

Canadian Brain Bank Network to advance Alzheimer research

To advance understanding of dementia and contribute to the search for new treatments, the Canadian Institutes of Health Research (CIHR) are investing more than \$1 million over five years to establish a Canadian brain bank network linked to the international Alzheimer's Disease Neuroimaging Initiative (ADNI) as part of its Dementia Research Strategy. The Canadian ADNI BraIn bank Network, or CABIN, will provide needed infrastructure to contribute to the ADNI program and, more broadly, support brain donation and tissue banking for dementia research programs in Canada. CABIN will be administered by **Dr. Howard Chertkow** at the Lady Davis Institute.

The project involves using advanced neuroimaging technologies to track the progression of dementia and develop imaging approaches to diagnosis and monitoring of future therapies.

A key component of the initiative includes the study of the brains of participants who eventually die from the disease. Researchers carry out brain autopsies to determine the effect of the disease and collect tissue samples to identify biomarkers that may be used to permit early detection.

"We are taking our place among the international leaders in dementia research," asserted Dr. Chertkow. "Thanks to those patients who generously donate their brains for research, we will have the opportunity to explore the significant variations in how dementia expresses itself and to use this valuable information to advance the search for new treatments."

More than 400,000 Canadians aged 65 and over live with dementia, including Alzheimer's disease, which accounts for approximately 70 percent of cases. The cause of this degenerative brain disease is largely unknown and no effective treatment exists.

In announcing the funding, Anthony Housefather, Member of Parliament for Mont Royal, said, "McGill University and the Jewish General Hospital are world leaders in brain research and the treatment of dementia and other neurodegenerative diseases."



Announcing funding for CABIN, left to right, Joanne Goldberg, Associate Director of the CIHR Institute on Aging, Dr. Gerald Batist, Acting Director of the LDI, Dr. Yves Joannette, Scientific Director of the CIHR Institute on Aging, Dr. Howard Chertkow, Member of Parliament Anthony Housefather, Dr. Nahum Sonnenberg, James McGill Professor of Biochemistry, and Alan Maislin, Chair of the Board of the CIUSSS of West-Central Montreal

New funding to strengthen proteomics research

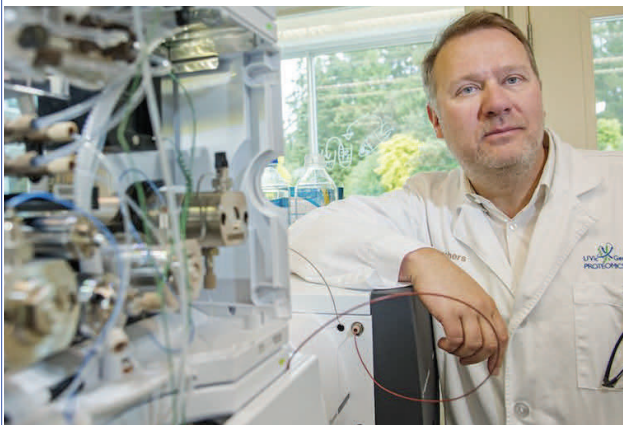
New funding from Genome Canada and Genome BC will serve to enhance efforts to translate proteomic and metabolomic research into new approaches for diagnosis and treatment of cancer, according to **Dr. Christoph Borchers**, Director of the Segal Cancer Proteomics Centre, who leads a pan-Canadian protein research platform.

Proteomics focuses on understanding the structure and function of proteins, while metabolomics is the complementary study of the molecules used, and produced by, cellular processes. These allow even deeper analysis than genomics of the exact biological processes at work in cancer.

“Drugs target proteins,” explains Dr. Borchers, who holds the Segal Family Chair in Molecular Oncology at McGill University, “so when we can identify the protein that is active in the cancer, we can know precisely which treatment will be most effective on the patient. We have never before been able to so accurately evaluate the processes at work within the tumor and, therefore, to target therapies with such precision.”

Dr. Borchers serves as the director of the UVic-Genome BC Proteomics Centre, which is the most advanced proteomics research facility in Canada. It is home to the technologies that are central to this national effort. Clinical samples will be gathered from patients at the Segal Cancer Centre for screening.

“Extending proteomics and metabolomics centres into a Canada-wide network provides additional and complementary capacity and capabilities,” he said, “which means faster sample processing time.”



