, Zinman B, Diamandis EP, Soosaipillai A, Reich H, Lorraine J, Lai V, Scholey JW, Miller JA. The Effect of Protein Kinase C $\beta$  Inhibition on Renal Hemodynamic Function and Urinary Biomarkers in Humans with Type 1 Diabetes Mellitus: A Pilot Study. *Diabetes Care* 32:91-93, 2009. Co-authored operating grant, performed all experiments, analyzed data, drafted and edited manuscripts, acted as corresponding author. Impact Factor 8.1. **Principal Author**.

*This paper demonstrated, for the first time in humans, that protein kinase C-beta inhibition reduces renal hyperfiltration. Furthermore, we were able to demonstrate that ruboxistaurin suppresses urinary biomarkers of renal injury and inflammation, highlighting possible protective effects of this medication in humans. Findings from this study formed the basis for two other urinary biomarker manuscripts, including Cherney et al. Diabetes Care 2010;34(1):177-180, and Cherney et al. Diabetic Medicine 2012;29:1-6.*

## 2. PEER-REVIEWED PUBLICATIONS

### Journal Articles

1. Petter Bjornstad, **David Z.I. Cherney**. Kidney Function Can Predict Pregnancy Outcomes. *Clinical Journal of the American Society of Nephrology* (in press) 2017
2. Veena S. Rao, Noah Planavsky, Jennifer S Hanberg, Tariq Ahmad, Meredith A. Brisco, F. Perry Wilson, Daniel Jacoby, W. H. Wilson Tang, **David Cherney**, David H Ellison, Jeffrey M. Testani. Mechanistic Location of Diuretic Resistance in Heart Failure: Compensatory distal tubular reabsorption plays a dominant role. *JASN* 2017

3. Ronald M. Goldenberg, Murray Berall, Christopher T. M. Chan, **David Z. I. Cherney**, Julie A. Lovshin, Philip A. McFarlane, Peter A. Senior, Subodh Verma, Jordan J. Weinstein. From the Old to the New: Managing the Course of Diabetic Kidney Disease. *Can J Diab* 2017 (in press)
4. Harindra Rajasekeran, **David Cherney\***. Julie Lovshin\*. Do Effects of Sodium Glucose Cotransporter-2 Inhibitors (SGLT-2i) in Patients with Diabetes Give Insight into Potential Use in Non-Diabetic Kidney Disease? *Curr Opin Nephrol Hypertension* (in press) 2017
5. Genevieve Boulet, Devrim Eldelekli, Marina Cardinez, Erik Lovblom, Julie Lovshin, Yuliya Lytvyn, Michael H. Brent, Vera Bril, Elise M. Halpern, Hillary A. Keenan, J.W. Bai, **David Cherney**, Mohammed A. Farooqi, Narinder Paul, Alanna Weisman, Bruce Perkins. NEUROPATHY AND PRESENCE OF EMOTIONAL DISTRESS AND DEPRESSION IN LONGSTANDING DIABETES: RESULTS FROM THE CANADIAN STUDY OF LONGEVITY IN TYPE 1 DIABETES. *Journal of Diabetes and its Complications* (in press) Jan 2017
6. **David Cherney**, Bernard Zinman, Silvio E. Inzucchi, Audrey Koitka-Weber, Maximilian von Eynatten, Christoph Wanner. Effect of Empagliflozin on Albuminuria in Patients with Type 2 Diabetes and High Cardiovascular Risk. *Lancet Diabetes Endocrinology* (in press) 2017
7. Subodh Verma, John McMurray, **David Cherney**. The search for the sweet spot in heart failure: the metabolodiuretic promise of SGLT2 inhibitors. *JAMA Cardiology* (in press) 2017
8. Lovshin, JA, Rajasekeran, H, Lytvyn, Y, Lovblom, E, Khan, S, Alemu, R, Perkins, B, Wang, W, Drucker, DJ, **DZ Cherney**. Dipeptidyl Peptidase-4 Inhibition in Patients with Type 2 Diabetes Stimulates Distal Tubular Natriuresis and Increases in SDF-1 $\alpha$ <sup>1-67</sup>. *Diabetes Care* (in press) 2017
9. Yuliya Lytvyn, Ronnie Har, Amy Locke, Vesta Lai, Derek Fong, Andrew Advani, Bruce A. Perkins MD, MPH<sup>4\*</sup>, **David Z. I. Cherney MD, PhD<sup>1\*</sup>**. Renal and Vascular Effects of Uric Acid Lowering in Patients with Uncomplicated Type 1 Diabetes. *Diabetes* (in press) Jan 2017
10. Harindra Rajasekeran, Andrea M. Norgate, Carl J. Cardella, S. Joseph Kim, Kathryn J. Tinckam, Jeffrey Schiff, Mark Cattral, **David Z. I. Cherney\***, Sunita K. S. Singh\*. Use of Canagliflozin in Kidney Transplant Recipients for the Treatment of Type 2 Diabetes: A Case Series. *Diabetes Care* (in press) 2017 (\*co-senior)
11. Harindra Rajasekeran\*, Yuliya Lytvyn\*, Andrea Bozovic, Julie Lovshin, Eleftherios Diamandis, Daniel Cattran, Michelle Hladunewich, Mansoor Husain, Bruce Perkins, Andrew Advani, Heather Reich, Vathany Kulasingam, **David Cherney**. Urinary Adenosine Excretion in Diabetes. *AJP-Renal* (in press) 2017
12. Marko Skrtic, Yuliya Lytvyn, James W. Scholey, Paul Yip, Bruce Perkins, **David Z. I. Cherney**. The influence of sex on hyperfiltration in patients with uncomplicated type 1 diabetes. *AJP-Renal* 2017, *in press*
13. Alberto Montanari, Giovanna Pela, Antonio Crocarno, Almerina Biggi, Luisa Musiari, Aderville Cabassi, **David Cherney**. Calcium-Channel Blockade blunts the Renal Effects of Acute Nitric Oxide Synthase Inhibition in Healthy Humans. *AJP-Renal* in press 2017
14. Yuliya Lytvyn, Fengxia Xiao, Bruce A. Perkins, Heather N. Reich, James W. Scholey, **Cherney DZ\***, Burger D\*. ASSESSMENT OF URINARY EXTRACELLULAR VESICLES IN NORMOTENSIVE PATIENTS WITH TYPE 1 DIABETES. *Diabetologia* 2016;60:581-584 (\* = co-senior author)
15. Petter Bjornstad, Richard J. Johnson, Janet K. Snell-Bergeon, Laura Pyle, Asa Davis, Nicole Foster, **David Z. Cherney** and David M. Maahs. Copeptin is associated with albuminuria and chronic kidney disease in adult men with type 1 diabetes: A Brief Report from The T1D Exchange Biobank. *J Diab Compl* 2017;31:387-389
16. Hiddo Heerspink, Bruce Perkins, Mansoor Husain, David Fitchett, **David Cherney**. Sodium Glucose Cotransporter 2 Inhibitors in the Treatment of Diabetes: Cardiovascular and Kidney Effects, Potential Mechanisms and Clinical Applications. *Circulation* 2016;134:752-772. Impact factor 14.4. **Senior Responsible Author**.

17. Burns, KD, Lytvyn Y, Mahmud FH, Daneman, Deda L, Dunger DB, Deanfield JE, Dalton RN, Elia Y, Van J, Bradley TJ, Slorach C, Hui W, Xiao F, Zimpelmann J, Mertens L, Moineddin R, Reich HN, Sochett EB, Scholey JW, **Cherney DZI**. The Relationship between Urinary Renin Angiotensin System Markers, Renal and Vascular Function in Adolescents with Type 1 Diabetes. *AJP-Renal*. 2017;312:F335-F342 **Senior Responsible Author**.
18. Petter Bjornstad, Marko Skrtic, Yuliya Lytvyn, Richard Johnson, David Maahs, **David Cherney**. The role of the Gomez equations in human physiological investigation. *AJP-Renal in press*
19. **David Z. I. Cherney**, Jacob A. Udell. The Use of Sodium Glucose Cotransporter 2 Inhibitors in the Hands of Cardiologists: With Great Power Comes Great Responsibility. *Circulation* 2016;134:1915-1917. Impact factor 14.4. **Principal Author**
20. Bruce Perkins, Jay Udell, **David Cherney**. No need to sugar coat the message: Is cardiovascular risk reduction from SGLT2 inhibition related to natriuresis. *American Journal of Kidney Diseases*, 2016;68:349-352. Impact factor 5.90. **Senior Responsible Author**.
21. **David Cherney**, Maximilian von Eynatten, Soeren S. Lund, Stefan Kaspers, Susanne Crowe, Hans J. Woerle, Maximilian von Eynatten. The Effect of Sodium Glucose Cotransport 2 (SGLT2) Inhibition with Empagliflozin on Microalbuminuria and Macroalbuminuria in Patients with Type 2 Diabetes. *Diabetologia*. 2016;59:1860-70. Impact Factor 6.67. **Principal Author**.
22. Harindra Rajasekeran, Yuliya Lytvyn, David Z. I. **Cherney**. Sodium Glucose Cotransport-2 Inhibition and Cardiovascular Risk Reduction in Patients with Type 2 Diabetes: The Emerging Role of Natriuresis. *Kidney International*. 2016;89:524-526. Impact factor 8.6. **Senior Responsible Author**.
23. Liza Grosman-Rimon, Fillo Billia, Avi Fuks, Ira Jacobs, Michael McDonald, **David Z Cherney**, Vivek Rao. New Therapy, New Challenges: The Effects of Long-Term Continuous Flow Left Ventricular Assist Device on Inflammation. *International Journal of Cardiology* 2016;215:424-430. Impact factor 4.04. **Co-author**
24. Noah Fine, Siavash Hassanpour, Flavia Lakschevitz, Alon Borenstein, Ayala Rubin, Corneliu Sima, Ulrich Eckhard, James Scholey, **David Cherney**, Christopher Overall, Michael Glogauer. Para- and pro-inflammatory human tissue neutrophils define health and disease: novel populations of tissue neutrophils. *Blood* 2015;95:931-938. **Coauthor or Collaborator**.
25. Weisman A, Rovinski R, Farooqi MA, Lovblom LE, Halpern EM, Boulet G, Eldelekli D, Keenan HA, Brent MH, Paul N, Brill V, **Cherney DZ**, Perkins BA. Commonly Measured Clinical Variables Are Not Associated With Burden of Complications in Long-standing Type 1 Diabetes: Results From the Canadian Study of Longevity in Diabetes. *Diabetes Care* 2016;39:e67-68. Impact Factor 8.4. **Coauthor or Collaborator**.
26. Timothy J. Bradley, Cameron Slorach, Denis Daneman, Livia Deda, David B. Dunger, Yesmino Elia, Ron Har, Wei Hui, Farid H. Mahmud, Rahim Moineddin, Heather N. Reich, James W. Scholey, Luc Mertens, Etienne Sochett, **David Z.I. Cherney**. Early changes in cardiovascular structure and function in adolescents with type 1 diabetes. *Cardiovascular Diabetology*. 2016;15:31. Impact Factor 4.1. **Senior Responsible Author**.
27. Geneviève Boulet, Elise M. Halpern, Leif E. Lovblom, Alanna Weisman, Johnny-Wei Bai, Devrim Eldelekli, Hillary Keenan, Michael Brent, Narinder Paul, Vera Brill, **David Cherney**, Bruce A. Perkins. Prevalence of Insulin Pump Therapy and Its Association with Glycemic Control: Results from the Canadian Study of Longevity in Type 1 Diabetes. *Diabetes Technology and Therapeutics*. 2016;18:298-307. In Press. Impact Factor 2.1. **Co-senior author**.
28. Petter Bjornstad, David Z. Cherney, David M. Maahs Kristen Nadeau. Diabetic Kidney Disease in Adolescents with Type 2 Diabetes. *Current Diabetes Reports*. 2016;11. Impact Factor 3.99. **Coauthor or Collaborator**.
29. Lytvyn Y, Har R, Reich HN, Scholey JW, Daneman D, Moineddin R, Motran L, Elia Y, Deda L, Ostrovsky M, Sochett EB, Mahmud FH, **Cherney DZI**. Association between plasma uric acid levels and cardiorenal function in adolescents with type 1 diabetes. *Diabetes Care*. 2016;39:611-616. Impact Factor 8.4. **Senior Responsible Author**.
30. Yuliya Lytvyn, Marko Škrtić, Gary K. Yang, Paul M. Yip, Bruce A. Perkins, **David Z. I. Cherney**. Plasma Uric Acid Effects on Glomerular Hemodynamic Profile of Patients with Uncomplicated Type 1 Diabetes Mellitus. *Diabetic Medicine*. 2016;33:1102-1111. Impact Factor 3.11. **Senior Responsible Author**.

