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### Dr. Alexandre Caron

Correspondence language: English

Sex: Male

Date of Birth: 2/20

Canadian Residency Status: Canadian Citizen

Country of Citizenship: Canada

### **Contact Information**

The primary information is denoted by (\*)

#### **Address**

Primary Affiliation (\*)

Institut Universitaire de Cardiologie et de Pneumologie de Québec 2725 chemin Ste-Foy Y4255.5 Quebec Quebec G1V 4G5

Canada

### **Telephone**

Work (\*) 1-418-6568711 extension: 2398

#### **Email**

Work (\*) alexandre.caron@pha.ulaval.ca





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### Dr. Alexandre Caron

# Language Skills

Language	Read	Write	Speak	Understand
English	Yes	Yes	Yes	Yes
French	Yes	Yes	Yes	Yes

### **User Profile**

Disciplines Trained In: Physiology, Molecular Biology, Neurosciences, Cell Biology

Research Disciplines: Endocrinology, Neurosciences

Areas of Research: Diabetes, Obesity, Energy Metabolism, Cell Signaling, Autonomic Nervous System, Metabolic

Diseases

Fields of Application: Biomedical Aspects of Human Health, Pathogenesis and Treatment of Diseases

Research Specialization Keywords: Autonomic nervous system, Insulin signaling, Feeding behaviour, Glucose metabolism, Obesity, Energy expenditure, Liver metabolism, Leptin, Chemogenetic technology, G protein coupled receptors

# **Degrees**

2015/9 - 2020/3

	Degree Status: Completed
	Supervisors: Shawn C. Burgess; Joel K. Elmquist
2015/9 - 2017/12	Certificate, Post-doctoral certificate, Career Advancement in Research, UT Southwestern Medical Center

Post-doctorate, Neurometabolism, Neuroendocrinology, UT Southwestern Medical Center

Degree Status: Completed Supervisors: Joel Elmquist

2012/1 - 2015/7 Doctorate, Philosophiæ doctor, Physiology-endocrinology, Université Laval

Degree Status: Completed

Transferred to PhD without completing Masters?: Yes

Supervisors: Denis Richard; Mathieu Laplante

2010/9 - 2011/12 Master's Thesis, Masters of sciences, Physiology-endocrinology, Université Laval

Degree Status: Completed Supervisors: Denis Richard

Dr. Alexandre Caron

2007/8 - 2010/11 Bachelor's, Bachelor of Science, Medical biology, Université du Québec à Trois-Rivières

Degree Status: Completed Supervisors: Guy Massicotte

Recognitions

2019/11 Rolls-Simons Award - 1,000

The Obesity Society

Prize / Award

2019/2 Keystone Symposia Scholarship - 1,200

National Institutes of Health

Prize / Award

2019/2 Journal of Lipid Research Junior Investigator Award - 500

Journal of Lipid Research

Prize / Award

2018/4 - 2020/3 Banting Postdoctoral Fellowship - 140,000 (Canadian dollar)

Canadian Institutes of Health Research

Prize / Award

2016/11 Poster Award, 50th Miami 2017 Winter Symposium Diabetes: Today's Research –

Tomorrow's Therapies - 870 (United States dollar)

International Union of Biochemistry and Molecular Biology (IUBMB)

Prize / Award

2016/9 PDA Travel Award to attend the 50th Miami 2017 Winter Symposium Diabetes: Today's

Research – Tomorrow's Therapies - 700 (United States dollar)

Postdoctoral Association (PDA)

Prize / Award

2015/9 - 2018/4 Diabetes Canada Postdoctoral Fellowship - 120,000 (Canadian dollar)

Diabetes Canada Prize / Award

2015/2 Poster Award - Montreal Diabetes Research Center annual retreat - 400 (Canadian dollar)

Montreal Diabetes Research Centre

Prize / Award

2015/2 Presentation Award, Annual meeting of the Cardiometabolic health, Diabetes and

Obesity Research Network (CMDO) and the Quebec Society of Lipidology Nutrition and

Metabolism - 500 (Canadian dollar)

Quebec Society of Lipidology Nutrition and Metabolism

Prize / Award

**Employment** 

2020/3 Assistant professor (tenure track)

