Curriculum Vitae – November 2023

PERSONAL DATA

Name: Ormond A. MacDougald
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EDUCATION

1977-1982	Mitchell District High School, Ontario, Canada
1982-1986	University of Guelph, Guelph, Ontario, Canada; BSc (Agr)
1986-1988	Michigan State University, East Lansing, Michigan; M.S.
1988-1992	Michigan State University, East Lansing, Michigan; Ph.D. (Department of Physiology; Advisor: Donald B. Jump)

POSTDOCTORAL TRAINING

1992-1996	Johns Hopkins University School of Medicine, Baltimore, Maryland; (Department of Biological Chemistry; Advisor: M. Daniel Lane)

ACADEMIC APPOINTMENTS

1996-2002	Assistant Professor, Department of Physiology, University of Michigan School of Medicine, Ann Arbor, Michigan
2002-2006	Associate Professor, Department of Molecular & Integrative Physiology, University of Michigan School of Medicine, Ann Arbor, Michigan
2005-2006	Associate Professor, Department of Internal Medicine, Division of Metabolism, Endocrinology, and Diabetes, University of Michigan School of Medicine, Ann Arbor, Michigan
2006-	Professor, Departments of Molecular & Integrative Physiology, and Internal Medicine, Division of Metabolism, Endocrinology, and Diabetes, University of Michigan School of Medicine, Ann Arbor, Michigan
2010-	John A. Faulkner Collegiate Professor of Physiology, Medical School
2013-2014	Visiting Scholar, Pembroke College, University of Cambridge, UK
2016-2021	Adjunct Professor, Department of Biochemistry and Molecular Biology, University of Southern Denmark
2019-2026	Honorary Fellow, College of Medicine and Veterinary Medicine, University of Edinburgh

SCIENTIFIC INTERESTS

Adipose Tissue Development and Metabolism. Wnt Signaling, Bone Formation

EDITORIAL BOARDS

2003 – 2009	Journal of Biological Chemistry
2004 – 2006	Adipocytes

2004 – 2008	Gene Therapy and Molecular Biology
2007 – 2012	Obesity
2008 - 2011	The Open Bone Journal
2011 – 2012	Guest Editor for a special issue of *Bone*
2012 – present	Adipocyte
2012 – 2016	Molecular and Cellular Endocrinology
2016 – 2021	Diabetes (Associate Editor)
2022 - 2023	Guest Editor for a special issue of *Biochimie*

REVIEWING FOR JOURNALS

Referee for: Cell, Science, Nature, Cell Metabolism, Genes & Development, Journal of Biological Chemistry, Molecular and Cellular Biology, American Journal of Physiology, Molecular Endocrinology, Journal of Cellular Physiology, Archives of Biochemistry and Biophysics, European Journal of Biochemistry, Journal of Clinical Investigation, Diabetes, Endocrinology, Proceedings of the National Academy of Sciences, U.S.A., Cellular and Molecular Life Sciences, Nucleic Acids Research, Journal of Animal Science, Journal of Nutrition, Cell Growth & Differentiation, Journal of Cell Science, Gastroenterology, Trends in Endocrinology and Metabolism, Biochemical Pharmacology, FEBS Letters, Obesity Research, Obesity, Biochemical Journal, Molecular Genetics and Metabolism, Nature Cell Biology, BBA – Molecular Cell Research, FASEB Journal, Journal of Lipid Research, Critical Reviews in Biochemistry and Molecular Biology, Diabetologia, PPAR Research, Differentiation, PLOS One, PLOS Biology, PLOS Pathogens, Journal of Experimental Medicine, Molecular and Cellular Endocrinology, Stem Cells, New England Journal of Medicine, Nature Medicine, Arteriosclerosis Thrombosis and Vascular Biology, Gerontology, Science Signaling, Journal of Cell Science, Diabetology & Metabolic Syndrome, Adipocyte, Molecular and Cellular Endocrinology, Lancet, Journal of Molecular Endocrinology, Molecular Metabolism, Nature Communications, eLife, Cell Stem Cell, Journal of Visualized Experiments, Comprehensive Physiology, Haematologica, Journal of Molecular Neuroscience, Cell Reports, Surgery for Obesity and Related Diseases, Journal of Bone and Mineral Research, JCI Insight, Aging Cell, Disease Models & Mechanisms, Physiological Reviews, Advanced Science, Frontiers in Cell and Developmental Biology, STAR protocols, iScience