31. DeMelo E, Deda L, Har R, Reich HN, Scholey JW, Daneman D, Moineddin R, Motran L, Elia Y, **Cherney DZI**, Sochett EB & Mahmud FH. Urinary Inflammatory Profile in GFD - Adherent Adolescents with Type 1 Diabetes and Celiac Disease. *J Diabetes Complications*. 2016;30:295-299. Impact Factor 4.13. **Coauthor or Collaborator**.
32. Liza Grosman-Rimon, Laura C. Tumiat, Hiroyuki Kawajiri, Avi Fuks, Stacey Pollock Bar-Ziv, Spencer D. Lalonde, Andrzej Chruscinski, Michael A. McDonald, Arash Ghashghai, Julieta Lazarte, Ira Jacobs, David Z. Cherney\* and Vivek Rao\* (\*co-senior authors). Preliminary Study: Increased Levels of cGMP in Recipients of Continuous Flow LVADs, Implications for Gastrointestinal Bleeding. *Journal of Thoracic and Cardiovascular Surgery*. 2016;151:219-227. Impact Factor 3.99. **Co-senior responsible author**.
33. Gilbert C, **Cherney DZI**, Al-Hesayen A, Mak S, Floras JS, Parker JD. Hemodynamic and neurochemical determinates of renal function in heart failure. *American Journal of Physiology – Reg Int Comp Physiology*. 2016;310:R167-175. Impact Factor 3.77. **Coauthor or Collaborator**.
34. Johnny W. Bai, Geneviève Boulet, Elise M. Halpern, Leif E. Lovblom, Devrim Eldelekli, Hillary Keenan, Michael Brent, Narinder Paul, Vera Brill, **David Cherney**, Alanna Weisman, Bruce A. Perkins. Cardiovascular Disease Guideline Adherence and Statin Use in Longstanding Type 1 Diabetes: Results from the Canadian Study of Longevity in Diabetes. *Cardiovascular Diabetology*. 2016;15:14. Impact Factor 4.5. **Coauthor or Collaborator**.
35. Yuliya Lytvyn, Petter Bjornstad, Nicole Pun, **David Z.I. Cherney**. New and old agents in the management of diabetic nephropathy. *Current Opinion in Nephrology and Hypertension*. 2016;25:232-239. Impact factor 3.23. **Senior Responsible Author**.
36. Petter Bjornstad, David Z. Cherney, David M. Maahs and Kristen J. Nadeau. Fat mass is associated with cystatin C and eGFR in adolescents with type 1 diabetes. *Journal of Renal Nutrition*. 2015;25:454-455. Impact Factor 1.87. **Coauthor or Collaborator**.
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### Book Chapters

1. Petter Bjornstad, **David Cherney**. Insulin sensitivity and the pathogenesis of diabetic nephropathy. *Insulin Resistance: Childhood Precursors of Adult Disease*, 2nd edition 2017
2. Petter Bjornstad, Yuliya Lytvyn, Dick de Zeeuw, **David Cherney**. The Pathogenesis and Treatment of Diabetic Nephropathy. *Primer on Kidney Diseases – The National Kidney Foundation*. 2017
3. **Cherney DZI**, Miller JA. Renal Sodium Handling in Women. In: Burnier M, ed. *Sodium in Health and Disease*. Marcel Dekker, 2007. **Principal Author**.
4. Halperin ML, **Cherney DZI**, Kamel K. Ketoacidosis. In: TD Dubose and LL Ham, editors. *Acid-Base and Electrolyte Disorders: a companion to Brenner and Rector's, The Kidney*. Philadelphia: WB Saunders; 2002. Chapter 5, pp 67-82. Supervisor: Dr. M.L.Halperin. **Coauthor or Collaborator**.
5. Straus S, **Cherney D**, McAlister FA, Padwal R. How do we best monitor and facilitate chronic care for patients with hypertension. In: Mulrow C, editor. *Evidence-Based Hypertension*. London: BMJ Books; 2001. p. 161-192. Supervisor: Dr. S.E. Straus. **Coauthor or Collaborator**.

### Commentaries

1. **Cherney DZI**, Sochett EB. Comment on "The evolution of hyperfiltration and arterial stiffness from adolescence into early adulthood in type 1 diabetes". *Diabetes Care*. *Diabetes Care* 2011;34:1821. Impact Factor 6.72. **Principal Author**.
2. **Cherney, DZI**. Commentary on "Effect of saxagliptin on renal outcomes in the SAVOR-TIMI 53 trial". *Diabetes Practice Update*. 2017. **Principal Author**.

### Letters to Editor

1. **Cherney DZI**, Maahs DM. GFR estimating equations in type 1 diabetes. *New England Journal of Medicine* 2013; 369:2457-2459. 2013. Impact Factor 51.7. **Principal Author**.
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## 3. NON-PEER-REVIEWED PUBLICATIONS

### Journal Articles

1. **Cherney DZI**. Advances in the treatment of diabetic nephropathy. *Nephrology News and Issues*. 2013 May;27:18-33. **Principal Author**.

### Commentaries

1. Polly VandenBerg. Research update: Dr. David Cherney, Canadian Diabetes Association – KRESCENT Joint New Investigator Awardee. *Canadian Journal of Diabetes*. Impact Factor 3.3. **Editor**.

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2. **Cherney DZI.** Obesity and the kidney. *Nephrology Rounds* 2007; 8:1-4. **Senior Responsible Author.**
3. **Cherney DZI.** Nitric oxide and diabetic nephropathy. *Nephrology Rounds* 2007; 8:1-4. **Senior Responsible Author.**

#### 4. SUBMITTED PUBLICATIONS

##### Journal Articles

1. Livia Deda, Yonatan Yeshahayu, Shama Sud, Meaghan Cuerden, David ZI Cherney, Etienne B. Sochett, Farid H. Mahmud. Improvements in Peripheral Vascular Function with Short Term Vitamin D Treatment in Deficient Adolescents with Type 1 Diabetes. *Diabetes Care*. 2016. **Coauthor or Collaborator.**
2. Grosman-Rimon L, Billia F, Stacey Pollock Bar-Ziv, Kobulnik J, **David Z. Cherney**, Vivek Rao MD. The Physiological Rationale for Incorporating Pulsatility in Continuous-Flow Left Ventricular Assist Devices. *Circulation Research* (submitted) 2017
3. Noone, D, DeMelo E, Deda L, Har R, Reich HN, Scholey JW, Bradley, T, Daneman D, Moineddin R, Dunger, D, Deanfield, J, Motran L, Elia Y, **Cherney DZI**, Mahmud FH, Sochett EB. Relationship Between Circulating Inflammatory Markers and Vascular Function in Adolescents in Type 1 Diabetes. *Diabetes Care* 2016 **Coauthor or Collaborator**
4. Sharon Peacock, BSc (PT)<sup>1</sup>, MD; Julie A. Lovshin, MD, PhD<sup>2,4</sup>, **David Z. I. Cherney, MD, PhD<sup>3,4</sup>**. Perioperative Considerations for the Use of Sodium-glucose Cotransport-2 inhibitors in Patients with Type 2 Diabetes. *Can J Anaesthesia* (in revision) 2017
5. **David Cherney**, Mark Cooper, Ilkka Tikkanen, Susanne Crowe, Odd Erik Johansen, Soeren S. Lund, Hans J. Woerle, Uli C. Broedl. Contrasting Influences of Renal Function on Blood Pressure and Hba1c Reductions with Empagliflozin in Patients with Type 2 Diabetes and Hypertension. *Kidney International* (in revision) 2016
6. Daniel Scarr<sup>1</sup>, Leif E. Lovblom<sup>1</sup>, Mohammed A. Farooqi<sup>1</sup>, Genevieve Boulet<sup>1</sup>, Julie Lovshin<sup>2</sup>, Andrej Orszag<sup>1</sup>, Alanna Weisman<sup>1</sup>, Yuliya Lytvyn<sup>2</sup>, Mylan Ngo<sup>6</sup>, Hillary A. Keenan<sup>3</sup>, Michael H. Brent<sup>4</sup>, Narinder Paul<sup>5</sup>, Vera Bril<sup>6</sup>, **David Z. Cherney<sup>2</sup>**, Bruce A. Perkins<sup>1,7</sup>. Lower Corneal Nerve Fibre Length Identifies Diabetic Neuropathy in Older Adults with Diabetes: Results from the Canadian Study of Longevity in Type 1 Diabetes. *JCEM* (submitted) 2017
7. Alanna Weisman, Leif E. Lovblom, Hillary A. Keenan, Liane Tinsley, Stephanie D'Eon, Genevieve Boulet, Mohammed A. Farooqi, Julie Lovshin, Andrej Orszag, Yuliya Lytvyn, Michael Brent, Narinder Paul, Vera Bril, **David Z. Cherney**, Bruce A. Perkins. Diabetes Care Disparities in Longstanding Type 1 Diabetes in Canada and the United States: A Cross-Sectional Comparison. *Diabetes Care* 2017 (submitted)
8. Liza Grosman-Rimon, Danit Freedman, David Banner, Yip Paul, **David Z. Cherney**, Vivek Rao. Aortic Valve Open-Close Condition and Neurohormone levels in CF-LVAD recipients. *Journal of Cardiac Failure* 2017 (submitted)
9. Petter Bjornstad<sup>1,2</sup>, M.D.; Laura Pyle<sup>1</sup>, Ph.D.; **David Z.I. Cherney<sup>3</sup>**, M.D., Ph.D.; Richard J. Johnson<sup>4</sup>, M.D.; Rachel Sippl, M.P.H.; Randy Wong, Ph.D.; Marian Rewers<sup>1,2</sup>, M.D., Ph.D.; Janet K. Snell-Bergeon<sup>1,2</sup>, Ph.D., M.P.H. Plasma biomarkers predict diabetic kidney disease in adults with type 1 diabetes over a 12-year follow-up: CACTI study. *NDT* 2017 (in revision)
10. Julie Lovshin, Ann Bugeja, Jacqueline R. Curtis, Denis Daneman, **David Cherney\*** and Etienne B. Sochett\*. Early Ambulatory Blood Pressure Abnormalities in Adolescents with Uncomplicated Type 1 Diabetes Are Independent of HbA1c or Urinary Albumin Excretion: A Prospective Study During Puberty. **\*co-senior authors.** *AJP-Renal* (submitted) 2017
11. Daniel Scarr, Leif E. Lovblom, Nancy Cardinez, Andrej Orszag, Mohammed A. Farooqi, Genevieve Boulet, Alanna Weisman, Julie Lovshin, Mylan Ngo, Narinder Paul, Hillary A. Keenan, Michael H. Brent, **David Z. Cherney**, Vera

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Bril, Bruce A. Perkins. Validity of a Point-of-Care Nerve Conduction Device for Polyneuropathy Identification in Older Adults with Diabetes: Results from the Canadian Study of Longevity in Type 1 Diabetes. PLoS One (submitted) 2017

## MANUSCRIPTS IN PREPARATION

### Journal Articles

1. Macfarlane P, **Cherney D**, Gilbert R, Senior P. Chronic Kidney Disease in Diabetes: Canadian Diabetes Association Clinical Practice Guidelines. Canadian Journal of Diabetes. 2016
2. **David Z.I. Cherney**, Fengxia Xiao, Joseph Zimpelmann, Vesta Lai, Kevin D. Burns. Plasma vs. Urinary Angiotensinogen and Hemodynamic Function in Patients with Uncomplicated Type 1 Diabetes. In Preparation.
3. Heather N. Reich, **David Cherney** et al. The urine proteomic signature for glomerulonephritis in humans. In Preparation.
4. Yuliya Lytvyn, Marko Škrtić, Gary K. Yang, Vesta Lai, Melvin Silverman, James W. Scholey, Paul M. Yip, Bruce A. Perkins, **David Z. I. Cherney**. The Effect of Uric Acid Levels at the Extremes of Disease Duration in Patients with Type 1 Diabetes. In preparation.
5. **David Cherney**, Maximilian von Eynatten, Soeren S. Lund, Stefan Kaspers, Susanne Crowe, Hans J. Woerle, Christopher Lee. The Effect of Sodium Glucose Cotransport 2 (SGLT2) Inhibition with Empagliflozin and Linagliptin on Microalbuminuria and Macroalbuminuria in Patients with Type 2 Diabetes. In Preparation.
6. Yuliya Lytvyn, **David Cherney**, John Parker. Afferent and efferent resistances in patients with congestive heart failure. In preparation
7. Ziv Harel, **David Cherney**. SGLT2 inhibition and renal outcomes in patients with diabetes. In preparation.
8. Bjornstad P, Daniel Scarr<sup>1</sup>, Leif E. Lovblom<sup>1</sup>, Mohammed A. Farooqi<sup>1</sup>, Genevieve Boulet<sup>1</sup>, Julie Lovshin<sup>2</sup>, Andrej Orszag<sup>1</sup>, Alanna Weisman<sup>1</sup>, Vesta Lai, Josephine Tse, Leslie Cham, Yuliya Lytvyn<sup>2</sup>, Mylan Ngo<sup>6</sup>, Hillary A. Keenan<sup>3</sup>, Michael H. Brent<sup>4</sup>, Narinder Paul<sup>5</sup>, Vera Bril<sup>6</sup>, Bruce A. Perkins<sup>1,7</sup>Cherney D. Coronary artery calcification score and renal function and longevity
9. Bjornstad P, Daniel Scarr<sup>1</sup>, Leif E. Lovblom<sup>1</sup>, Vesta Lai, Josephine Tse, Leslie Cham, Mohammed A. Farooqi<sup>1</sup>, Genevieve Boulet<sup>1</sup>, Julie Lovshin<sup>2</sup>, Andrej Orszag<sup>1</sup>, Alanna Weisman<sup>1</sup>, Yuliya Lytvyn<sup>2</sup>, Mylan Ngo<sup>6</sup>, Hillary A. Keenan<sup>3</sup>, Michael H. Brent<sup>4</sup>, Narinder Paul<sup>5</sup>, Vera Bril<sup>6</sup>, Bruce A. Perkins<sup>1,7</sup>Cherney D. Gomez, Neuropathy and Longevity.
10. Petter Bjornstad, Julie Lovshin, Yuliya Lytvyn, Genevieve Boulet, Leif E. Lovblom, Omar N. Alhuzaim, Mohammed A. Farooqi, Vesta Lai, Josephine Tse, Leslie Cham, Andrej Orszag, Alanna Weisman, Hillary A. Keenan, Michael H. Brent, Narinder Paul, Vera Bril, Bruce A. Perkins, **David Z.I. Cherney**. Central Adiposity and Intrarenal Hemodynamic Function in Adults with Type 1 Diabetes with and without Diabetic Kidney Disease: Results from the Canadian Study of Longevity in Type 1 Diabetes
11. Julie Lovshin, Petter Bjornstad, David Cherney. Primary component analysis and incretin agents.
12. David Cherney, George Bakris. Novel therapies for diabetic kidney disease. Kidney International (invited supplement review) 2017