Pharmacy, Pharmacy, Université Laval

2020/3 Researcher

Obesity, Type 2 Diabetes and Metabolism, Institut universitaire de cardiologie et de

pneumologie de Québec

2019/4 - 2020/3 Instructor (non tenured)

Internal Medicine, Center for Human Nutrition, University of Texas Southwestern Medical

Center

2015/9 - 2019/3 Postdoctoral Researcher

Internal Medicine, Center for Hypothalamic Research, University of Texas Southwestern

**Medical Center** 

2010/9 - 2015/8 Graduate Student

Medicine, Medicine, Université Laval

2010/5 - 2010/8 Research intern - Neurobiology of obesity

Institut universitaire de cardiologie et de pneumologie de Québec

### **Affiliations**

The primary affiliation is denoted by (\*)

2020/3 Researcher, Institut universitaire de cardiologie et de pneumologie de Québec

(\*) 2020/1 Assistant professor, Pharmacy, Université Laval

# **Research Funding History**

### Awarded [n=9]

2020/9 - 2025/8 Canada Research Chair in Autonomic Pharmacology of Metabolic Diseases

Principal Investigator Funding Sources:

2020/4 - 2025/3 Canada Research Chairs (CRC)

Tier 2

Total Funding - 600,000 (Canadian dollar)

Funding Competitive?: Yes

2020/9 - 2025/8 Chemogenetic control of liver metabolism

Funding Sources:

Principal Applicant

2020/4 - 2025/3 Natural Sciences and Engineering Research Council of Canada

(NSERC)

**Discovery Grants Program** 

Total Funding - 185,000 (Canadian dollar)

Funding Competitive?: Yes

2020/7 - 2024/6 Rôle du système nerveux autonome dans le développement des maladies métaboliques

Principal Investigator Funding Sources:

2020/9 - 2024/8 Fonds de recherche du Québec - Santé (FRQS)

Research Scholar - Junior 1

Total Funding - 235,693 (Canadian dollar)

Funding Competitive?: Yes

2020/7 - 2024/6 Rôle du système nerveux autonome dans le développement des maladies métaboliques

Principal Investigator Funding Sources:

2020/7 - 2024/6 Fonds de recherche du Québec - Santé (FRQS)

Starting grant for new investigators – Junior 1 Total Funding - 80,000 (Canadian dollar)

Funding Competitive?: Yes

2019/4 - 2024/3 Sympathetic Control of Liver Metabolism (relinquished in March 2020 due to position in

Principal Investigator Canada)

**Funding Sources:** 

2019/4 - 2024/3 National Institute of Diabetes & Digestive & Kidney diseases

(NIDDK)

K99/R00 Pathway to Independence Award Total Funding - 928,500 (United States dollar)

Funding Competitive?: Yes

2020/4 - 2021/3 Principal Investigator Chemogenetic control of liver metabolism

**Funding Sources:** 

2020/4 - 2021/3 Natural Sciences and Engineering Research Council of Canada

(NSERC)

**Discovery Launch Supplement** 

Total Funding - 12,500 (Canadian dollar)

Funding Competitive?: Yes

2020/4 - 2021/3 Co-applicant Sympathomimetics and Sympatholytics in Type 2 Diabetes: Teaching Old Drugs New

Tricks

Co-applicant : Denis P. Blondin

Funding Sources:

2020/4 - 2021/3 Réseau Québécois de Recherche sur les Médicaments

Projet Fédérateurs

Total Funding - 70,000 (Canadian dollar)

Funding Competitive?: Yes

2018/4 - 2020/3 Principal Applicant Leptin revisited: role of melanocortin neurons in glucose and leptin regulation

**Funding Sources:** 

2018/4 - 2020/3 Canadian Institutes of Health Research (CIHR)

Banting Postdoctoral Fellowship

Total Funding - 140,000 (Canadian dollar)

Funding Competitive?: Yes

2015/9 - 2018/8 Principal Applicant Regulation of energy and glucose homeostasis by mTORC1 in POMC neurons

**Funding Sources:** 

2015/9 - 2018/8 Diabetes Canada

Postdoctoral Fellowship

Total Funding - 120,000 (Canadian dollar)