“Significant breakthrough” in approach to osteoporosis

A regimen of a novel bone anabolic medication (which builds bone mass) followed by an antiresorptive agent (which maintains bone mass) has been shown to significantly reduce the risk of fracture among postmenopausal women with severe osteoporosis, according to results of a clinical trial published in [The New England Journal of Medicine](#). **Dr. Andrew Karaplis**, one of the authors, who had patients participating in this phase 3 clinical trial, characterized the study’s results as a “significant breakthrough.”

Over a two-year period, 4,093 women with osteoporosis and a fragility fracture were randomly assigned to one of two groups. The first received romosozumab for a year, a new monoclonal antibody against sclerostin that is effective at rapidly building bone mass by increasing bone formation and decreasing bone resorption. This was followed by alendronate, an antiresorptive agent commonly used as a first-line therapy for osteoporosis, that maintains existing levels of bone mass. The second group received only alendronate. The women who received romosozumab followed by alendronate were observed to have a 48% lower rate of new vertebral fractures when compared with those who only received alendronate. Moreover, the former group had a 19% lower risk of nonvertebral fractures, and 38% lower risk of hip fracture than those in the latter group.

“Keeping patients at a constant bone mass isn’t adequate when they are already suffering from osteoporosis and their bones aren’t strong enough to resist fracture,” said Dr. Karaplis. “We anticipated less fractures if we first succeeded in increasing the patient’s bone mass, followed by a regimen to sustain it.”

One safety concern did emerge over the course of the trial. During the first year, serious cardiovascular events were observed more frequently in the romosozumab-alendronate group (50 of 2040 patients, or 2.5%, as compared with 38 of 2014, or 1.9%, in the alendronate only group).

“Although the numbers are relatively small, this is a signal that requires further clarification,” said Dr. Karaplis.

CIHR Project Grant recipients

Researchers with very diverse interests from the Lady Davis Institute were awarded Project Grants by the Canadian Institutes of Health Research. Nearly 20% of applicants from the LDI were successful, significantly more than the national average of 15%. The projects being supported are:

Mark Eisenberg 2 yrs \$267,750

The Evaluating the Efficacy of E-Cigarette Use for Smoking Cessation (E3) Trial is the first large trial to address the important issue of electronic cigarettes for smoking cessation in Canada. This funding will ensure the successful completion of this landmark trial.

Marc Fabian 5 yrs \$784,125

To study how the cellular machinery that controls the activity of genetic material (messenger RNA) are recruited to specific mRNAs, and how, they shut down protein synthesis. Understanding these fundamental mechanisms may ultimately allow for the design of molecular diagnostics for screening diseases and potentially target them with novel therapies.

Kristian Filion 2 yrs \$175,950

To compare the chances of having a pregnancy complication between patients who use levothyroxine to treat subclinical hypothyroidism (SCH) and those who do not.

Christina Greenaway 3 yrs \$1,197,225

A study to provide policy makers with information so that the most effective screening and treatment programs can be developed to prevent complications and deaths from hepatitis C and to achieve hepatitis elimination in Canada.

Melissa Henry 1.6 yrs \$275,400

To test whether the PTSD Coach app as an e-intervention plus usual care reduces levels of anxiety in patients newly diagnosed with head and neck cancer, and to evaluate its impact on anxiety/depression, quality of life, biological indicators of stress, and psychosocial oncology uptake.

Nathalie Johnson 5 yrs \$1,208,700

To develop a novel way of monitoring patients with lymphoma and find a new immunotherapy regimen that would be effective in patients that are not cured with conventional chemotherapy by: 1) genetically profiling the tumors to determine when they become resistant; 2) determining how these lymphomas evade immune detection; 3) testing if targeting these evasion strategies may eradicate chemo-resistant lymphoma.

Claudia Kleinman 5 yrs \$753,525

To characterize the changes in gene expression that happen during human brain development, with a particular focus on genes and pathways involved in pediatric brain tumors; and to develop computational models to identify developmental pathways altered in these aggressive tumors.

Hemant Paudel 5 yrs \$673,200

Having demonstrated that inhibition of the early growth response 1 (Egr-1) protein in the hippocampus reduces levels of both hyperphosphorylated tau and beta amyloid, which are associated with Alzheimer disease (AD), this project will test the efficacy of a peptide derived from a physiological inhibitor of Egr-1 to treat AD.