## F. Presentations and Special Lectures

### 1. INTERNATIONAL

#### Invited Lectures and Presentations

- 2018 February **Invited Speaker.** SGLT2 Inhibition – Renal Effects in Man. Keystone Symposium. Santa Fe, New Mexico. February 26, 2018
- 2017 August **Invited Speaker.** SGLT2 inhibitors and renal outcomes. Australian Diabetes Society – Perth Australia. August 26, 2017
- 2017 August **Invited Speaker.** SGLT2 inhibitors and renal outcomes. Australian Diabetes Society – Perth Australia. August 26, 2017
- 2017 June **Invited Speaker.** SGLT2 inhibitors and renal protection. **International Diabetes and Cardiovascular Disease Conference (IDCDC)**, to be held on 24-25 June 2017 at Shangri-La Hotel in Singapore – DECLINED due to conflicting meetings
- 2017 July **Invited Speaker.** SGLT2 inhibitors and renal outcomes. Asian Interchange on Diabetes – Kuala Lumpur Complications Symposium. Kuala Lumpur, Malaysia
- 2017 June **Invited speaker.** Joint ADA/ASN Symposium – effects of new diabetic treatments on diabetic kidney Disease. June 11, 2017
- 2017 May **Invited speaker.** “SGLT2 inhibition and renal protection. Japanese Society of Nephrology Meeting. Tokyo, Japan. May 26 2017
- 2017 April **Invited Speaker.** “SGLT2 inhibition and renal protection” – AstraZeneca Global Diabetes Symposium – Panama City, April 29, 2017
- 2017 April **Invited Speaker.** “Glomerular Hyperfiltration as a Treatment Target” – World Congress of Nephrology – Mexico City, April 22, 2017
- 2017 Feb **Invited Speaker.** National University Hospital Renal Rounds - Novel Strategies to slow the progression of kidney disease in type 2 diabetes: an emerging mechanism of SGLT2-inhibitors. Singapore February 22 2017
- 2017 Feb **Invited Speaker.** Asian CardioDiabetes Forum – Renal outcomes in recent T2D CVOTs Breakout: Renal outcomes: revisiting EMPA-REG OUTCOME Bangkok, Thailand, February 24 2017
- 2016 Nov **Invited Speaker.** SGLT2 Inhibition and diabetic nephropathy. American Society of Nephrology Meeting
- 2016 Sept **Invited Speaker.** “Effects of the sodium–glucose cotransporter 2 inhibition on cardiovascular outcomes and mortality in Type 2 Diabetes” Program Committee for the Council on Hypertension 2016 Scientific Sessions and the American Heart Association. DECLINED due to conflicting meeting in Munich.
- 2016 Nov **Invited Speaker.** SGLT2 inhibitors and renal outcomes. Symposium – Oslo Diabetes Complications Symposium. Oslo, Norway
- 2016 Sep 10th **Invited Speaker.** SGLT2 inhibitors and renal outcomes. Symposium - European Association for the Study of Diabetes (EASD). Munich, Germany.

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- 2016 Sep 14th **Invited Speaker.** Novel strategies to slow the progression of kidney disease in type 2 diabetes: an emerging mechanism of SGLT2 inhibition. Symposium - European Association for the Study of Diabetes (EASD). Munich, Germany.
- 2016 Sep 12th **Invited Speaker.** Preserving renal function beyond glucose control – myth or reality. Symposium - European Association for the Study of Diabetes (EASD). Munich, Germany.
- 2016 Sep 11th **Invited Speaker.** Taking the Kidney to Heart Symposium – the role of SGLT2 inhibition. Baker IDI Institute and the European Association for the Study of Diabetes (EASD). Regensburg, Germany.
- 2016 Sep 10th **Invited Speaker.** Proposed mechanisms of SGLT2 inhibition resulting in renal benefit. Symposium - European Association for the Study of Diabetes (EASD). Munich, Germany.
- 2016 Sep **Invited Speaker.** SGLT2 inhibition and the regulation of renal hemodynamic function in diabetes. The ERA-ETDA meeting. Vienna, Austria.
- 2016 Sep **Invited Speaker.** SGLT2 inhibition and the regulation of renal hemodynamic function in diabetes. European Diabetic Nephropathy Study Group. Pisa, Italy.
- 2016 July **Invited Speaker.** SGLT2 Inhibition and the Potential for Renal and Cardiovascular Protection in Diabetes IDEACON India Conference July 8<sup>th</sup> 2016, Kolkota, India
- 2016 May **Invited Speaker.** SGLT2 Inhibition and Cardiovascular Protection Symposium. Santiago, Chile.
- 2016 Mar **Invited Speaker.** Can we intervene to prevent diabetic nephropathy? National Diabetes Forum. Montreal, Canada.
- 2015 Dec **Invited Speaker.** SGLT2 inhibition and renal protective effects. The World Congress of Diabetes. Vancouver, British Columbia, Canada.
- 2015 Oct **Invited Speaker** Invited speaker, “The Potential for Cardiorenal Protection with SGLT2 inhibition”, the American Society of Nephrology, San Diego, November 2015
- 2015 Oct **Invited Speaker.** “SGLT2 Inhibitors and the Kidney: the potential for nephroprotection”, Renal Scientific Exchange Meeting (100 local endocrinologists, cardiologists, diabetologists), Sydney, Australia Oct 2015
- 2015 Oct **Invited speaker** - “SGLT2 Inhibitors and the Kidney: the potential for nephroprotection”, International Society of Pediatric and Adolescent Diabetes (ISPAD), Brisbane, Australia, October 8, 2015
- 2015 Oct **Invited speaker** - “SGLT2 Inhibitors and the Kidney: the potential for nephroprotection”, Cardiorenal Research Rounds, BakerIDI, Melbourne, Australia, October 7th 2015
- 2015 Jun **Invited Speaker.** SGLT2 inhibition and the regulation of blood pressure - DECLINED (due to birth of third child). 75th meeting of the American Diabetes Association. Boston, Massachusetts, United States.
- 2015 Jun **Invited Speaker.** SGLT2 as a therapeutic target for diabetes: physiology and consequences. European Society of Hypertension - DECLINED due to birth of third child. Milan, Italy.
- 2015 May **Invited Speaker.** The Safety and Efficacy of SGLT2 Inhibitors in Patients with Renal Impairment. Japanese Diabetes Society 58th Annual Meeting, May 2015. Yamaguchi and Tokyo, Japan.
- 2015 Apr **Invited Speaker.** SGLT-2 inhibition: from the apple tree to clinical practice: mode of action, efficacy, safety and tolerability. Oslo Diabetes Symposium. Oslo, Norway.
- 2014 Nov **Invited Speaker.** The Safety and Efficacy of SGLT2 Inhibitors in Patients with Renal Impairment (Symposium). American Society of Nephrology meeting. Philadelphia, Pennsylvania, United States.
- 2014 Nov **Invited Speaker.** Role of SGLT2 Inhibition in the Regulation of Renal Function. American Society of

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Nephrology meeting. Philadelphia, Pennsylvania, United States.

- 2014 Oct **Invited Speaker.** SGLT2 Inhibition as Adjunctive to Insulin in Type 1 Diabetes Mellitus – Renal Hemodynamic Aspects. Global Advisory Board, Boehringer Ingelheim. Orlando, Florida, United States.
- 2014 Sep **Invited Speaker.** Effects of SGLT2 Inhibition on BP lowering in Type 2 Diabetes. Global Advisory Board, Boehringer Ingelheim, Frankfurt, Germany. Frankfurt, Germany.
- 2014 Sep **Invited Speaker.** Role of Urine Inflammatory Markers in Early Detection of Diabetic Nephropathy. National Kidney Foundation. Toronto, Ontario, Canada. 40th Annual Conference of the International Society for Pediatric and Adolescent Diabetes.
- 2014 Apr **Chair.** The Kidney and SGLT2 Inhibition. National Kidney Foundation Meeting. Las Vegas, Nevada, United States. Session chair.
- 2014 Apr **Chair.** The Kidney and SGLT2 Inhibition - Chair and Speaker. National Kidney Foundation Meeting. Las Vegas, Nevada, United States. Session chair and speaker.
- 2013 Nov **Chair.** Glycemia and the Kidney: a Bitter Sweet Story. American Society of Nephrology. Atlanta, Georgia, United States. Session chair.
- 2013 Nov **Invited Speaker.** Hypertensive Urgencies. American Heart Association Meeting 2013. Texas, United States.
- 2011 Dec **Invited Speaker.** Glucose toxicity and the kidney. The International Diabetes Federation Meeting, Dubai. Dubai, United Arab Emirates. Presenter(s): **David Cherney**, Ralph DeFronzo, Ele Ferrannini. Symposium.
- 2010 Nov **Invited Speaker.** Cystatin C and novel new markers of kidney function. American Society of Nephrology Curriculum Committee. Denver, Colorado, United States. Presenter(s): **David Cherney**. American Society of Nephrology Meeting, Clinical Pathological Conference – November 2010.
- 2010 Oct **Invited expert in the field of measuring kidney function in humans.** The role of SGLT2 inhibition in diabetes mellitus. Boehringer-Ingelheim. Busan, Korea, Republic Of.
- 2010 Jun **Invited expert in the field of measuring kidney function in humans.** The role of SGLT2 inhibition in diabetes mellitus. Boehringer-Ingelheim. Frankfurt, Germany.
- 2009 Nov **Invited Speaker.** Serum Cystatin C Reflects the Acute Changes in Glomerular Filtration Rate Provoked by Hyperglycemia and Angiotensin II in Subjects With Type 1 Diabetes. American Society of Nephrology. San Diego, California, United States. Presenter(s): **David Cherney**. Oral presentation, Free Communications Session, American Society of Nephrology 2009.
- 2009 Nov **Invited Speaker.** Hemodynamic function in women with type 1 diabetes mellitus. American Heart Association. Orlando, Florida, United States. Presenter(s): **David Cherney**. American Heart Association Meeting, 2009.

### Presented and Published Abstracts

- 2017 June **student presentation:** Omar N. Alhozaim<sup>1,7</sup>, Leif E. Lovblom<sup>1</sup>, Mohammed A. Farooqi<sup>1</sup>, Genevieve Boulet<sup>1</sup>, Alanna Weisman<sup>1</sup>, Julie Lovshin<sup>1</sup>, Yuliya Lytvyn<sup>6</sup>, Hillary A. Keenan<sup>2</sup>, Michael H. Brent<sup>3</sup>, Narinder Paul<sup>4</sup>, Vera Bril<sup>5</sup>, **David Z. Cherney**<sup>6</sup>, Bruce A. Perkins<sup>1</sup>. **Bone Mineral Density (BMD) and Microvascular Complications in Patients with Longstanding Type 1 Diabetes (T1D): Results from the Canadian Study of Longevity in Diabetes. ADA 2017**
- 2017 June **student presentation:** Authors List: Omar N. Alhozaim<sup>1,7</sup>, Leif E. Lovblom<sup>1</sup>, Mohammed A. Farooqi<sup>1</sup>, Genevieve Boulet<sup>1</sup>, Alanna Weisman<sup>1</sup>, Julie Lovshin<sup>1</sup>, Yuliya Lytvyn<sup>6</sup>, Hillary A. Keenan<sup>2</sup>, Michael H. Brent<sup>3</sup>, Narinder Paul<sup>4</sup>, Vera Bril<sup>5</sup>, **David Z. Cherney**<sup>6</sup>, Bruce A. Perkins<sup>1</sup>. Diabetic Neuropathy (DN) and Bone Mineral Density (BMD) in Patients with Longstanding Type 1 Diabetes. **ADA 2017**