GRANT REVIEWING

1997	Extramural Reviewer for the State of Louisiana Basic Science Grant Program
1999	NIH Reviewer (ad hoc): Program Project Grant, 11/99
2000	Extramural Reviewer for the Department of Veterans Affairs
	Biotechnology and Biological Sciences Research Council, United Kingdom
	NIH (ad hoc): Special Study Section (Obesity and Adipocyte Development),
2001	NIH (ad hoc): Metabolism Study Section
	NIH (ad hoc): Special Emphasis Panel (SBIR applications to the NIDDK)
	Diabetes and Research Training Center (ad hoc): UCSF
2002	NIH (ad hoc): Special Emphasis Panel (SBIR applications to the NIDDK)
2003	Diabetes and Research Training Center (ad hoc): Vanderbilt University
	Nutritional and Metabolic Sciences RFA. "Life Cycle of the Adipocyte"
2004	Diabetes and Research Training Center (ad hoc): Vanderbilt University
2005	American Diabetes Association (ad hoc)
	Medical Research Council, UK (ad hoc)
2006	Biotechnology and Biological Sciences Research Council, United Kingdom (ad hoc)
	Center for Organogenesis: Predoctoral Fellowships
2007	NIH (ad hoc): Special Emphasis Panel, Metabolism and β-Cell Biology
	NIH (ad hoc): Special Emphasis Panel, Stem Cells and Adipogenesis
	NIH (ad hoc): Special Emphasis Panel, Metabolism and β-Cell Biology
	Association Francaise contre les Myophathies

2008 Diabetes and Research Training Center (ad hoc): Vanderbilt University
Center for Organogenesis: Postdoctoral Fellowships
Biotechnology and Biological Sciences Research Council, United Kingdom

2009 NIH (ad hoc): CADO Study Section (NIDDK)
NIH (ad hoc): Special Emphasis Panel (EMNR-B (95); ARRA applications to NIDDK)
NIH (ad hoc): NURSA Collaborative Bridging Projects (NIDDK)
Danish Council for Strategic Research
Society for Women's Health Research

2010 Biotechnology and Biological Sciences Research Council, United Kingdom (ad hoc)

2011 PO1 program project grant, NIDDK
Yale University: Women's Health Research Program

2012 PO1 program project grant, NIDDK
Pilot/Feasibility Grants for the Albert Einstein College of Medicine DRTC

2013 Pilot/Feasibility Grants for the Boston NORC
Pilot/Feasibility Grant for the Washington University DRC

2014 NIH: Special Emphasis Panel: ZRG1 EMNR-R(56). NIDDK Translational Research

2010 – 2015 NIH (permanent member): CADO Study Section; NIDDK

2015 Welcome Trust: Senior Research Fellow in Clinical Science
American Diabetes Association Postdoctoral Fellowship Awards
NIH Special Emphasis Panel: ZRG EMNR-P (02) M

2014 – 2016 U.S. Peer Review Committee for Fulbright Scholar applications to the U.K.