Andrew Karaplis 5 yrs \$895,050

This study will use animal models and molecular biology techniques to understand how high levels of the hormone FGF23 affects bone development by altering the concentration of vitamin D locally in bone. It aims to show that, whether by genetics or by pharmacotherapy, this process can be altered to allow better bone formation to take place.

Wilson Miller 5 yrs \$692,325

Metastasis is a devastating diagnosis for patients, but even more so for new mothers diagnosed with pregnancy associated breast cancer (PABC). With more women delaying pregnancy, the incidence of PABC is predicted to rise. This project will target regulators of protein production as an innovative approach to block PABC metastasis.

Soham Rej 3 yrs \$413,000

A randomized controlled trial of automatic self-transcending meditation in treatment resistant late-life depression.

Vahab Soleimani 5 yrs \$665,550

Having discovered that maintenance of muscle stem cell pool depends on the functional interaction between Myogenic Regulatory Factors (MRFs) and a chromatin modifier called REST/NRSF, this project aims to identify the mechanism by which the interaction between MRFs and REST regulate satellite cell function and skeletal muscle regeneration.

Brett Thombs 2 yrs \$133,876

To develop and disseminate a reporting guideline, as an extension of the Consolidated Standards of Reporting Trials (CONSORT) statement for trials conducted in existing data structures, including researcher-generated cohorts, registries, electronic health records, and administrative databases.

Brett Thombs 1 yr \$100,000

A Bridge Grant for "The Scleroderma Support group Leader Education (SSLED) Program: a randomized controlled trial."

Ana Velly 2 yrs \$141,526

The objective of the current study is to determine whether opioid analgesics increase the risk of cancer.

Ana Velly 1 yr \$118,575

A pilot study to evaluate the feasibility of a larger randomized controlled trial (RCT) addressing pain management after surgery. This is a cost-effective and sensible effort as a first step to address this important clinical and public health issue.

9th Annual LDI Scientific Retreat

Friday May 4, 2018 8:15 am—5:30 pm

Location: La Plaza, 420 Sherbrooke St. West

Keynote Speakers:

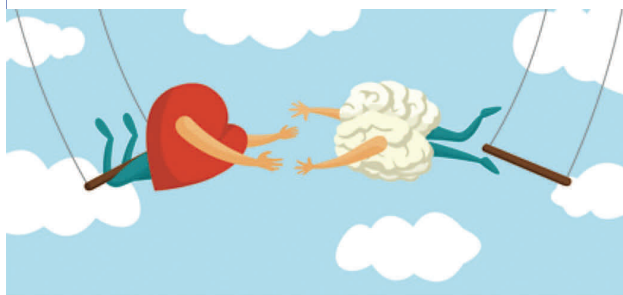
Dr. Eduardo Franco

James McGill Professor in the Departments of Oncology and Epidemiology & Biostatistics
Director, Division of Cancer Epidemiology
Chair, Department of Oncology
McGill University

Dr. Russell Jones

Associate Professor
Department of Physiology
McGill University

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13th Annual JGH Psychiatry Research Day

Connecting Mind and Body: Psychosocial Interventions in the Context of Treating Physical Diseases

Friday April 6, 2018 8:30 to 12:30

ICFP AMPHITHEATRE

4333, Chemin de la Côte Ste-Catherine

[Click here to register](#)

This conference is supported by a grant from the Gustav Levinschi Foundation

Comparative study of statins shows no significant effect on Alzheimer disease

Data from more than 465,000 statin users over a period of eighteen years has revealed that fungus-derived, or lipophilic, statins were not associated with decreased incidence of Alzheimer disease when compared with synthetic, or hydrophilic, statins. The research, published in *Neurology*, was undertaken in order to clarify whether certain characteristics of statins could influence their neuro-protective properties.

“There have been inconsistent claims over the years that statins may be associated with lower rates of Alzheimer disease,” said Dr. Paul Brassard, an epidemiologist at the Lady Davis Institute, the paper’s lead author. “However, most studies compare statin users with non-users. This is potentially problematic because it compares people with different health conditions. Ours is the first observational study to look only at patients who take statins. In other words, we were comparing like-with-like and, therefore, getting a more accurate picture of this particular association. Our finding was of an insignificant difference between the two types of statins in relation to the risk of Alzheimer disease.”

Nonetheless, the modest variation that was observed – where the lipophilic statins, those that are more quickly absorbed in fatty tissue, were associated with a higher risk of Alzheimer than the hydrophilic, which are less well-absorbed in fat – does call for further study. An [accompanying editorial](#) supports this conclusion, while applauding the paper for providing “important new information in the statin saga.”