- 2017 June Plasma Uric Acid and Renal Function at the Extreme Ends of Type 1 Diabetes Duration: Adolescents Compared to Older Adults with Longstanding Diabetes. Yuliya Lytvyn<sup>1,2</sup>, Mohammed A. Farooqi<sup>3</sup>, Julie A. Lovshin<sup>3</sup>, Genevieve Boulet<sup>3</sup>, Daniel Scarr<sup>3</sup>, Leif E. Lovblom<sup>3</sup>, Alanna Weisman<sup>3</sup>, Hillary A. Keenan<sup>4</sup>, Michael H. Brent<sup>5</sup>, Narinder Paul<sup>6</sup>, Vera Bril<sup>7</sup>, Bruce A. Perkins<sup>3</sup>, **David Z. I. Cherney**<sup>1</sup>. **ADA 2017**
- 2017 June Renin Angiotensin System (RAS) Activation and Nephropathy Resistor Status in Longstanding Type 1 Diabetes: Results from the Canadian Study of Longevity in Diabetes. Lovshin, JA, Lytvyn, L, Genevieve Boulet, Mohammed A. Farooqi, Leif E. Lovblom, Daniel Scarr, Lai, V, Cham, L, Tse, J, Alanna Weisman, Hillary A. Keenan, Michael H. Brent, Narinder Paul, Vera Bril, Bruce A. Perkins, **David Z. Cherney**. **ADA Meeting 2017**
- 2016 Jun **student presentation**. Plasma Uric Acid and Renal Function in Adults with Longstanding Type 1 Diabetes. American Diabetes Association meeting. Presenter(s): Yuliya Lytvyn, Mohammed A. Farooqi, Julie Lovshin, Genevieve Boulet, Daniel Scarr, Leif E. Lovblom, Alanna Weisman, Hillary A. Keenan, Michael Brent, Narinder Paul, Vera Bril, Bruce A. Perkins, David Z. I. **Cherney**. (Trainee Presentation).
- 2016 Jun **student presentation**. The Effect of SGLT2 Inhibition on Adenosine Excretion in Patients with Type 1 Diabetes. American Diabetes Association meeting. Presenter(s): Harindra Rajasekeran, Yuliya Lytvyn, Daniel Cattran, Mansoor Husain, Andrea Bozovic, Eleftherios Diamandis, Bruce Perkins, Heather Reich, Vathany Kulasingam, **David Cherney**. (Trainee Presentation).
- 2016 Jun **student presentation**. Comparison of Diabetes Care Indicator Variables Between Older Canadians and Americans With Longstanding Type 1 Diabetes. American Diabetes Association meeting. Presenter(s): Alanna Weisman, Leif E. Lovblom, Genevieve Boulet, Johnny-Wei Bai, Mohammed A. Farooqi, Michael Brent, Narinder Paul, Vera Bril, David Z. Cherney, Hillary A. Keenan, Bruce A. Perkins. (Trainee Presentation).
- 2016 Jun **student presentation**. Use of Corneal Nerve Fibre Length (CNFL) for Diabetic Neuropathy Identification in Older Patients with Longstanding Type 1 Diabetes. American Diabetes Association meeting. Presenter(s): Daniel Scarr, Mohammed A. Farooqi, Leif E. Lovblom, Genevieve Boulet, Alanna Weisman, Julie Lovshin, Hillary A. Keenan, Michael Brent, Narinder Paul, Vera Bril, David Z. Cherney, Bruce A. Perkins. (Trainee Presentation).
- 2016 Oct **student presentation**. Yuliya Lytvyn, Mohammed A. Farooqi, Julie Lovshin, Genevieve Boulet, Daniel Scarr, Leif E. Lovblom, Alanna Weisman, Hillary A. Keenan, Michael Brent, Narinder Paul, Vera Bril, Bruce A. Perkins, David Z. I. Cherney. Plasma Uric Acid and Renal Function in Adults with Longstanding Type 1 Diabetes. CDA 2016 (ORAL presentation)
- 2015 Nov **student presentation**. The effect of plasma uric acid on blood pressure, renal function, and albumin excretion in normotensive, normoalbuminuric adolescents with type 1 diabetes mellitus. American Society of Nephrology meeting. Presenter(s): Lytvyn Y, Har R, Reich HN, Scholey JW, Daneman D, Moineddin R, Motran L, Elia Y, Deda L, Ostrovsky M, Sochett EB, Mahmud FH, **Cherney DZI**. (Trainee Presentation)
- Publication Details:*  
The effect of plasma uric acid on blood pressure, renal function, and albumin excretion in normotensive, normoalbuminuric adolescents with type 1 diabetes mellitus. American Society of Nephrology Meeting, Boston, 2015. 2015 Nov. **Senior Responsible Author**.
- 2015 Sep **student presentation**. IMPACT OF DIABETIC COMPLICATIONS ON EMOTIONAL DISTRESS AND DEPRESSION IN LONGSTANDING T1D: RESULTS FROM THE CANADIAN STUDY OF LONGEVITY IN TYPE 1 DIABETES. European Association for the Study of Diabetes. (Trainee Presentation)
- Publication Details:*  
Johnny-Wei Bai, Alanna Weisman, Mohammed A. Farooqi, Elise M. Halpern, Leif E. Lovblom, Genevieve Boulet, Devrim Eldelekli, Hillary Keenan, Michael Brent, Narinder Paul, Vera Bril, **David Cherney**, Bruce A. Perkins. IMPACT OF DIABETIC COMPLICATIONS ON EMOTIONAL DISTRESS AND DEPRESSION IN LONGSTANDING T1D: RESULTS FROM THE CANADIAN STUDY OF LONGEVITY IN TYPE 1 DIABETES. European Association for the Study of Diabetes. 2015 Jun. **Coauthor or Collaborator**.

- 2015 Jun **co-author.** RENAL HEMODYNAMIC FUNCTION AND 8-ISOPROSTANE EXCRETION IN RESPONSE TO L-ARGININE INFUSION IN HEALTHY AND HYPERTENSIVE HUMANS. European Society of Hypertension.
- Publication Details:*  
Alberto Montanari, Luisa Musiari, Almerina Biggi, Aderville Cabassi, Antonio Crocamo, Giovanna Pelà and David Z. Cherney. RENAL HEMODYNAMIC FUNCTION AND 8-ISOPROSTANE EXCRETION IN RESPONSE TO L-ARGININE INFUSION IN HEALTHY AND HYPERTENSIVE HUMANS. European Society of Hypertension Meeting, 2015. 2015 Jun. **Senior Responsible Author.**
- 2015 Jun Contrasting Influences of Renal Function on Blood Pressure and HbA1c Reductions with Empagliflozin in Patients with Type 2 Diabetes and Hypertension. United States.
- Publication Details:*  
**David Cherney**, Mark Cooper, Ilkka Tikkanen, Susanne Crowe, Odd Erik Johansen, Søren S. Lund, Hans J. Woerle, Uli C. Broedl, Thomas Hach. Contrasting Influences of Renal Function on Blood Pressure and HbA1c Reductions with Empagliflozin in Patients with Type 2 Diabetes and Hypertension. American Diabetes Association Meeting, Boston, 2015. 2015 Jun. **Coauthor or Collaborator.**
- 2015 Jun **co-author.** RENAL HEMODYNAMIC FUNCTION AND 8-ISOPROSTANE EXCRETION IN RESPONSE TO L-ARGININE INFUSION IN HEALTHY AND HYPERTENSIVE HUMANS. European Society of Hypertension Meeting, 2015.
- Publication Details:*  
Alberto Montanari, Luisa Musiari, Almerina Biggi, Aderville Cabassi, Antonio Crocamo, Giovanna Pelà and David Z. Cherney. RENAL HEMODYNAMIC FUNCTION AND 8-ISOPROSTANE EXCRETION IN RESPONSE TO L-ARGININE INFUSION IN HEALTHY AND HYPERTENSIVE HUMANS. European Society of Hypertension Meeting, 2015. 2015 Jun. **Senior Responsible Author.**
- 2015 Jun **student presentation.** Statin Use in Primary Prevention of Cardiovascular Disease in Patients with Longstanding T1DM: Results from the Canadian Study of Longevity in Diabetes. American Diabetes Association meeting. Presenter(s): Johnny-Wei Bai, Genevieve Boulet, Elise M. Halpern, Leif E. Lovblom, Alanna Weisman, Hillary Keenan, Michael Brent, Narinder Paul, Vera Bril, **David Cherney**, Bruce A. Perkins. (Trainee Presentation)
- Publication Details:*  
Genevieve Boulet, Leif E. Lovblom, Elise M. Halpern, Alanna Weisman, Devrim Eldelekli, Hillary Keenan, Michael Brent, Narinder Paul, Vera Bril MD, **David Cherney**, Bruce A. Perkins. Statin Use in Primary Prevention of Cardiovascular Disease in Patients with Longstanding T1DM: Results from the Canadian Study of Longevity in Diabetes. American Diabetes Association Meeting, Boston, 2015. 2015 Jun. **Coauthor or Collaborator.**
- 2015 Jun **student presentation.** The Effect of Sodium Glucose Cotransport 2 (SGLT2) Inhibition with Empagliflozin on Microalbuminuria and Macroalbuminuria in Patients with Type 2 Diabetes. American Society of Nephrology meeting. Presenter(s): **David Cherney**, Maximilian von Eynatten, Soeren S. Lund, Stefan Kaspers, Susanne Crowe, Hans J. Woerle, Thomas Hach. (Trainee Presentation)
- Publication Details:*  
Genevieve Boulet, Leif E. Lovblom, Elise M. Halpern, Alanna Weisman, Devrim Eldelekli, Hillary Keenan, Michael Brent, Narinder Paul, Vera Bril MD, **David Cherney**, Bruce A. Perkins. The Effect of Sodium Glucose Cotransport 2 (SGLT2) Inhibition with Empagliflozin on Microalbuminuria and Macroalbuminuria in Patients with Type 2 Diabetes. American Society of Nephrology Meeting, 2015. 2015 Jun. **Principal Author.**
- 2015 Jun **student presentation.** Prevalence of Insulin Pump Therapy and Its Association with Glycemic Control in Longstanding T1DM: Results from the Canadian Study of Longevity in Diabetes Cohort. American Diabetes Association Meeting. (Trainee Presentation)

*Publication Details:*

Genevieve Boulet, Leif E. Lovblom, Elise M. Halpern, Alanna Weisman, Devrim Eldelekli, Hillary Keenan, Michael Brent, Narinder Paul, Vera Bril MD, **David Cherney**, Bruce A. Perkins. Prevalence of Insulin Pump Therapy and Its Association with Glycemic Control in Longstanding T1DM: Results from the Canadian Study of Longevity in Diabetes Cohort. American Diabetes Association Meeting, Boston, 2015. 2015 Jun. **Coauthor or Collaborator.**

2015 Jun **student presentation.** Neuropathy Prevalence Compared to Other Complications in Longstanding T1DM: Preliminary Analysis of the Canadian Study of Longevity in Diabetes Cohort. American Diabetes Association meeting. (Trainee Presentation)

*Publication Details:*

Alanna Weisman, Leif E. Lovblom, Randy Rovinski, Elise M. Halpern, Genevieve Boulet, Devrim Eldelekli, Hillary Keenan, Michael Brent, Narinder Paul, Vera Bril, **David Cherney**, Bruce A. Perkins. Neuropathy Prevalence Compared to Other Complications in Longstanding T1DM: Preliminary Analysis of the Canadian Study of Longevity in Diabetes Cohort. American Diabetes Association Meeting, Boston, 2015. 2015 Jun. **Coauthor or Collaborator.**

2015 Jun **student presentation.** Plasma Uric Acid Effects on Glomerular Hemodynamic Profile of Patients with Uncomplicated Type 1 Diabetes Mellitus. (Trainee Presentation)

*Publication Details:*

Yuliya Lytvyn, Marko Škrtić, Gary K. Yang, Paul M. Yip, Bruce A. Perkins, David Z. **I. Cherney**. Plasma Uric Acid Effects on Glomerular Hemodynamic Profile of Patients with Uncomplicated Type 1 Diabetes Mellitus. American Diabetes Association Meeting, Boston, 2015. 2015 Jun. **Coauthor or Collaborator.**

2015 Jun **student presentation.** Statin Use in Primary Prevention of Cardiovascular Disease in Patients with Longstanding T1DM: Results from the Canadian Study of Longevity in Diabetes. (Trainee Presentation)

*Publication Details:*

Johnny-Wei Bai, Genevieve Boulet, Elise M. Halpern, Leif E. Lovblom, Alanna Weisman, Hillary Keenan, Michael Brent, Narinder Paul, Vera Bril, **David Cherney**, Bruce A. Perkins. Statin Use in Primary Prevention of Cardiovascular Disease in Patients with Longstanding T1DM: Results from the Canadian Study of Longevity in Diabetes. American Diabetes Association Meeting, Boston, 2015. 2015 Jun. **Coauthor or Collaborator.**

2015 Jun **student presentation.** Rapid GFR decline is associated with renal hyperfiltration and impaired GFR in adults with type 1 diabetes: a brief report. United States.

*Publication Details:*

Petter Bjornstad, **David Cherney**, Janet K. Snell-Bergeon, Laura Pyle, Marian Rewers, Richard J. Johnson, David M. Maahs. Rapid GFR decline is associated with renal hyperfiltration and impaired GFR in adults with type 1 diabetes: a brief report. American Diabetes Association Meeting, Boston, 2015. 2015 Jun. **Coauthor or Collaborator.**

2014 Nov Improved Urinary Inflammatory Profile in GFD - Adherent Adolescents with Type 1 Diabetes and Celiac Disease. [Late breaking Abstracts]. (Trainee Presentation)

*Publication Details:*

DeMelo E, Deda L, Har R, Reich HN, Scholey JW, Daneman D, Dunger DB, Moineddin R, Motran L, Elia Y, **Cherney DZI**, Sochett EB & Mahmud FH. Improved Urinary Inflammatory Profile in GFD - Adherent Adolescents with Type 1 Diabetes and Celiac Disease. [Late breaking Abstracts]. American Diabetes Association Meeting, Philadelphia, 2014. 2014 Nov. **Coauthor or Collaborator.**

2014 Nov Biomarkers of Disease Pathobiology in Patients with Glomerulonephritis in the NEPTUNE Cohort.

*Publication Details:*

Heather N. Reich, Viji Nair, Wenjun Ju, **David Cherney**, Marie C. Hogan, John C. Lieske, Sharon G.

Adler, Daniel C. Cattran, Michelle A. Hladunewich, James W. Scholey, Peter J. Nelson, Matthias Kretzler. Biomarkers of Disease Pathobiology in Patients with Glomerulonephritis in the NEPTUNE Cohort. American Society of Nephrology Meeting, 2014. 2014 Nov. **Coauthor or Collaborator**.

2014 Nov **Co-author (presented by Dr. Cooper)**. Contrasting Influences of Renal Function on Blood Pressure and Hba1c Reductions with Empagliflozin in Patients with Type 2 Diabetes and Hypertension.

*Publication Details:*

**David Cherney**, Mark Cooper, Ilkka Tikkanen, Susanne Crowe, Odd Erik Johansen, Soeren S. Lund, Hans J. Woerle, Uli C. Broedl, Thomas Hach. Contrasting Influences of Renal Function on Blood Pressure and Hba1c Reductions with Empagliflozin in Patients with Type 2 Diabetes and Hypertension. American Heart Association Meeting, 2014. 2014 Nov. **Principal Author**.

2014 Nov **student presentation**. Insulin sensitivity is an important determinant of renal health in adolescents with type 2 diabetes. (Trainee Presentation)

*Publication Details:*

Petter Bjornstad, David M. Maahs, **David Cherney**, Melanie Cree-green, Amy D West, Laura Pyle, Kristen Nadeau. Insulin sensitivity is an important determinant of renal health in adolescents with type 2 diabetes. American Society of Nephrology Meeting, Boston. 2014 Nov. **Coauthor or Collaborator**.