Funding Competitive?: Yes

# **Student/Postdoctoral Supervision**

Doctorate [n=6]

Principal Supervisor Nader Srour (In Progress), Laval University

Student Degree Start Date: 2020/9 Student Degree Expected Date: 2024/8

Present Position: PhD student

Principal Supervisor Alisia Silva (In Progress), Laval University

Student Degree Start Date: 2020/9 Student Degree Expected Date: 2024/8

Present Position: PhD student

Co-Supervisor Lauralyne Dumont (In Progress), Université Sherbrooke

Student Degree Start Date: 2020/5 Present Position: PhD student

Co-Supervisor Charles Colas (In Progress), Université Laval

Student Degree Start Date: 2020/1 Present Position: PhD student

Co-Supervisor Laura Tribouillard (In Progress), Université Laval

Student Degree Start Date: 2020/1 Present Position: PhD student

Academic Advisor Ryan P. Reynolds (Completed), UT Southwestern Medical Center

Student Degree Start Date: 2019/1 Present Position: PhD student

# **Mentoring Activities**

2012/3 - 2015/7 Mentor, Scientific recreation Development Council (CDLS) Network

Number of Mentorees: 5

Help students/mentees to develop and bring their Science Fair projects to fruition.

# **Community and Volunteer Activities**

2020/5 - 2020/6 CIHR Peer Review Committee – COVID-19 Rapid Research - Diagnostics, Canadian

Institutes of Health Research

2019/7 - 2020/6 Peer Review Committee – Doctoral Research Awards – A, Canadian Institutes of Health

Research

2018/7 - 2019/6 Peer Review Committee – Doctoral Research Awards – A, Canadian Institutes of Health

Research

### **Presentations**

1. (2020). Invited presentation: Autonomic Control of Metabolism (EN) - Cancelled due to COVID-19.

Cardiovascular and Metabolic Diseases Research Division Seminar, IRCM, Montreal, Canada

Main Audience: Researcher

Invited?: Yes

2. (2020). Invited presentation: The Brain-Liver Axis (EN) - Cancelled due to COVID-19. Gastronautes

Seminars, Duke University, Durham, United States

Main Audience: Researcher

Invited?: Yes

3. (2019). Invited presentation: Autonomic control of metabolism. Department of Biochemistry and Molecular

Biology, Oregon Health and Science University School of Medicine, Portland, United States

Main Audience: Researcher

Invited?: Yes

4. (2019). Invited presentation: Rethinking the central causes of diabetes and obesity. Department of Nutrition & Metabolism, University of Texas Medical Branch, United States

Main Audience: Researcher

Invited?: Yes

 (2019). Oral presentation: Sympathetic Control of Adipose Endocrine and Metabolic Functions. Keystone Symposia on Molecular and Cellular Biology - Obesity and Adipose Tissue Biology (J7), Banff, Canada Main Audience: Researcher

Invited?: No

6. (2019). Invited presentation: Sympathetic control of liver metabolism. Rising Star Symposium, Salt Lake City, United States

Main Audience: Researcher

Invited?: Yes

(2019). Invited presentation: Are diabetes and obesity diseases of the autonomic nervous system? (EN).
 Department of Pharmacology & Nutritional Sciences. University of Kentucky, Lexington, United States
 Main Audience: Researcher

Invited?: Yes

8. (2019). Invited presentation: Are diabetes and obesity diseases of the autonomic nervous system?.

Diabetes and Metabolism Research Center, University of Utah, United States

Main Audience: Researcher

Invited?: Yes

9. (2019). Oral presentation: Sympathetic Control of Adipose Endocrine and Metabolic Functions. Obesity week, Las Vegas, United States

Main Audience: Researcher

Invited?: No

10. (2019). Poster presentation: Sympathetic Control of Adipose Endocrine and Metabolic Functions (EN). McGarry Symposium, Dallas, United States

Main Audience: Researcher

Invited?: No

11. (2018). Invited presentation: Physiological role of leptin: a sympathetic story (FR). Obesity-Metabolism Research Conference, Quebec Heart and Lung Institute (IUCPQ), Quebec, Canada Main Audience: Researcher