“At this point, we don’t see that an association with Alzheimer risk ought to be a primary concern when clinicians are deciding upon which statin to give to their patients who are over sixty years of age,” Dr. Brassard said. “Our belief is that this should not be a consideration when choosing which statin to take.”

Prepared by the Research Communications Office, Lady Davis Institute at the Jewish General Hospital. Any suggestions with respect to content are welcome. Not to be reproduced without attribution.

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Selected Bibliography of Papers from the Lady Davis Institute (January—February 2018):

Cancer

[DICER1 mutations are frequent in adolescent-onset papillary thyroid carcinoma.](#) Wasserman JD, Sabbaghian N, Fahiminiya S, Chami R, Mete O, Acker M, Wu MK, Shlien A, de Kock L, **Foulkes WD**. J Clin Endocrinol Metab. 2018 Feb 21. doi: 10.1210/jc.2017-02698.

[Integration of distinct ShcA signaling complexes promotes breast tumor growth and tyrosine kinase inhibitor resistance.](#) Ha JR, Ahn R, Smith HW, Sabourin V, Hébert S, Cepeda Cañedo E, Im YK, Kleinman C, Muller WJ, **Ursini-Siegel J**. Mol Cancer Res. 2018 Feb 16. pii: molcanres.0623.2017. doi: 10.1158/1541-7786.MCR-17-0623.

[Downregulation of PERK activity and eIF2 \$\alpha\$ serine 51 phosphorylation by mTOR complex 1 elicits pro-oxidant and pro-death effects in tuberous sclerosis-deficient cells.](#) Krishnamoorthy J, Tenkerian C, Gupta J, Ghaddar N, Wang S, Darini C, Staschke KA, Ghosh A, Gandin V, Topisirovic I, Kristof AS, Hatzoglou M, Simos G, **Koromilas AE**. Cell Death Dis. 2018 Feb 15;9(3):254. doi: 10.1038/s41419-018-0326-2.

[Analysis of DICER1 in familial and sporadic cases of transposition of the great arteries.](#) Sabbaghian N, Digilio MC, Blue GM, Revil T, Winlaw DS, **Foulkes WD**. Congenit Heart Dis. 2018 Feb 5. doi: 10.1111/chd.12578.

[Distinct homologous recombination gene expression profiles after neoadjuvant chemotherapy associated with clinical outcome in patients with ovarian cancer.](#) Kessous R, Oceau D, Klein K, Tonin PN, Greenwood CMT, Pelmus M, Laskov I, Kogan L, Salvador S, Lau S, Yasmeen A, **Gotlieb WH**. Gynecol Oncol. 2018 Mar;148(3):553-558. doi: 10.1016/j.ygyno.2018.01.017.

[Verification of a proteomic biomarker panel to diagnose minor stroke and transient ischaemic attack: phase 1 of SpecTRA, a large scale translational study.](#) Penn AM, Bibok MB, Saly VK, Coutts SB, Lesperance ML, Balshaw RF, Votova K, Croteau NS, Trivedi A, Jackson AM, Hegedus J, Klourfeld E, Yu AYX, Zerna C, **Borchers CH**; SpecTRA study group. Biomarkers. 2018 Feb 12:1-14. doi: 10.1080/1354750X.2018.1434681.

[Del11q-positive CLL lymphocytes exhibit altered glutamine metabolism and differential response to GLS1 and glucose metabolism inhibition.](#) Galicia-Vázquez G, Smith S, **Aloyz R**. Blood Cancer J. 2018 Jan 24;8(1):13. doi: 10.1038/s41408-017-0039-2.

[Top-Down Hydrogen-Deuterium Exchange Analysis of Protein Structures Using Ultraviolet Photodissociation.](#) Brodie NI, Huguet R, Zhang T, Viner R, Zabrouskov V, Pan J, Petrotchenko EV, **Borchers CH**. Anal Chem. 2018 Feb 1. doi: 10.1021/acs.analchem.7b03655.

[Proteomic Profiling of Leishmania donovani Promastigote Subcellular Organelles.](#) Jardim A, Hardie DB, Boitz J, **Borchers CH**. J Proteome Res. 2018 Mar 2;17(3):1194-1215. doi: 10.1021/acs.jproteome.7b00817.