2014 Nov The glomerular hemodynamic profile of normotensive, normoalbuminuric type 1 diabetes patients compared to healthy controls. (Trainee Presentation)

*Publication Details:*

Marko Skrtic, Yuliya Lytvyn, Ronnie Har, Paul Yip, Melvin Silverman, **David Z.I. Cherney**. The glomerular hemodynamic profile of normotensive, normoalbuminuric type 1 diabetes patients compared to healthy controls. American Society of Nephrology Meeting, 2014. 2014 Nov. **Principal Author**.

2014 Nov The Effect of Sex on Humanin Levels in Healthy Adults and Patients with Uncomplicated Type 1 Diabetes. (Trainee Presentation)

*Publication Details:*

Yuliya Lytvyn, Pinchas Cohen, Junxiang Wan, **David Cherney**. The Effect of Sex on Humanin Levels in Healthy Adults and Patients with Uncomplicated Type 1 Diabetes. American Society of Nephrology Meeting, 2014. 2014 Nov. **Principal Author**.

## Submitted abstract

2016 Dec **student presentation:** Omar N. Alhozaim<sup>1,7</sup>, Leif E. Lovblom<sup>1</sup>, Mohammed A. Farooqi<sup>1</sup>, Genevieve Boulet<sup>1</sup>, Alanna Weisman<sup>1</sup>, Julie Lovshin<sup>1</sup>, Yuliya Lytvyn<sup>6</sup>, Hillary A. Keenan<sup>2</sup>, Michael H. Brent<sup>3</sup>, Narinder Paul<sup>4</sup>, Vera Bril<sup>5</sup>, **David Z. Cherney**<sup>6</sup>, Bruce A. Perkins<sup>1</sup>. **Bone Mineral Density (BMD) and Microvascular Complications in Patients with Longstanding Type 1 Diabetes (T1D): Results from the Canadian Study of Longevity in Diabetes**

2016 Dec **student presentation:** Authors List: Omar N. Alhozaim<sup>1,7</sup>, Leif E. Lovblom<sup>1</sup>, Mohammed A. Farooqi<sup>1</sup>, Genevieve Boulet<sup>1</sup>, Alanna Weisman<sup>1</sup>, Julie Lovshin<sup>1</sup>, Yuliya Lytvyn<sup>6</sup>, Hillary A. Keenan<sup>2</sup>, Michael H. Brent<sup>3</sup>, Narinder Paul<sup>4</sup>, Vera Bril<sup>5</sup>, **David Z. Cherney**<sup>6</sup>, Bruce A. Perkins<sup>1</sup>. Diabetic Neuropathy (DN) and Bone Mineral Density (BMD) in Patients with Longstanding Type 1 Diabetes

2016 Dec Plasma Uric Acid and Renal Function at the Extreme Ends of Type 1 Diabetes Duration: Adolescents Compared to Older Adults with Longstanding Diabetes. Yuliya Lytvyn<sup>1,2</sup>, Mohammed A. Farooqi<sup>3</sup>, Julie A. Lovshin<sup>3</sup>, Genevieve Boulet<sup>3</sup>, Daniel Scarr<sup>3</sup>, Leif E. Lovblom<sup>3</sup>, Alanna Weisman<sup>3</sup>, Hillary A. Keenan<sup>4</sup>, Michael H. Brent<sup>5</sup>, Narinder Paul<sup>6</sup>, Vera Bril<sup>7</sup>, Bruce A. Perkins<sup>3</sup>, **David Z. I. Cherney**<sup>1</sup>. **Submitted to ADA Meeting**

2016 Dec Renin Angiotensin System (RAS) Activation and Nephropathy Resistor Status in Longstanding Type 1 Diabetes: Results from the Canadian Study of Longevity in Diabetes. Lovshin, JA, Lytvyn, L, Genevieve

Boulet, Mohammed A. Farooqi, Leif E. Lovblom, Daniel Scarr, Lai, V, Cham, L, Tse, J, Alanna Weisman, Hillary A. Keenan, Michael H. Brent, Narinder Paul, Vera Bril, Bruce A. Perkins, **David Z. Cherney**.  
**Submitted to ADA Meeting**

## 2. NATIONAL

### Invited Lectures and Presentations

- 2017 April **Invited Speaker**. Literature review for the busy clinician – diabetic nephropathy. Canadian Society of Nephrology. Montreal, Canada May 5, 2017
- 2017 April **Invited Speaker**. Renal endpoints in EMPA-REG Outcome – Medical Grand Rounds, University of Alberta April 21, 2017
- 2016 Nov **Invited Speaker**. Diabetes Clinical Trials Update (CTU) program series: "The diabetic kidney": Montreal, Quebec, November 5, 2016
- 2016 Nov **Invited Speaker**.: New therapies to treat diabetic nephropathy, Annual ACP meeting, Toronto, Nov 2016
- 2016 Nov **Invited Speaker. Renal Disease and Diabetes: Physiology and Novel Mechanisms**. CDA/CSEM Meeting, Ottawa, Ontario
- 2016 Sept **Invited Speaker**. "*4 Giant Steps in Cardiometabolic Risk Reduction: A Critical Update 2016 in Cardiometabolic Disease* Conference, Saturday, September 24 at the Hilton Toronto Markham Suites Conference Centre. The *4 Giant Steps* include the Gliflozin Story, the LEADER Trial, the SPRINT Trial and the PCSK9 Inhibitors. Title: The Gliflozin Story section on "*The Kidney Evidence*"
- 2015 May **Invited Speaker**. Can we intervene to prevent diabetic nephropathy? (present and future) National Diabetes Form and Diabetes Update 2016, Mont Tremblant, Quebec
- 2015 May **Invited Speaker**. Non-glycemic effects of SGLT2i. RxMD Diabetes Mini-Medical School, Toronto Ontario
- 2015 May **Invited Speaker**. Update on ongoing novel renal protection trials in Canada – The CREDENCE study. Canadian Society of Nephrology. Montreal, Quebec, Canada.
- 2015 May **Invited Speaker**. Improvement in Quality Study Investigation Group (IQSIG) Canada National Meeting – Managing patients with Diabetic Nephropathy. Ontario, Canada. Improvement in Quality Study Investigation Group (IQSIG) Canada National Meeting.
- 2014 Oct **Invited Speaker**. SGLT2 inhibition and diabetic nephropathy. Jewish General Hospital, Endocrinology Rounds. Quebec, Canada.
- 2014 Oct **Invited Speaker**. SGLT2 inhibition and diabetic nephropathy. Royal Victoria Hospital Montreal Endocrinology Rounds. Quebec, Canada.
- 2014 Jun **Invited Speaker**. SGLT2 Inhibition and Renal Function in Type 1 Diabetes. Boehringer-Ingelheim National Advisory Board Meeting, Toronto. Canada.
- 2013 Sep **Invited Speaker**. Nephron transport and effects on kidney/vascular disease – role of SGLT2 inhibition. Kidney Foundation of Canada – KRESCENT Meeting. Montreal, Quebec, Canada. Presenter(s): **David Cherney**.
- 2013 Sep **Invited Speaker**. SGLT2 Inhibition, Renal Function and Glycemic Control in Type 1 Diabetes. University of Ottawa, Riverside Campus. Ottawa, Ontario, Canada. Presenter(s): **David Cherney**. Nephrology Grand Rounds.
- 2013 Sep **Invited Speaker**. SGLT2 Inhibition and Renal Function in Type 1 Diabetes. University of British Columbia.

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Vancouver, Ontario, Canada. Presenter(s): **David Cherney**. Nephrology Grand Rounds.

- 2013 Jun 17 **Invited Speaker**. Boehringer-Ingelheim National Advisory Board. Boehringer-Ingelheim. Toronto, Ontario, Canada. Sodium glucose co-transport-2 inhibition and type 1 diabetes.
- 2012 Nov **Invited Speaker**. New Therapies in Humans with Type 1 Diabetes Mellitus. University of Montreal Grand Medical Rounds. Montreal, Quebec, Canada. Presenter(s): **David Cherney**. University of Montreal - Division of Nephrology.
- 2012 Nov **Invited Speaker**. Clinical seminar on the management of diabetic nephropathy. Hôtel-Dieu Hôpital. Montreal, Quebec, Canada. Presenter(s): **David Cherney**. University of Montreal - Division of Nephrology.
- 2012 Oct **Invited Speaker**. Treatment of Renal Complications Related to Type 1 Diabetes Mellitus. Foothills Hospital, University of Calgary. Toronto, Ontario, Canada. Presenter(s): **David Cherney**. Division of Nephrology.
- 2012 Apr **Invited Speaker**. Canadian Society of Nephrology Meeting Invited Talk, "Novel therapies fore the treatment of diabetic nephropathy". Canadian Society of Nephrology Annual Meeting. Toronto, Ontario, Canada. Presenter(s): **David Cherney**. Canadian Society of Nephrology Annual Meeting.
- 2011 Sep **Invited Speaker**. The role of endothelin antagonism in diabetes mellitus. Prevention in Renal Disease 8th Annual Conference, Toronto, 2010. Prevention in Renal Disease 10th Annual Conference Curriculum. Toronto, Ontario, Canada. Presenter(s): **David Cherney**. Prevention in Renal Disease 8th Annual Conference, Toronto, 2010.
- 2011 Feb **Invited Speaker**. The Role of Renal Hyperfiltration in Diabetic Nephropathy. Canadian Pediatric Endocrine Group. Toronto, Ontario, Canada. Presenter(s): **David Cherney**. Invited speaker at the the Canadian Cardiovascular Congress, Montreal.
- 2010 Nov 28 **Presenter**. Mechanisms of hyperfiltration in type 1 diabetes. Kidney Foundation of Canada, KRESCENT Program. Toronto, Ontario, Canada. Presenter(s): **David Cherney**.
- 2010 Oct **Invited Speaker**. Peripheral vascular abnormalities in early type 1 diabetes. Canadian Cardiovascular Congress. Montreal, Quebec, Canada. Presenter(s): **David Cherney**. Invited speaker.
- 2010 Sep **Invited Speaker**. Adenosine Receptors and Kidney Function. Toronto Heart Failure Summit Organizing Committee. Toronto, Ontario, Canada. Presenter(s): **David Cherney**. Toronto Heart Failure Summit.
- 2010 Sep **Invited Speaker**. The role of endothelin antagonism in diabetes mellitus. Prevention in Renal Disease 9th Annual Conference Curriculum. Toronto, Ontario, Canada. Presenter(s): **David Cherney**. Prevention in Renal Disease 8th Annual Conference, Toronto, 2010.
- 2010 Jun **Invited Speaker**. Measuring vascular function in type 1 DM. Kidney Foundation of Canada. Toronto, Ontario, Canada. Presenter(s): **David Cherney**. Kidney Foundation of Canada - Annual General Meeting. (Presentation to Patients/Public).
- 2010 May **Invited Speaker**. Age is a Determinant of the Renal Hemodynamic Responses to Clamped Hyperglycemia and Angiotensin II in Humans with Uncomplicated Type 1 Diabetes Mellitus. Canadian Society of Nephrology. Toronto, Ontario, Canada. Presenter(s): **David Cherney**. Canadian Society of Nephrology - Free Communications, 2010.
- 2009 Sep **Invited Speaker**. Review of dual blockade: beneficial or harmful? An overview of the rationale and literature review. Prevention in Renal Disease 8th Annual Conference Curriculum Committee. Toronto, Ontario, Canada. Presenter(s): **David Cherney**.
- 2008 May **Invited Speaker**. Endothelial Nitric Oxide Synthase Polymorphisms and the Renal Response to L-Arginine. Oral presentation, Canadian Society of Nephrology Meeting. Ontario, Canada.
- 2007 May **Invited Speaker**. The Differential Renal Hemodynamic Effect of Cyclooxygenase 2 Inhibition in Men and Women with Uncomplicated Type 1 Diabetes Mellitus. Canadian Society of Nephrology Meeting. Halifax,

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Nova Scotia, Canada.

2006 May **Invited Speaker.** The Impact of Renin Angiotensin System Modulation on the Hyperfiltration State in Type 1 Diabetes Mellitus. Canadian Society of Nephrology Meeting. Quebec City, Ontario, Canada.