Invited?: Yes

12. (2018). Invited presentation: Understanding the role of sympathetic nervous system in energy metabolism by the development of modern genetic tools (FR). Faculty of Pharmacy, Laval University, Quebec, Canada Main Audience: Researcher

Invited?: Yes

13. Dungan Lemko HM , Castorena CM , Fujikawa T , Lee S , Lord CC , Ahmed N , Lee CE , Holland WL , Liu C , Elmquist JK. (2018). Poster presentation: Why do leptin levels fall with fasting?. American Society for Biochemistry and Molecular Biology (ASBMB) Deuel Conference on Lipids, Coronado, United States Main Audience: Researcher

Invited?: No

14. (2018). Invited presentation: Novel genetic and optogenetic tools allowing chrono- and pharmaco- control of adrenergic signaling (FR). Faculty of Pharmacy, Laval University, Quebec, Canada

Main Audience: Researcher

Invited?: Yes

15. (2017). Invited presentation: Why do leptin levels fall with fasting? (EN). UT Southwestern Neuroscience Retreat., Dallas, United States

Main Audience: Researcher

Invited?: Yes

16. (2017). Invited presentation: How to flox your favorite gene using the CRISPR-Cas9 System. Integrated DNA Technologies (IDT) CRISPR Mini-Seminar, Dallas, United States

Main Audience: Researcher

Invited?: Yes

17. Caron A, Dungan Lemko HM, Lee S, Lord CC, Fujikawa T, Lee CE, Liu C, Elmquist JK. (2017). Poster presentation: Leptin receptors in POMC neurons play a key role in the metabolic adaptation to fasting. 50th Miami 2017 Winter Symposium Diabetes: Today's Research – Tomorrow's Therapies., Miami, United States

Main Audience: Researcher

Invited?: No

18. Dungan Lemko HM, Fujikawa T, Castorena CM, Lee S, Lord CC, Ahmed N, Lee CE, Holland WL, Liu C, Elmquist JK. (2017). Poster presentation: A subset of POMC neurons regulates fasting-induced suppression in leptin (EN). UTSW Postdoctoral Symposium, Dallas, United States Main Audience: Researcher

Invited?: No

19. (2017). Invited presentation: Function of the obesity-associated transcription factor ETV5 in POMC and AgRP neurons (EN). Hypothalamic Division WIP. University of Texas Southwestern Medical Center,, Dallas, United States

Main Audience: Researcher

Invited?: Yes

20. (2016). Invited presentation: Why do leptin levels fall with fasting? (EN). Division of Hypothalamic Research, University of Texas Southwestern Medical Center, Dallas, United States Main Audience: Researcher

Invited?: Yes

21. Caron A , Labbe S , Carter S , MC Roy , Richard D. (2015). Poster presentation: Role of uncoupling protein 2 (UCP2) in beta-3 adrenergic stimulation of brown adipose tissue oxidation and substrates utilization (FR). Annual Scientific Meeting of the Cardiometabolic health, Diabetes and Obesity Research Network (CMDO) and the Quebec Society of Lipidology Nutrition and Metabolism (SQLNM), Magog, Canada Main Audience: Researcher

Invited?: Yes

22. Caron A, Bakan I, Blanchard PG, Lanfray D, Labbe S, Sabatini DM, Laplante M, Richard D. (2015). Poster presentation: Hypothalamic DEPTOR overexpression protects against high-fat diet-induced obesity by enhancing Akt/PKB signaling (EN). Keystone Symposia on Molecular and Cellular Biology – Neural Control of Metabolic Physiology and Diseases, Snowbird, United States

Main Audience: Researcher

Invited?: No

23. (2015). Oral presentation: Deptor as a target for improving hypothalamic insulin sensitivity (EN). 3rd Annual Canadian Neurometabolic Club meeting, Toronto, Canada

Main Audience: Researcher

Invited?: No

24. Caron A, Labbe S, Lanfray D, Blanchard PG, Sabatini DM, Laplante M, Richard D. (2015). Poster presentation: Hypothalamic DEPTOR overexpression protects against high-fat diet-induced obesity by enhancing Akt/PKB signaling (EN). Montreal Diabetes Research Centre annual retreat, Montreal, Canada Main Audience: Researcher