[Multiple DICER1-related tumors in a child with a large interstitial 14q32 deletion.](#) de Kock L, Geoffrion D, Rivera B, Wagener R, Sabbaghian N, Bens S, Ellezam B, Bouron-Dal Soglio D, Ordóñez J, Sacharow S, Polo Nieto JF, Guillerman RP, Vujanac GM, Priest JR, Siebert R, **Foulkes WD**. Genes Chromosomes Cancer. 2018 Jan 9. doi: 10.1002/gcc.22523.

[The genomic landscape of two Burkitt lymphoma cases and derived cell lines: comparison between primary and relapse samples.](#) Wever CM, Geoffrion D, Grande BM, Yu S, Alcaide M, Lemaire M, Riazalhosseini Y, Hébert J, Gavino C, Vinh DC, Petrogiannis-Haliotis T, Dmitrienko S, Mann KK, Morin RD, **Johnson NA**. Leuk Lymphoma. 2018 Jan 3:1-16. doi: 10.1080/10428194.2017.1413186.

[Spectral multi-energy CT texture analysis with machine learning for tissue classification: an investigation using classification of benign parotid tumours as a testing paradigm.](#) Al Ajmi E, Forghani B, Reinhold C, Bayat M, **Forghani R**. Eur Radiol. 2018 Jan 2. doi: 10.1007/s00330-017-5214-0.

[Spectral Computed Tomography: Technique and Applications for Head and Neck Cancer.](#) Pérez-Lara A, **Forghani R**. Magn Reson Imaging Clin N Am. 2018 Feb;26(1):1-17. doi: 10.1016/j.mric.2017.08.001. Review.

Epidemiology

[Diabetic ketoacidosis among pregnant and non-pregnant women: a comparison of morbidity and mortality.](#) Rougerie M, Czuzoj-Shulman N, **Abenhaim HA**. J Matern Fetal Neonatal Med. 2018 Feb 27:1-4. doi: 10.1080/14767058.2018.1443071.

[SGLT-2 inhibitors and the risk of infections: a systematic review and meta-analysis of randomized controlled trials.](#) Puckrin R, Saltiel MP, Reynier P, Azoulay L, Yu OHY, **Filion KB**. Acta Diabetol. 2018 Feb 27. doi: 10.1007/s00592-018-1116-0.

[Special issue: Late consequences of venous thromboembolism.](#) **Kahn SR**, Pengo V. Thromb Res. 2018 Feb 13. pii: S0049-3848(18)30067-7. doi: 10.1016/j.thromres.2018.02.005.

[Heritable contributions versus genetic architecture.](#) Timpson NJ, Greenwood CMT, Soranzo N, Lawson DJ, **Richards JB**. Nat Rev Genet. 2018 Feb 14;19(3):185. doi: 10.1038/nrg.2018.7.

[An analytic approach for interpretable predictive models in high-dimensional data in the presence of interactions with exposures.](#) Bhatnagar SR, Yang Y, Khundrakpam B, Evans AC, Blanchette M, Bouchard L, **Greenwood CMT**. Genet Epidemiol. 2018 Feb 8. doi: 10.1002/gepi.22112.

[Agreement in DNA methylation levels from the Illumina 450K array across batches, tissues, and time.](#) Forest M, O'Donnell KJ, Voisin G, Gaudreau H, MacIsaac JL, McEwen LM, Silveira PP, Steiner M, Kobor MS, Meaney MJ, **Greenwood CMT**. Epigenetics. 2018;13(1):19-32. doi: 10.1080/15592294.2017.1411443.

[Comparative effectiveness of novel oral anticoagulants in UK patients with non-valvular atrial fibrillation and chronic kidney disease: a matched cohort study.](#) Loo SY, Coulombe J, Dell'Aniello S, Brophy JM, Suissa S, **Renoux C**. BMJ Open. 2018 Jan 24;8(1):e019638. doi: 10.1136/bmjopen-2017-019638.

[Mortality Reduction in EMPA-REG OUTCOME Trial: Beyond the Antidiabetes Effect.](#) **Suissa S**. Diabetes Care. 2018 Feb;41(2):219-223. doi: 10.2337/dc17-1059.

[Effect of Cesarean Delivery on Long-term Risk of Small Bowel Obstruction.](#) **Abenhaim HA**, Tulandi T, Wilchesky M, Platt R, Spence AR, Czuzoj-Shulman N, **Suissa S**. Obstet Gynecol. 2018 Feb;131(2):354-359. doi: 10.1097/AOG.0000000000002440.