### Presented and Published Abstracts

2014 Oct Characteristics of Canadians with 50 Years of Type 1 Diabetes: Preliminary Description of the Canadian Study of Longevity in Diabetes. (Trainee Presentation)

*Publication Details:*

Elise M. Halpern, Leif E. Lovblom, Alanna Weisman, Hillary Keenan, Michael Brent, **David Cherney**, Narinder Paul, Vera Brill, Bruce A. Perkins. Characteristics of Canadians with 50 Years of Type 1 Diabetes: Preliminary Description of the Canadian Study of Longevity in Diabetes. Canadian Diabetes Association Meeting. 2014 Oct. **Coauthor or Collaborator.**

### 3. PROVINCIAL / REGIONAL

#### Invited Lectures and Presentations

- 2017 Jan **Invited Speaker.** The diabetic kidney. Diabetes Clinical Trials Update Symposium. London, Ontario
- 2015 May **Invited Speaker.** From tubuloglomerular feedback to renal protection in diabetic nephropathy. Ontario, Canada. London Health Sciences Centre Division of Nephrology Rounds.
- 2015 May **Invited Speaker.** From tubuloglomerular feedback to renal protection in diabetic nephropathy. Ontario, Canada. Scarborough General Hospital Division of Nephrology Rounds.
- 2015 May **Invited Speaker.** From tubuloglomerular feedback to renal protection in diabetic nephropathy. Ontario, Canada. Oshawa General Hospital Division of Nephrology Rounds.
- 2015 Mar **Invited Speaker.** SGLT2 inhibition and renal protection in diabetes. Quebec, Canada. Kingston General Hospital, Combined Nephrology-Endocrinology.
- 2014 Oct **Invited Speaker.** SGLT2 inhibition and diabetic nephropathy. Greater Toronto Area Nephrology Journal Club. Toronto, Ontario, Canada. Presenter(s): **David Cherney.** LMC Diabetes and Endocrinology Visiting Speaker Series.
- 2014 Sep **Invited Speaker.** Diabetic Nephropathy: Cases - Toronto Summit on Diabetes and Cardiovascular Disease. University of Toronto. Toronto, Ontario, Canada. Presenter(s): **David Cherney.** Toronto Summit on Diabetes and Cardiovascular Disease.
- 2014 Sep **Invited Speaker.** Releasing the potential of SGLT2 inhibitor therapy in type 2 diabetes. University of Toronto. Toronto, Ontario, Canada. Presenter(s): **David Cherney.** Toronto Summit on Diabetes and Cardiovascular Disease.
- 2014 May **Invited Speaker.** "Diabetes and Kidney Disease". LMC Diabetes and Endocrinology. Toronto, Ontario, Canada. Presenter(s): **David Cherney.** LMC Diabetes and Endocrinology Visiting Speaker Series.
- 2013 Apr **Invited Speaker.** Advances in the management of diabetic kidney disease. University of Toronto Banting and Best Diabetes Centre Clinical Workshop. Toronto, Ontario, Canada. Presenter(s): **David Cherney.** University of Toronto Banting and Best Diabetes Centre.
- 2013 Mar **Invited Speaker.** New Therapies in Humans with Type 1 Diabetes Mellitus. Sunnybrook Nephrology Noon Rounds. Toronto, Ontario, Canada. Presenter(s): **David Cherney.** Sunnybrook Division of Nephrology.
- 2012 Apr **Invited Speaker.** Controversies in the management of diabetic kidney disease. University of Toronto

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Banting and Best Diabetes Centre Clinical Workshop. Toronto, Ontario, Canada. Presenter(s): **David Cherney**. University of Toronto Banting and Best Diabetes Centre.

- 2012 Apr **Invited Speaker**. Novel therapies fore the treatment of diabetic nephropathy. University Health Network Endocrinology Rounds. Toronto, Ontario, Canada. Presenter(s): **David Cherney**. University Health Network Division of Endocrinology.
- 2012 Feb **Invited Speaker**. New Therapies in Humans with Type 1 Diabetes Mellitus. Sunnybrook Nephrology Noon Rounds. Toronto, Ontario, Canada. Presenter(s): **David Cherney**. Sunnybrook Division of Nephrology.
- 2009 Dec **Invited Speaker**. Blood vessel function in type 1 diabetes mellitus. Guelph Insulin Pumpers Association. Guelph, Ontario, Canada. Presenter(s): **David Cherney**. (Presentation to Patients/Public).
- 2008 Nov **Invited Speaker**. Hemodynamic function in type 1 diabetes mellitus. The Ottawa Hospital. Toronto, Ontario, Canada.
- 2008 Sep **Invited Speaker**. Acute Decompensated Congestive Heart Failure and the Cardiorenal Syndrome. Merck Canada Inc. Toronto, Ontario, Canada. Presenter(s): Dr. **David Cherney**.

#### 4. LOCAL

##### Invited Lectures and Presentations

- 2015 May **Invited Speaker**. "SGLT2 Inhibitors and the Kidney: the potential for nephroprotection", City Wide Endocrinology Rounds, Centre Hospitalier Universitaire de Montreal (CHUM), Montreal, September 2015
- 2015 May **Invited Speaker**. "SGLT2 Inhibitors and the Kidney: the potential for nephroprotection", City Wide Nephrology Rounds, Hotel Dieu de Quebec, Quebec City, September 2015
- 2015 May **Invited Speaker**. From tubuloglomerular feedback to renal protection in diabetic nephropathy. Ontario, Canada. St Michael's Hospital Division of Nephrology Rounds.
- 2015 May **Invited Speaker**. From tubuloglomerular feedback to renal protection in diabetic nephropathy. Ontario, Canada. Heart and Stroke Richard Lewar Centre for Excellence Research Day.
- 2015 Mar **Invited Speaker**. SGLT2 inhibition and renal protection in diabetes. Quebec, Canada. Charlemoigne Hospital, Montreal, Combined Nephrology-Endocrinology Rounds.
- 2015 Feb **Invited Speaker**. SGLT2 inhibition and renal protection in diabetes. Quebec, Canada. Centre Hospitalier Universitaire de Laval Endocrinology Rounds.
- 2015 Feb **Invited Speaker**. SGLT2 inhibition and renal protection in diabetes. Ontario, Canada. Toronto East General Hospital Combined Nephrology-Endocrinology Rounds.
- 2014 Oct **Invited Speaker**. Physiological basis of SGLT2 inhibition and diabetic nephropathy. University of Toronto. Toronto, Ontario, Canada. Presenter(s): **David Cherney**. Toronto General Hospital Research Institute Research Day.
- 2014 Apr **Invited Speaker**. SGLT2 Inhibition and Hyperfiltration in Type 1 Diabetes. Women's College Hospital, Medical Grand Rounds. Toronto, Ontario, Canada. Presenter(s): **David Cherney**. Medical Grand Rounds.
- 2014 Jan **Invited Speaker**. SGLT2 Inhibition and Hyperfiltration in Type 1 Diabetes. Hospital for Sick Children, Division of Endocrinology Rounds. Toronto, Ontario, Canada. Presenter(s): **David Cherney**. Endocrinology Research Rounds.
- 2012 Jan **Invited Speaker**. Basic Concepts in Renal Vascular Hemodynamic Function. University Health Network City Wide Teaching Rounds. Toronto, Ontario, Canada. Presenter(s): **David Cherney**. Division of Nephrology City Wide Rounds, also offered as component of the Institute of Medical Sciences

Glomerulonephritis Lecture Series.

- 2010 Dec 6 **Invited Speaker.** December 6th 2010: Diabetic Nephropathy Mechanisms and Clinical Overview. University of Toronto kidney transplant student research training program. Toronto, Ontario, Canada. Presenter(s): **David Cherney.**
- 2010 Mar **Invited Speaker.** City Wide Nephrology Rounds “Metabolic memory in humans: insights from the RAS Study”, March 2010. City-Wide Nephrology Grand Rounds, University Health Network. Toronto, Ontario, Canada.
- 2010 Feb **Invited Speaker.** Sunnybrook Nephrology Noon Rounds: Novel Therapies to Correct Hyperfiltration in Humans with Type 1 Diabetes Mellitus, February 2010. Sunnybrook Health Sciences Centre Division of Nephrology. Toronto, Ontario, Canada.
- 2010 Feb **Invited Speaker.** Hemodynamic function in humans with type 1 diabetes mellitus. Division of Cardiology, St. Michael’s Hospital. Toronto, Ontario, Canada. Presenter(s): **David Cherney.** Cardiology Research Rounds, Division of Cardiology, St. Michael’s Hospital, 2010.
- 2010 Feb **Invited Speaker.** New vascular agents in humans with type 1 diabetes mellitus. Cardiology Research Rounds, Division of Cardiology, Mount Sinai Hospital. Toronto, Ontario, Canada. Presenter(s): **David Cherney.** Cardiology Research Rounds, Division of Cardiology, Mount Sinai Hospital, 2010.
- 2009 Dec **Invited Speaker.** Hemodynamic abnormalities in humans with type 1 diabetes mellitus. Dr. Gary Newton. Toronto, Ontario, Canada. Presenter(s): **David Cherney.** Cardiology Research Rounds, Division of Cardiology, Mount Sinai Hospital.
- 2009 Dec **Invited Speaker.** Hemodynamic function in type 1 diabetes mellitus. City-wide endocrine research rounds, 2009. University of Toronto Endocrine Division. Toronto, Ontario, Canada. Presenter(s): **David Cherney.** City-wide endocrine research rounds, 2009.
- 2009 Sep **Speaker.** Research in progress rounds, “Hemodynamic function and type 1 diabetes mellitus in humans”, Division of Nephrology, September 2009. University Health Network Division of Nephrology. Toronto, Ontario, Canada.
- 2008 Nov **Invited Speaker.** New pharmacologic therapies in type 1 diabetes mellitus. Endocrine rounds, Women’s College Hospital. Toronto, Ontario, Canada.
- 2008 Oct **Invited Speaker.** The renal hyperfiltration state in type 1 diabetes mellitus. City-Wide Medical Grand Rounds, Mount Sinai Hospital. Toronto, Ontario, Canada.
- 2008 Feb **Invited Speaker.** “Basic concepts in renal physiology (Glomerulonephritis Course)”. City-Wide Nephrology Teaching Rounds, University of Toronto. Toronto, Ontario, Canada.
- 2008 Feb **Invited Speaker.** “Pathophysiology of diabetic nephropathy (Glomerulonephritis Course)”. City-Wide Nephrology Teaching Rounds, University of Toronto. Toronto, Ontario, Canada.
- 2007 Nov **Speaker.** The Pathophysiology of Hypertension: the Pump, the Pipes and the Kidney in Humans, City-Wide Nephrology Teaching Rounds, University of Toronto, 2008. City-Wide Nephrology Rounds, University of Toronto. Toronto, Ontario, Canada.
- 2007 Jun **Invited Speaker.** Cyclooxygenase 2-Renin Angiotensin System Interactions in Type 1 Diabetes Mellitus. City-Wide Nephrology Rounds, University of Toronto. Toronto, Ontario, Canada.
- 2007 May **Speaker.** Impact of Cyclooxygenase 2 Interactions in Subjects with Uncomplicated Type 1 Diabetes Mellitus. Clinician Scientist Research Day, University of Toronto. Toronto, Ontario, Canada.
- 2007 May **Invited Speaker.** Mechanisms of Hyperfiltration in Humans with Type 1 Diabetes Mellitus. Department of Medicine. Toronto, Ontario, Canada. Medical Grand Rounds, Mount Sinai Hospital and University Health Network.
- 2006 Sep **Speaker.** Research in progress rounds, “Protein Kinase C inhibition and Diabetic Nephropathy”, Division

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of Nephrology, September 2006. University Health Network Division of Nephrology. Toronto, Ontario, Canada.

- 2006 May **Invited Speaker.** Modulation of prostaglandins normalizes glomerular filtration rate in hyperfiltering patients with type 1 diabetes mellitus. University of Toronto Clinician Scientist Research Day. Toronto, Ontario, Canada.
- 2005 Apr **Speaker.** Vascular access: grafts and fistulas, City Wide Nephrology Rounds, University of Toronto, April 2005. University of Toronto Division of Nephrology. Toronto, Ontario, Canada.
- 2005 Mar **Speaker.** Dialysis Seminar: Calcium, Phosphate and PTH Metabolism in Dialysis Patients, City Wide Nephrology Rounds, University of Toronto, March 2005. University of Toronto Division of Nephrology. Toronto, Ontario, Canada.
- 2005 Jan **Speaker.** Dialysis Seminar: Intradialytic Hypotension, City Wide Nephrology Rounds, University of Toronto, January 2005. University of Toronto Division of Nephrology. Toronto, Ontario, Canada.
- 2004 Sep **Speaker.** Research in progress rounds, "Cyclooxygenase-2 Inhibition and Diabetes Mellitus", Division of Nephrology, September 2004. University Health Network Division of Nephrology. Toronto, Ontario, Canada.

## 5. OTHER

### Presented and Published Abstracts

- 2014 Nov Effect of Hyperglycemia on Plasma Uric Acid Levels in Patients with Uncomplicated Type 1 Diabetes.
- Publication Details:*  
Yuliya Lytvyn, Marko Skrtic, Ron Har, Paul Yip, **David Z. I. Cherney**. Effect of Hyperglycemia on Plasma Uric Acid Levels in Patients with Uncomplicated Type 1 Diabetes. American Society of Nephrology Meeting, 2014. 2014 Nov. **Principal Author.**
- 2014 Nov A multicenter clinical trial of allopurinol to prevent early renal function loss (PERL) in type 1 diabetes.
- Publication Details:*  
**Cherney DZ**, Perkins BA, Mauer M, Doria A. A multicenter clinical trial of allopurinol to prevent early renal function loss (PERL) in type 1 diabetes. American Society of Nephrology Meeting, 2014. 2014 Nov. **Principal Author.**
- 2014 Nov Sodium glucose cotransporter 2 inhibition with empagliflozin reduces microalbuminuria in patients with type 2 diabetes.
- Publication Details:*  
**David Cherney**, Maximilian von Eynatten, Soeren S. Lund, Stefan Kaspers, Susanne Crowe, Hans J. Woerle, Thomas Hach. Sodium glucose cotransporter 2 inhibition with empagliflozin reduces microalbuminuria in patients with type 2 diabetes. European Association for the Study of Diabetes, Vienna 2014. 2014 Nov. **Principal Author.**
- 2014 Jun The Intraglomerular Hemodynamic Profile of Hyperfiltration Before and After SGLT2 Inhibition in Patients with Type 1 Diabetes [Late breaking Abstracts].
- Publication Details:*  
Marko Skrtic, Gary Yang, Bruce A. Perkins, Nima Soleymanlou, Maximilian von Eynatten, Hans J. Woerle, Odd Erik Johansen, Uli C. Broedl, Thomas Hach, Melvin Silverman, **David Z.I. Cherney** •. The Intraglomerular Hemodynamic Profile of Hyperfiltration Before and After SGLT2 Inhibition in Patients with Type 1 Diabetes [Late breaking Abstracts]. American Diabetes Association Meeting, Philadelphia, 2014. 2014 Jun. **Principal Author.**