Invited?: No

25. S Labbé, Gautier N, Laplante M and Richard D. (2015). Oral presentation: Role of DEPTOR in the brain-liver axis (FR). Annual Scientific Meeting of the Cardiometabolic health, Diabetes and Obesity Research Network (CMDO) and the Quebec Society of Lipidology Nutrition and Metabolism (SQLNM), Magog, Canada

Main Audience: Researcher

Invited?: No

26. (2015). Invited presentation: New players in energy balance regulation (EN). Division of Hypothalamic Research, University of Texas Southwestern Medical Center, Dallas, United States

Main Audience: Researcher

Invited?: Yes

### **Publications**

#### **Journal Articles**

 Michael NJ, Caron A, Lee CE, Castorena CM, Lee S, Zigman JM, Williams KW, Elmquist JK. (2020). Melanocortin regulation of histaminergic neurons via perifornical lateral hypothalamic melanocortin 4 Receptors. Molecular Metabolism. N/A: N/A.

In Press

Refereed?: Yes

2. Caron A , Mani BK , Tsay M , Michael NJ , Castorena CM , Reynolds RP , Lee CE , Zigman JM , Elmquist JK. (2020). Crosstalk between  $\beta1$ - and  $\beta3$ -adrenergic receptors in adipose tissue controls glucose homeostasis. Journal of Clinical Investigation. NA: NA. Submitted

Refereed?: Yes

3. Mouchiroud M, Camiré É, Aldow M, Caron A, Jubinville É, Turcotte L, Kaci I, Beaulieu MJ, Roy C, Labbé SM, Varin TV, Gélinas Y, Lamothe J, Trottier J, Mitchell PL, Guénard F, Festuccia WT, Joubert P, Rose CF, Karvellas CJ, Barbier O, Morissette MC, Marette A, Laplante M. (2019). The hepatokine Tsukushi is released in response to NAFLD and impacts cholesterol homeostasis. JCI insight. 4(15): e129492.

Published

Refereed?: Yes

4. Zhao S , Zhu Y , Schultz RD , Li N , He Z , Zhang Z , Caron A , Zhu Q , Sun K , Xiong W , Deng H , Sun J , Deng Y , Kim M , Lee CE , Gordillo R , Liu T , Odle AK , Childs GV , Zhang N , Kusminski CM , Elmquist JK , Williams KW , An Z , Scherer PE. (2019). Partial Leptin Reduction as an Insulin Sensitization and Weight Loss Strategy.Cell metabolism. 30(4): 706-719.e6. Published

Refereed?: Yes

5. Castorena CM, Caron A, Michael NJ, Ahmed NI, Arnold AG, Lee J, Lee C, Herrera AS, Limboy C, Grainer M, Wang S, Horton JD, Holland WL, Lee S, Liu C, Fujikawa T, Elmquist JK. (2019). CB1Rs in SF-1 neurons regulate glucose levels in response to diet induced obesity independent of body weight. Molecular Metabolism.

Submitted

Refereed?: Yes

6. Mouchiroud M, Camire E, Aldow M, Caron A, Jubincille E, Turcotte L, Kaci I, Beaulieu M, Roy C, Labbe S, Varin TV, Genilas Y, Lamoth J, Trottier J, Mitchell O, Festuccia WT, Joubert P, Rose C, Karvella C, Barbier O, Marette A, Morissette M, Laplante M. (2019). The Hepatokine TSK Does Not Affect Brown Fat Thermogenic Capacity, Body Weight Gain, and Glucose Homeostasis. Molecular Metabolism. 30: 184-191.

Published

Refereed?: Yes

7. Leon Mercado L\*, Caron A\*, Wang Y, Burton M, Gautron L. (2019). Identification of Leptin Receptor-Expressing Cells in the Nodose Ganglion of Male Mice. Endocrinology. 160(5): 1307-1322. Published

Refereed?: Yes

8. Caron A, Reynolds RP, Castorena CM, Michael NJ, Lee CE, Lee S, Bordeaux R, Scherer PE, Elmquist JK. (2019). Adipocyte Gs but not Gi signaling regulates whole-body glucose homeostasis. Molecular Metabolism. 27: 11-21.