[Direct Oral Anticoagulants in End-Stage Renal Disease.](#) Klil-Drori AJ, **Tagalakis V**. Semin Thromb Hemost. 2018 Jan 10. doi: 10.1055/s-0037-1621715.

[Exome-wide rare variant analyses of two bone mineral density phenotypes: the challenges of analyzing rare genetic variation.](#) Sun J, Oualkacha K, Forgetta V, Zheng HF, Richards JB, Evans DS, Orwoll E, **Greenwood CMT**. Sci Rep. 2018 Jan 9;8(1):220. doi: 10.1038/s41598-017-18385-9.

[Mendelian randomization in multiple sclerosis: A causal role for vitamin D and obesity?](#) Harroud A, **Richards JB**. Mult Scler. 2018 Jan;24(1):80-85. doi: 10.1177/1352458517737373.

[Lower Risk of Death With SGLT2 Inhibitors in Observational Studies: Real or Bias?](#) **Suissa S.** Diabetes Care. 2018 Jan;41(1):6-10. doi: 10.2337/dc17-1223.

Molecular & Regenerative Medicine

[The latest evidence for possible HIV-1 curative strategies.](#) Pham HT, **Mesplède T.** Drugs Context. 2018 Feb 21;7:212522. doi: 10.7573/dic.212522.

[DNA Vaccine-Encoded Flagellin Can Be Used as an Adjuvant Scaffold to Augment HIV-1 gp41 Membrane Proximal External Region Immunogenicity.](#) Ajamian L, Melnychuk L, Jean-Pierre P, **Zaharatos GJ.** Viruses. 2018 Feb 27;10(3). pii: E100. doi: 10.3390/v10030100.

[Evaluation of salivary heme oxygenase-1 as a potential biomarker of early Parkinson's disease.](#) Song W, Kothari V, Velly AM, Cressatti M, Liberman A, Gornitsky M, **Schipper HM.** Mov Disord. 2018 Feb 28. doi: 10.1002/mds.27328.

[Global Impact of the 2017 American College of Cardiology/American Heart Association Hypertension Guidelines: A Perspective From Canada.](#) **Schiffirin EL.** Circulation. 2018 Feb 27;137(9):883-885. doi: 10.1161/CIRCULATIONAHA.117.032849.

[Slow Your Roll: Inhibiting SETD7 Activity Permits Ex Vivo Expansion of Muscle Stem Cells.](#) Fujita R, **Crist C.** Cell Stem Cell. 2018 Feb 1;22(2):146-147. doi: 10.1016/j.stem.2018.01.007.

[Higher Cytopathic Effects of a Zika Virus Brazilian Isolate from Bahia Compared to a Canadian-Imported Thai Strain.](#) Alpuche-Lazcano SP, McCulloch CR, Del Corpo O, Rance E, Scarborough RJ, Mouland AJ, Sagan SM, Teixeira MM, **Gatignol A.** Viruses. 2018 Jan 27;10(2). pii: E53. doi: 10.3390/v10020053.

[Bicaudal D2 is a novel autoantibody target in systemic sclerosis that shares a key epitope with CENP-A but has a distinct clinical phenotype.](#) Fritzier MJ, Hudson M, Choi MY, Mahler M, Wang M, Bentow C, Milo J, **Baron M;** Canadian Scleroderma Research Group. Autoimmun Rev. 2018 Mar;17(3):267-275. doi: 10.1016/j.autrev.2018.01.006.

[Defective Interplay Between mTORC1 Activity and Endoplasmic Reticulum Stress-Unfolded Protein Response in Uremic Vascular Calcification.](#) Panda D, Bai X, Sabbagh Y, Zhang Y, Zaun HC, Karellis A, Koromilas AE, Lipman M, **Karaplis AC.** Am J Physiol Renal Physiol. 2018 Jan 10. doi: 10.1152/ajprenal.00350.2017.

[Differential susceptibility of striatal, hippocampal and cortical neurons to Caspase-6.](#) Noël A, Zhou L, Foveau B, Sjöström PJ, **LeBlanc AC.** Cell Death Differ. 2018 Jan 19. doi: 10.1038/s41418-017-0043-x.

[Where are we with injectables against HIV infection and what are the remaining challenges?](#) Hassounah SA, **Mesplède T.** Expert Rev Anti Infect Ther. 2018 Feb;16(2):143-152. doi: 10.1080/14787210.2018.1430570.