- 2014 Apr Chronic Inflammation in Heart Failure Patients with Mechanical Circulatory Support.
- Publication Details:*  
Liza Grosman-Rimon, Michael A. McDonald, Stacey Pollock Bar-Ziv, Ira Jacobs, Andrzej Chruscinski, Laura C. Tumiati, Amelia G. Mociornita, Arash Ghashghai, Daniel J. Shogilev, David Z. Cherney,\* and Vivek Rao\*. Chronic Inflammation in Heart Failure Patients with Mechanical Circulatory Support. International Society for Heart and Lung Transplantation meeting, April 2014. 2014 Apr. **co-senior author**.
- 2013 Nov Exploring Myocardial Function in Adolescent Type 1 Diabetes. – ORAL PRESENTATION.
- Publication Details:*  
Bradley T.J., Storch C., **Cherney D.Z.I.**, Daneman D., Deda L., Dunger D.B., Elia Y., Har R., Hui W., Mahmud F.H., Moineddin R., Sochett E., Mertens L. Exploring Myocardial Function in Adolescent Type 1 Diabetes. – ORAL PRESENTATION. Association for European Paediatric and Congenital Cardiology, Barcelona. 2013 Nov. **Coauthor or Collaborator**.
- 2013 Nov The Effect of Albumin:Creatinine Ratio on Standard Echocardiographic Parameters in Adolescent Type 1 Diabetes.
- Publication Details:*  
Bradley T.J., Storch C., **Cherney D.Z.I.**, Daneman D., Deda L., Dunger D.B., Elia Y., Har R., Hui W., Mahmud F.H., Moineddin R., Mertens L., Sochett E. The Effect of Albumin:Creatinine Ratio on Standard Echocardiographic Parameters in Adolescent Type 1 Diabetes. Association for European Paediatric and Congenital Cardiology, Barcelona, 2013. 2013 Nov. **Coauthor or Collaborator**.
- 2013 Nov A comparison of short-term exposure of once-daily extended release Tacrolimus (Advagraf) and twice-daily Tacrolimus (Prograf) on 24 hour renal hemodynamic function in healthy volunteers.
- Publication Details:*  
**Cherney DZI**, Zaltzman J. A comparison of short-term exposure of once-daily extended release Tacrolimus (Advagraf) and twice-daily Tacrolimus (Prograf) on 24 hour renal hemodynamic function in healthy volunteers. American Society of Nephrology. 2013 Nov. **Principal Author**.
- 2013 Nov Renal Hyperfiltration and Urinary Cytokines/Chemokines in Adolescents With Type 1 Diabetes.
- Publication Details:*  
Har R, Scholey JW, Daneman D, Mahmud FH, Moineddin R, Ostrovsky M, Deda L, Elia Y, Sochett EB, Reich HN, Cherney DC. Renal Hyperfiltration and Urinary Cytokines/Chemokines in Adolescents With Type 1 Diabetes. American Society of Nephrology. 2013 Nov. **Senior Responsible Author**.
- 2013 Jun The Effects of Long-Term Continuous Flow Left Ventricular Assist Device (CF-LVAD) Support on Inflammation.
- Publication Details:*  
Liza Grosman-Rimon, Michael A. McDonald, Stacey Pollock Bar-Ziv, Ira Jacobs, Andrzej Chruscinski, Laura C. Tumiati, Amelia G. Mociornita, Arash Ghashghai, Daniel J. Shogilev, David Z. Cherney,\* and Vivek Rao\*. The Effects of Long-Term Continuous Flow Left Ventricular Assist Device (CF-LVAD) Support on Inflammation. American Heart Association meeting. 2013 Jun. **co-senior author**.
- 2013 Jan Hyperfiltration, the RAS paradox and the effect on blood pressure in patients with uncomplicated type 1 diabetes.
- Publication Details:*  
Yang G, Maahs DM, Perkins BA, **Cherney DZI**. Hyperfiltration, the RAS paradox and the effect on blood pressure in patients with uncomplicated type 1 diabetes. Canadian Society of Nephrology Meeting. **Senior Responsible Author**.
- 2013 Jan The effect of renal hyperfiltration on urinary cytokines/chemokines in type 1 diabetes mellitus: a pilot

study.

*Publication Details:*

Har, R, Scholey JW, Daneman D, Mahmud F, Sochett EB, Reich HN, **Cherney DZI**. The effect of renal hyperfiltration on urinary cytokines/chemokines in type 1 diabetes mellitus: a pilot study. Canadian Society of Nephrology Meeting. **Co-Senior Responsible Author**.

2013 The Effect of SGLT-2 Inhibition on Renal Hyperfiltration in Patients with Uncomplicated Type 1 Diabetes Mellitus: A Pilot Study.

*Publication Details:*

**Cherney DZI**, Perkins BA, Maione M, Lai V, Lee A, Fagan N, Woerle HJ, Johansen OE, Soleymanlou N, Brödl U, Eynatten, M. The Effect of SGLT-2 Inhibition on Renal Hyperfiltration in Patients with Uncomplicated Type 1 Diabetes Mellitus: A Pilot Study. American Diabetes Association. **Principal Author**.

2013 Sodium Glucose Cotransport-2 Inhibition and Glycemic Control in Type 1 Diabetes.

*Publication Details:*

Perkins BA, **David Cherney**, Helen Partridge, Nima Soleymanlou, Holly Tschirhart, Bernard Zinman, Nora Fagan, Stefan Kaspers, Hans-Juergen Woerle, Uli C. Broedl, Odd Erik Johansen. Sodium Glucose Cotransport-2 Inhibition and Glycemic Control in Type 1 Diabetes. American Diabetes Association. **Co-Principal Author**.

2013 The sodium-glucose cotransport-2 (SGLT2) inhibitor empagliflozin improves glycemic control in patients with type 1 diabetes: a single-arm clinical trial (ORAL PRESENTATION).

*Publication Details:*

Perkins BA, **Cherney DZI**, Partridge H, Soleymanlou N, Tschihart H, Zinman B, Fagan N, Kaspers S, Woerle HJ, Broedl U, Johansen OE. The sodium-glucose cotransport-2 (SGLT2) inhibitor empagliflozin improves glycemic control in patients with type 1 diabetes: a single-arm clinical trial (ORAL PRESENTATION). European Society for the Study of Diabetes (EASD), Barcelona. 2013. **Co-Principal Author**.

2013 The sodium-glucose cotransport-2 (SGLT2) inhibitor empagliflozin improves glycemic control in patients with type 1 diabetes: a single-arm clinical trial (ORAL PRESENTATION).

*Publication Details:*

Perkins BA\*, **Cherney DZI\***, Partridge H, Soleymanlou N, Tschihart H, Zinman B, Fagan N, Kaspers S, Woerle HJ, Broedl U, Johansen OE. \*primary co-authors. The sodium-glucose cotransport-2 (SGLT2) inhibitor empagliflozin improves glycemic control in patients with type 1 diabetes: a single-arm clinical trial (ORAL PRESENTATION). International Diabetes Federation Meeting. 2013. **Co-Principal Author**.

2013 The sodium-glucose cotransport-2 (SGLT2) inhibitor empagliflozin improves glycemic control in patients with type 1 diabetes: a single-arm clinical trial (ORAL PRESENTATION).

*Publication Details:*

Perkins BA, **Cherney DZI**, Partridge H, Soleymanlou N, Tschihart H, Zinman B, Fagan N, Kaspers S, Woerle HJ, Broedl U, Johansen OE. The sodium-glucose cotransport-2 (SGLT2) inhibitor empagliflozin improves glycemic control in patients with type 1 diabetes: a single-arm clinical trial (ORAL PRESENTATION). European Society for the Study of Diabetes (EASD), Barcelona. 2013. **Co-Principal Author**.

2012 Preliminary Study: Increased Levels of cGMP in Recipients of Continuous Flow LVADs, Implications for Gastrointestinal Bleeding.

*Publication Details:*

Grosman-Rimon L, **Cherney DZI**, Rao V. Preliminary Study: Increased Levels of cGMP in Recipients of

Continuous Flow LVADs, Implications for Gastrointestinal Bleeding. International Society for Heart and Lung Transplantation, 2012. **Coauthor or Collaborator.**

2012 Inflammatory Markers and Cardiopulmonary Exercise Testing in Continuous Flow LVAD Recipients.

*Publication Details:*

Grosman-Rimon L, **Cherney DZI**, Rao V. Inflammatory Markers and Cardiopulmonary Exercise Testing in Continuous Flow LVAD Recipients. International Society for Heart and Lung Transplantation, 2012. **Coauthor or Collaborator.**

2012 Long-term hemodynamic and molecular effects after renin angiotensin system blockade in humans with type 1 diabetes mellitus.

*Publication Details:*

**Cherney DZI**, Zinman B, Moineddin R, Lai V, Miller JA, Scholey JW, Reich HN. Long-term hemodynamic and molecular effects after renin angiotensin system blockade in humans with type 1 diabetes mellitus. American Society of Nephrology meeting 2012. **Principal Author.**

2011 Urinary markers of renal inflammation in subjects with type 1 diabetes and normoalbuminuria.

*Publication Details:*

**Cherney DZI**, Scholey JW, Daneman D, Dunger DB, Mahmud F, Dekker R, Elia Y, Sochett E, Reich HN. Urinary markers of renal inflammation in subjects with type 1 diabetes and normoalbuminuria. Canadian Society of Nephrology, Vancouver, 2011. **Principal Author.**

2011 Hyperfiltration and the effect of nitric oxide inhibition on renal hemodynamic and endothelial function in humans with uncomplicated type 1 diabetes mellitus.

*Publication Details:*

**Cherney DZI**, Reich HN, Jiang S, Lai V, Scholey JW, Sochett EB. Hyperfiltration and the effect of nitric oxide inhibition on renal hemodynamic and endothelial function in humans with uncomplicated type 1 diabetes mellitus. American Society of Nephrology, 2011. **Principal Author.**

2010 Transdermal Contraception (EVRA Patch) and the Renin Angiotensin System.

*Publication Details:*

Odutayo A\*, **Cherney DZI\***, Miller JA, Hladunewich M \*co-principal authors. Transdermal Contraception (EVRA Patch) and the Renin Angiotensin System. Winner, Oral presentation Trainee Awards, Canadian Society of Nephrology, 2010. **Co-Principal Author.**

2010 Age is a Determinant of the Renal Hemodynamic Responses to Clamped Hyperglycemia and Angiotensin II in Humans with Uncomplicated Type 1 Diabetes Mellitus.

*Publication Details:*

**Cherney DZI**, Reich HN, Miller JA, Scholey JW, Lai V, Zinman B, Dekker MG, Sochett EB. Age is a Determinant of the Renal Hemodynamic Responses to Clamped Hyperglycemia and Angiotensin II in Humans with Uncomplicated Type 1 Diabetes Mellitus. Oral abstract presentation, the Canadian Society of Nephrology, 2010. **Principal Author.**

2010 The Angiotensin II Receptor Type 2 Polymorphism Influences Hemodynamic Function and Circulating RAS Mediators in Normotensive Humans.

*Publication Details:*

**Cherney DZI**, Lai V, Miller JA, Scholey JW, Reich HN. The Angiotensin II Receptor Type 2 Polymorphism Influences Hemodynamic Function and Circulating RAS Mediators in Normotensive Humans. American Society of Nephrology Meeting, 2010. **Principal Author.**

2009 The Effect of Protein Kinase C-beta Inhibition on Endothelial Function and Arterial Stiffness in Subjects with Type 1 Diabetes Mellitus: A Pilot Study.

*Publication Details:*

**Cherney DZI**, Scholey JW, Lai V, Slorach C, Zinman B, Miller JA, Bradley TJ. The Effect of Protein Kinase C-beta Inhibition on Endothelial Function and Arterial Stiffness in Subjects with Type 1 Diabetes Mellitus: A Pilot Study. Canadian Society of Nephrology, 2009. **Principal Author.**

2009 Serum Cystatin C Reflects the Acute Changes in Glomerular Filtration Rate Provoked by Hyperglycemia and Angiotensin II in Subjects With Type 1 Diabetes.

*Publication Details:*

**Cherney DZI**, Sochett EB, Dekker MG, Perkins BA. Serum Cystatin C Reflects the Acute Changes in Glomerular Filtration Rate Provoked by Hyperglycemia and Angiotensin II in Subjects With Type 1 Diabetes. Oral abstract presentation, the American Society of Nephrology, 2009. **Principal Author.**

2008 The renal and peripheral vascular effects of protein kinase C inhibition in type 1 diabetes mellitus.

*Publication Details:*

**Cherney DZI**, Konvalinka A, Zinman B, Diamandis E, Soosaipillai A, Reich H, Lorraine J, Lai V, Scholey J, Miller JA. The renal and peripheral vascular effects of protein kinase C inhibition in type 1 diabetes mellitus. Journal of the American Society of Nephrology [Abstract], 2008. **Principal Author.**

2008 Endothelial Nitric Oxide Synthase Gene Polymorphisms and the Renal Hemodynamic Response to L-Arginine.

*Publication Details:*

Cherney DZI Scholey JW, Cattran DC, Reich H, Page A, Lai V, Miller JA. Endothelial Nitric Oxide Synthase Gene Polymorphisms and the Renal Hemodynamic Response to L-Arginine. Oral presentation Canadian Society of Nephrology Meeting, May 2008. **Principal Author.**

2007 The Impact of Cyclooxygenase 2 Modulation on the Hyperfiltration State in Uncomplicated Type 1 Diabetes Mellitus.

*Publication Details:*

**Cherney DZI**, Miller JA, Scholey JW, Bradley TJ, Slorach C, Curtis JR, Dekker MG, Sochett EB. The Impact of Cyclooxygenase 2 Modulation on the Hyperfiltration State in Uncomplicated Type 1 Diabetes Mellitus. March 2007. Supervisor Dr. Judith Miller  
• Poster presentation Canadian Society of Nephrology Meeting, May 2007. **Principal Author.**

2007 Cyclooxygenase 2/Angiotensin II Interactions in the Control of Hemodynamic Function in Type 1 Diabetes Mellitus.

*Publication Details:*

**Cherney DZI**, Miller JA, Scholey JW, Bradley TJ, Slorach C, Curtis JR, Dekker MG, Sochett EB. Cyclooxygenase 2/Angiotensin II Interactions in the Control of Hemodynamic Function in Type 1 Diabetes Mellitus. March 2007. Supervisor Dr. Judith Miller  
• Poster presentation Canadian Society of Nephrology Meeting, May 2007. **Principal Author.**

2007 The Differential Renal Hemodynamic Effect of Cyclooxygenase 2 Inhibition in Men and Women with Uncomplicated Type 1 Diabetes Mellitus.