Published Refereed?: Yes

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First Listed Author

Published

Refereed?: Yes

Number of Contributors: 12

10. Carter S, Miard S, Caron A, Salle-Lefort S, St-Pierre P, Anhe FF, Lavoie-Charland E, Blais-Lecours P, Drolet M, Lefebvre JS, Lacombe J, Deshaies Y, Couet J, Laplante M, Ferron M, Bosse Y, Marette A, Richard D, Marsolais D, Picard F. (2018). Loss of OcaB Prevents Age-Induced Fat Accretion and Insulin Resistance by Altering B-Lymphocyte Transition and Promoting Energy Expenditure. Diabetes. 67(7): 1285-1296.

Co-Author Published Refereed?: Yes

Number of Contributors: 20

11. Caron A, Briscoe DM, Richard D, Laplante M. (2018). DEPTOR at the Nexus of Cancer, Metabolism and Immunity. Physiological Reviews. 98(3): 1765-1803.

First Listed Author

Published

Refereed?: Yes

Number of Contributors: 4

12. Labbe SM\*, Caron A\*, Festuccia WT, Lecomte R, Richard D. (2018). Interscapular brown adipose tissue denervation does not promote the oxidative activity of inguinal white adipose tissue in male mice. American Journal of Physiology - Endocrinology and Metabolism. 315(5): E815-E824.

First Listed Author

Published

Refereed?: Yes

Number of Contributors: 5

13. Blanchard PG, Moreira RJ, Castro É, Caron A, Côté M, Andrade ML, Oliveira TE, Ortiz-Silva M, Peixoto AS, Dias FA, Gélinas Y, Guerra-Sá R, Deshaies Y, Festuccia WT. (2018). PPARγ is a major regulator of branched-chain amino acid blood levels and catabolism in white and brown adipose tissues.Metabolism: clinical and experimental. 89: 27-38.

Published

Refereed?: Yes

14. Yuan X, Caron A, Wu H, Gautron L. (2018). Leptin receptor expression in mouse intracranial perivascular cells. Frontiers in Neuroanatomy. 12(4): NA.

Co-Author Published

Refereed?: Yes

Number of Contributors: 4

Secco B, Camiré E, Brière MA, Caron A, Billong A, Gelinas Y, Lemay AM, Tharp KM, Lee PL, Gobeil S, Guimond JV, Patey N, Guertin DA, Stahl A, Haddad E, Marsolais D, Bosse Y, Birsoy K, Laplante M. (2017). Amplification of Adipogenic Commitment by VSTM2A.Cell reports. 18(1): 93-106.

Co-Author Published Refereed?: Yes

Number of Contributors: 19

16. Caron A\*, Mouchiroud M\*, Gautier N, Labbé SM, Villot R, Turcotte L, Secco B, Lamoureux G, Shum M, Gélinas Y, Marette A, Richard D, Sabatini DM, Laplante M. (2017). Loss of hepatic DEPTOR alters the metabolic transition to fasting. Molecular metabolism. 6(5): 447-458.

First Listed Author

Published Refereed?: Yes

Number of Contributors: 14

17. Caron A\*, Labbe SM\*, Carter S, Roy MC, Lecomte R, Ricquier D, Picard F, Richard D. (2017). Loss of UCP2 impairs cold-induced non-shivering thermogenesis by promoting a shift toward glucose utilization in brown adipose tissue. Biochimie. 134: 118-26.

First Listed Author

Published Refereed?: Yes

Number of Contributors: 8

18. Mountjoy KG , Caron A , Hubbard K , Shome A , Grey AC , Sun B , Bould S , Middleditch M , Pontré B , McGregor A , Harris PWR , Kowalczyk R , Brimble MA , Botha R , Tan KML , Piper SJ , Buchanan C , Lee S , Coll AP , Elmquist JK. (2017). Desacetyl-α-melanocyte stimulating hormone and α-melanocyte stimulating hormone are required to regulate energy balance.Molecular metabolism. 9: 207-216.

Co-Author

Published Refereed?: Yes

Number of Contributors: 20

19. Caron A, Richard D. (2017). Neuronal systems and circuits involved in the control of food intake and adaptive thermogenesis. Annals of the New York Academy of Sciences. 1391(1): 35-53.