[Endothelial nitric oxide synthase overexpressing human early outgrowth cells inhibit coronary artery smooth muscle cell migration through paracrine functions.](#) Guber S, Ebrahimian T, Heidari M, Eliopoulos N, **Lehoux S.** Sci Rep. 2018 Jan 17;8(1):877. doi: 10.1038/s41598-017-18848-z.

[Interferons: Reprogramming the Metabolic Network against Viral Infection.](#) Raniga K, **Liang C.** Viruses. 2018 Jan 13;10(1). pii: E36. doi: 10.3390/v10010036.

[The antimalarial drug amodiaquine possesses anti-ZIKA virus activities.](#) Han Y, Mesplède T, Xu H, Quan Y, **Wainberg MA.** J Med Virol. 2018 Jan 9. doi: 10.1002/jmv.25031.

[Hypertension in 2017: Novel mechanisms of hypertension and vascular dysfunction.](#) **Schiffirin EL.** Nat Rev Nephrol. 2018 Feb;14(2):73-74. doi: 10.1038/nrneph.2017.178.

[Structural brain differences between monolingual and multilingual patients with mild cognitive impairment and Alzheimer disease: Evidence for cognitive reserve.](#) Duncan HD, Nikelski J, Pilon R, Steffener J, Chertkow H, **Phillips NA**. *Neuropsychologia*. 2018 Jan 31;109:270-282. doi: 10.1016/j.neuropsychologia.2017.12.036.

[The New ACC/AHA Hypertension Guidelines for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults.](#) Flack JM, Calhoun D, **Schiffirin EL**. *Am J Hypertens*. 2018 Jan 12;31(2):133-135. doi: 10.1093/ajh/hpx207.

[The Year in Clinical Hypertension From Other Pages.](#) **Schiffirin EL**. *Am J Hypertens*. 2018 Jan 12;31(2):136-138. doi: 10.1093/ajh/hpx206.

[Spatiotemporal Gait Characteristics Associated with Cognitive Impairment: A Multicenter Cross-Sectional Study, the Intercontinental "Gait, cOgnitiOn & Decline" Initiative.](#) **Beauchet O**, Blumen HM, Callisaya ML, De Cock AM, Kressig RW, Srikanth V, Steinmetz JP, Verghese J, Allali G. *Curr Alzheimer Res*. 2018 Jan 23;15(3):273-282. doi: 10.2174/1567205014666170725125621.

Psychosocial

[Structural validation of the Self-Compassion Scale with a German general population sample.](#) Coroiu A, Kwakkenbos L, Moran C, Thombs B, Albani C, Bourkas S, Zenger M, Brahler E, **Körner A**. *PLoS One*. 2018 Feb 6;13(2):e0190771.

[Hypnosis in palliative care: from clinical insights to the science of self-regulation.](#) Landry M, Stendel M, Landry M, **Raz A**. *Ann Palliat Med*. 2018 Jan;7(1):125-135. doi: 10.21037/apm.2017.12.05.

[Addressing overestimation of the prevalence of depression based on self-report screening questionnaires.](#) **Thombs BD**, Kwakkenbos L, Levis AW, Benedetti A. *CMAJ*. 2018 Jan 15;190(2):E44-E49. doi: 10.1503/cmaj.170691.

[The vaccine hesitancy scale: Psychometric properties and validation.](#) Shapiro GK, Tatar O, Dube E, Amsel R, Knauper B, Naz A, Perez S, **Rosberger Z**. *Vaccine*. 2018 Jan 29;36(5):660-667. doi: 10.1016/j.vaccine.2017.12.043.

[The climate of neurofeedback: scientific rigour and the perils of ideology.](#) Thibault RT, Lifshitz M, **Raz A**. *Brain*. 2018 Feb 1;141(2):e11. doi: 10.1093/brain/awx330.

[Reasons for Not Participating in Scleroderma Patient Support Groups: A Cross-Sectional Study.](#) Gumuchian ST, Delisle VC, Peláez S, Malcarne VL, El-Baalbaki G, Kwakkenbos L, Jewett LR, Carrier ME, Pépin M, **Thombs BD**; and the Scleroderma Support Group Project Advisory Team. *Arthritis Care Res (Hoboken)*. 2018 Feb;70(2):275-283. doi: 10.1002/acr.23220.