*Publication Details:*

**Cherney DZI**, Scholey JW, Bradley TJ, Slorach C, Curtis JR, Dekker MG, Sochett EB, Miller JA. The Differential Renal Hemodynamic Effect of Cyclooxygenase 2 Inhibition in Men and Women with Uncomplicated Type 1 Diabetes Mellitus. March 2007. Supervisor Dr. Judith Miller  
• Abstract, Institute of Medical Sciences, University of Toronto, 2007  
• Poster presentation Canadian Society of Nephrology Meeting, May 2007. **Principal Author.**

2007 The Effect of Oral Contraceptives on the Nitric Oxide System and Renal Function. [Abstract].

*Publication Details:*

**Cherney DZI**, Scholey JW, Cattran DC, Kang AK, Zimpelmann J, Kennedy C, Lai V, Burns KD, Miller JA. The Effect of Oral Contraceptives on the Nitric Oxide System and Renal Function. [Abstract]. Supervisor Dr. Judith Miller.

- Poster presentation American Society of Nephrology Meeting, November 2007. **Principal Author.**

2005 The Modulatory Effects of Estrogen on Nitric Oxide-Mediated Changes in Renal Hemodynamic Function in Normal Humans.

*Publication Details:*

**Cherney DZI**, Lai VS, Miller JA. The Modulatory Effects of Estrogen on Nitric Oxide-Mediated Changes in Renal Hemodynamic Function in Normal Humans. January 2005. Supervisor: Dr. JA Miller

- Poster presentation Canadian Society of Nephrology Meeting, May 2005
- Poster presentation American Society of Nephrology Meeting, November 2005. **Principal Author.**

2004 The Natural History and Outcome of Incarcerated Abdominal Hernias in Peritoneal Dialysis Patients. [Abstract].

*Publication Details:*

**Cherney DZI**, Chu M, Siccion Z, Bargman JM. The Natural History and Outcome of Incarcerated Abdominal Hernias in Peritoneal Dialysis Patients. [Abstract]. February 2004. Supervisor: Dr. J.M. Bargman

- Poster presentation at the Annual Dialysis Conference, San Antonio, Texas 2004
- Poster presentation at the Canadian Society of Nephrology Meeting, Toronto, Ontario, 2004
- Poster presentation at the International Society of Peritoneal Dialysis Meeting, Amsterdam, Netherlands, 2004. **Principal Author.**

2004 Gender Differences in Renal Responses to Hyperglycemia and Angiotensin Converting Enzyme Inhibition in Type 1 Diabetes. [Abstract].

*Publication Details:*

**Cherney DZI**, Sochett EB, Miller JA. Gender Differences in Renal Responses to Hyperglycemia and Angiotensin Converting Enzyme Inhibition in Type 1 Diabetes. [Abstract]. November 2004. Supervisor: Dr. JA Miller

- Poster presentation at "The Science of Diabetes Complications: Implications for Novel Therapy" International Symposium, Toronto, 2004
- Oral presentation, Canadian Society of Nephrology Meeting, May 2005. **Principal Author.**

## G. Teaching and Design

### ACADEMIC HISTORY RELATED TO TEACHING:

My academic career history related to teaching started as the Chief Medical Resident at the University Health Network and Mount Sinai Hospital, University of Toronto. In that role, I was responsible for teaching medical students and residents in didactic small group sessions and at the bedside. In addition, I organized noon teaching rounds for the housestaff, and was given the occasional opportunity to invite clinician scientists and investigators to discuss their areas of research. Because these rounds were so well received, I invited speakers on a monthly basis to give Bench to Bedside Rounds. This set of rounds continues to the present day. The aim of these rounds was to introduce the housestaff to various topics in basic science and how advances in molecular medicine have been translated to novel therapies. For example, Dr. Robert Rottapel spoke about his research in the area of hepatitis C and the rationale for anti-viral therapies based on molecular targets. I found that this approach to teaching was logical and facilitated knowledge retention, since the focus was on mechanisms and physiology, rather than memorization. I adopted this approach in many of my teaching sessions as a Chief Medical Resident, and was subsequently awarded the Outstanding Housestaff Award, Mount Sinai, Hospital, University of Toronto (2003), the Wightman-Berris Academy Award for Excellence in Clinical Teaching, University of Toronto (2003), and the University Health Network Clinical Teaching Award, University of Toronto (2003).

### TEACHING PROGRESS SINCE APPOINTMENT:

I have subsequently used this “first principles” approach with medical students and residents as an attending staff. When teaching about hypertension or heart failure, for example, the discussion begins with basic neurohormonal pathways, which then leads into a discussion of the rationale for therapeutic targets and ends with an epidemiological overview and evidence underlying the use of approved and investigational pharmacotherapeutic agents, and their rationale. My clinical teaching responsibilities currently range from leading an ASCM 1 Group, to teaching clerks in my ambulatory general nephrology and renal management clinics, to residents and fellows on the renal consultation service. In addition, I am responsible for teaching renal physiology components of the core nephrology city-wide rounds, including “Markers of Renal Function” and “Pathophysiology of Hypertension”.

At the graduate level, I have taught three students how to perform vascular studies (Dr. Yoav Yinon, Liza Grosman-Rimon, PhD candidate and Ronnie Har, MSc candidate). They have translated these techniques to their respective fields in obstetrics and gynecology (Y. Yinon), cardiac transplantation and cardiac resynchronization therapy (L. Grosman-Rimon) and diabetes (R. Har). Using these methods, Dr. Yinon completed his project and went on to publish his results in *Circulation* and to win the President’s Presenter Award from Society for Gynecologic Investigation (2009). Ms. Grosman-Rimon has successfully defended her PhD at the departmental level and will have her senate defense in the fall of 2013. Mr. Har has successfully obtained competitive graduate scholarship funding for 2 consecutive years and has published several papers in his area.

A critical component of interacting with students who work in my laboratory involves teaching them to present their data at meetings. This requires many hours of editing their presentations, teaching them how to maximize the impact of each slide, to speak slowly and clearly and preparing them to answer audience questions. The methods we have used to prepare students have been very successful: Dr. Yinon won the top award at his society’s meeting, while Ayo Adutayo, who was a first year medical student at the time, won the top award at the Canadian Society of Nephrology meeting in a competition that included medical residents, clinician-scientist trainees and PhD post-doctoral fellows.

#### TEACHING AND EDUCATION ACCOMPLISHMENTS SINCE APPOINTMENT:

I was fortunate to be awarded the New Faculty Excellence in Teaching Award, Wightman-Berris Academy, University Health Network, University of Toronto in 2008. I was subsequently awarded a Wightman-Berris Academy Individual Excellence Award in Undergraduate Teaching in May, 2013.

## 1. INNOVATIONS AND DEVELOPMENT IN TEACHING AND EDUCATION

- |                     |   |
|---------------------|---|
| 2001 Jul - 2002 Jun | Basic Science Rounds, Postgraduate MD, Mount Sinai Hospital and University Health Network, University of Toronto<br><i>Co-Initiator. designed to introduce medical residents to basic science concepts and its application in clinical medicine.</i>  |
| 2001 Jul - 2002 Jun | Critical Incident Rounds, Multilevel Education, University Health Network, University of Toronto<br><i>Initiator. a monthly noon rounds designed to discuss stressful housestaff experiences in order to promote discussion, guidance and information regarding medical student and resident support resources.</i> |

## H. Research Supervision

### 1. PRIMARY OR CO-SUPERVISION

#### Undergraduate Education

- |                     |  |
|---------------------|--|
| 2010 Jul - 2012 Dec | <b>Primary Supervisor.</b> B. Sc. Shan Jiang. Supervisee Position: Medical student, Ireland. <i>Nitric oxide and diabetes.</i> Completed 2012. |
|---------------------|--|

#### Graduate Education

- |                     |  |
|---------------------|--|
| 2015 Oct - 2017 Sep | <b>Primary Supervisor.</b> PhD. Harindra Rajasekeran, Physiology. Supervisee Position: MSc |
|---------------------|--|

- 2014 Apr – 2016 June **Primary Supervisor.** PhD. Yuliya Lytvyn, Pharmacology and Toxicology. Supervisee Position: PhD candidate, Supervisee Institution: University Health Network. *Uric acid and renal disease progression in type 1 diabetes mellitus.* (COMPLETED)
- 2011 Dec - 2014 Jun **Primary Supervisor.** MSc. Ronnie Har. Supervisee Position: MSc candidate, Supervisee Institution: University Health Network. *Early determinants of renal disease progression in type 1 diabetes mellitus.* Awards: BBDC Graduate student award, University of Toronto, \$21,000.00 (2013-2014)  
Hilda and William Courtney CLAYTON Paediatric Research Award, University of Toronto, \$5,000.00 (2013-2014)  
BBDC Graduate student award, University of Toronto, \$21,000.00 (2012-2013)  
Institute of Medical Science Graduate Student Award, University of Toronto, \$5,000.00 (2012-2013)  
BBDC Travel Award, University of Toronto, June 2013 (\$1000)  
School of Graduate Studies Travel Award, University of Toronto, 2013 (\$350).  
Collaborator(s): Etienne Sochett, Denis Daneman, Farid Mahmud, Heather Reich, James Scholey.
- 2008 Jul - 2009 Jun **Co-Supervisor.** MSc. Ana Konvalinka. Supervisee Position: Research fellow, Supervisee Institution: University Health Network. *The Effect of Protein Kinase C-beta Inhibition on Renal Hemodynamic Function and Urinary Biomarkers in Humans with Type 1 Diabetes Mellitus: A Pilot Study.* Collaborator(s): James Scholey, Heather Reich.

## Undergraduate MD

- 2013 Jan - present **Primary Supervisor.** Year 3. Gary Yang, Physiology. *Non-thesis Project.*

## Postgraduate MD

- 2013 Jan - present **Primary Supervisor.** Core Program. Marko Skrtic, Physiology. *Non-thesis Project.*
- 2008 Jul - 2009 Jun **Co-Supervisor.** Clinical Fellow. Yoav Yinon. Supervisee Position: Clinical fellow, Supervisee Institution: University Health Network. *Understanding the Mechanisms for Increased Cardiovascular Risk in Women with a History of Pre-eclampsia and Intra-uterine Growth Restriction – An Assessment of Post-partum Endothelial Function.* Awards: President's Presenter Award from Society for Gynecologic Investigation (Chicago). Collaborator(s): Michelle Hladunewich, John Kingdom. Completed 2009.

## 2. OTHER SUPERVISION

### Graduate Education

#### Thesis Committee Member

- 2009 Jul - 2013 Jun **PhD.** Grosman-Rimon, Liza. Supervisee Position: PhD Candidate, Supervisee Institution: University Health Network. *Arterial stiffness and VO2max in left ventricular assist device (LVAD) recipients.* Collaborator(s): Dr. Vivek Rao. Completed 2013.
- 2009 Jul - 2012 Jun **MSc.** Namin, Zahra Asbaghi. Supervisee Position: MSc Candidate, Supervisee Institution: University Health Network. *Longer acting agent vs. shorter acting ACE inhibitors in people with diabetes and microalbuminuria.* Collaborator(s): Dr. Sheldon Tobe. Completed 2013.

#### Thesis Examiner

- 2013 May **MSc.** David Kepecs. Supervisee Position: MSc graduate. *Translating Early Outgrowth Cell Therapy into a Clinically Relevant Approach for Long Term Renoprotection.*
- 2012 Jul **MSc.** Supervisee Position: MSc, Supervisee Institution: University Health Network. *Angiogenic factors and diabetic nephropathy.* Collaborator(s): Dr. Andrew Advani. Completed

David Zev Isaac CHERNEY

2012.

2010 Dec - 2011 Jan

**PhD.** Arash Ghashghai. Supervisee Position: MSc Candidate, Supervisee Institution: Faculty of Medicine. *Role of Nrf2 on ischemia reperfusion and calcineurin inhibitor mediated injury.* Collaborator(s): Dr. Vivek Rao. Completed 2013.

**IMS Annual Scientific Day Laidlaw Manuscript Competition Judge**

2011 Mar - 2011 May

**MSc and PhD level.**

**Undergraduate MD**

**Research co-supervisor**

2010 Jul - 2012 Dec

**Years 1-4.** Ayo Odutayo. Supervisee Position: Medical student, Supervisee Institution: University of Toronto. *1. Preeclampsia and vascular disease; 2. Cystatin C and diabetes.* Awards: CSN Trainee First Prize; Rhodes Scholarship (2013-2015). Collaborator(s): Dr. Michelle Hladunewich. Completed 2013.

**Postdoctoral Research Fellow (PhD)**

**Thesis Committee Member**

2013 Jul - present

Lovshin, Julie. Supervisee Position: Postdoctoral fellow, Supervisee Institution: Samuel Lunenfeld Research Institute of Mount Sinai Hospital. *Oral hypoglycemic agents and vascular function in type 2 diabetes.* Collaborator(s): Dr. Daniel Drucker. Completed 2016.