First Listed Author

Published

Refereed?: Yes

Number of Contributors: 2

20. Caron A , Lee S , Elmquist JK , Gautron L. (2017). Leptin and brain–adipose crosstalks. Nature Reviews Neuroscience. 19(3): 153-165.

First Listed Author

Published

Refereed?: Yes

Number of Contributors: 4

21. Labbe SM, Caron A, Chechi K, Laplante M, Lecomte R, Richard D. (2016). Metabolic activity of brown, "beige" and white adipose tissues in response to chronic adrenergic stimulation in male mice. American Journal of Physiology - Endocrinology and Metabolism. 311(1): E260-8.

Co-Author Published

Refereed?: Yes

Number of Contributors: 6

22. Labbe SM, Mouchiroud M, Caron A, Freinkman E, Chimin P, Gelinas Y, Lamoureux G, Lecomte R, Bosse Y, Festuccia W, Richard D, Laplante M. (2016). mTORC1 is required for brown adipose tissue recruitment and metabolic adaptation to cold. Scientific Reports. 23(6): 37223.

Co-Author Published Refereed?: Yes

Number of Contributors: 12

23. Lanfray D, Caron A, Roy MC, Laplante M, Morin F, Leprince J, Tonon MC, Richard D. (2016). Involvement of the Acyl-CoA binding domain containing 7 in the control of food intake and energy expenditure in mice.eLife. 5: e11742.

Co-Author Published Refereed?: Yes

Number of Contributors: 8

24. Caron A, Labbe SM, Mouchiroud M, Huard R, Lanfray D, Richard D, Laplante M. (2016). DEPTOR in POMC neurons affects liver metabolism but is dispensable for the regulation of energy balance. American Journal of Physiology - Regulatory, Integrative and Comparative Physiology. 310: R1322-1331.

First Listed Author

Published Refereed?: Yes

Number of Contributors: 7

25. Labbe SM\*, Caron A\*, Lanfray D\*, Monge-Roffarello B, Bartness TJ, Richard D. (2015). Hypothalamic control of brown adipose tissue thermogenesis. Frontiers in Systems Neuroscience. 9(150): 1-13.

First Listed Author

Published Refereed?: Yes

Number of Contributors: 6

26. Caron A, Richard D, Laplante M. (2015). The roles of mTOR complexes in lipid metabolism. Annual Review of Nutrition. 35: 321-48.

First Listed Author

Published Refereed?: Yes

Number of Contributors: 3

27. Caron A, Labbe SM, Lanfray D, Blanchard PG, Villot R, Roy C, Sabatini DM, Richard D, Laplante M. (2015). Mediobasal hypothalamic overexpression of DEPTOR protects against high-fat diet-induced obesity. Molecular Metabolism. 5(2): 102-112.

First Listed Author

Published

Refereed?: Yes

Number of Contributors: 9

28. Labbé SM, Caron A, Bakan I, Laplante M, Carpentier AC, Lecomte R, Richard D. (2015). In vivo measurement of energy substrate contribution to cold-induced brown adipose tissue thermogenesis. FASEB journal. 29(5): 2046-58.

Co-Author Published

Refereed?: Yes

Number of Contributors: 7

29. Caron A, Baraboi ED, Laplante M, Richard D. (2015). DEP domain-containing mTOR-interacting protein in the rat brain: distribution of expression and potential implication. The Journal of Comparative Neurology. 523(1): 93-107.

First Listed Author

Published

Refereed?: Yes

Number of Contributors: 4

### **Book Chapters**

1. Timofeeva E, Caron A, Richard D. (2017). Energy Homeostasis: Paraventricular Nucleus System. Encyclopedia of Neuroscience. Elsevier, Oxford, pp 1035-1041; now published in Elsevier Reference Module in Neuroscience and Biobehavioral Psychology.

Co-Author

Published, Elsevier Refereed?: Yes

### Thesis/Dissertation

1. Rôle de DEPTOR dans la régulation du bilan d'énergie. (2015). Université Laval. Supervisor: Mathieu Laplante, Denis Richard