2016 Pilot/Feasibility Grant for the Indiana DRC
Pilot/Feasibility grant for the Pennington Biomedical Research Institute COBRE
Austrian Science Fund, Research Proposal
Biotechnology and Biological Sciences Research Council, United Kingdom

2017 Fondation pour la Recherche Médicale, France
Pilot/Feasibility Grant for the Indiana DRC
Pilot/Feasibility Grant for the Pennington Biomedical Research Institute COBRE

2018 United Kingdom Diabetes Society
Medical Research Council, United Kingdom

2019 Pilot/Feasibility Grant for the Pennington Biomedical Research Institute COBRE

2020 European Research Council
Pilot/Feasibility Grants for the Pennington Biomedical Research Institute COBRE
Pilot/Feasibility Grant for the Diabetes Research Center at Washington University
Medical Research Council, United Kingdom
Biotechnology and Biological Sciences Research Council, United Kingdom

2021 Pilot/Feasibility Grant for the Vanderbilt Diabetes Research Center

2022 NIH Basic Mechanisms of Diabetes and Metabolism (BMDM) study section (ad hoc)
Joslin Diabetes Center Pilot & Feasibility Grants Program

2023 Joslin Diabetes Center Pilot & Feasibility Grants Program
European Research Council Synergy Grants Program
UKRI Biotechnology and Biological Sciences Research Council
Knut and Alice Wallenberg Foundation

OTHER SCIENTIFIC ACTIVITIES

2002 Co-chaired session with T. Unger at the 7th Annual Meeting of the European Council for Blood Pressure and Cardiovascular Research on "Obesity and Cardiovascular Risk." Seeheim, Germany, October 11-13.

2003 American Diabetes Association: Subcommittee on Adipocyte Biology to plan symposia for 64th Annual Meeting. 9/03.
American Diabetes Association: Subcommittee on Gene Expression to plan symposia for 64th Annual Meeting. 9/03.
International Advisory Board: Graduate School of Metabolism, University of Southern Denmark, Odense.

2004 International Advisory Board: Graduate School of Metabolism, University of Southern Denmark, Odense.
American Diabetes Assocation: Subcommittee on Gene Regulation to plan symposia for 65th Annual Meeting. 8/04.
American Diabetes Assocation: Subcommittee on Adipocyte Biology to plan symposia for 65th Annual Meeting. 8/04.

2005 International Advisory Board: Graduate School of Metabolism, University of Southern Denmark, Odense.

2006 American Diabetes Assocation: Review of abstracts for the Integrated Physiology - Adipocyte Biology category. 1/06.
International Advisory Board: Graduate School of Metabolism, University of Southern Denmark, Odense.
External Advisory Committee: Centers of Biomedical Research Excellence, Pennington Biomedical Research Center, Baton Rouge, LA

2007 American Diabetes Association: Review of abstracts for the Integrated Physiology - Adipocyte Biology category. 1/07.
Annual Program Committee: The Obesity Society (2007 – 2009)
External Advisory Committee: Centers of Biomedical Research Excellence, Pennington Biomedical Research Center, Baton Rouge, LA
International Advisory Board: Graduate School of Metabolism, University of Southern Denmark, Odense.

2008 Organizer: Keystone Symposia on Molecular Control of Adipogenesis and Obesity, February 19-24, Banff Canada
The Obesity Society: Program committee and review of abstracts for the 26th Annual Scientific Meeting
International Advisory Board: Graduate School of Metabolism, University of Southern Denmark, Odense.
External Advisory Committee: Centers of Biomedical Research Excellence, Pennington Biomedical Research Center, Baton Rouge, LA

2009 Human Brown Adipose Tissue Workshop. April 29, NIDDK, Bethesda MD

The Obesity Society: Program committee and review of abstracts and chair of sessions for the 27th Annual Scientific Meeting
International Advisory Board: Graduate School of Metabolism, University of Southern Denmark, Odense.
External Advisory Committee: Centers of Biomedical Research Excellence, Pennington Biomedical Research Center, Baton Rouge, LA

2010 American Diabetes Association: Review of regular and late-breaking Integrated Physiology - Adipocyte Biology abstracts for the Annual Meeting.
External Advisory Committee: Centers of Biomedical Research Excellence, Pennington Biomedical Research Center, Baton Rouge, LA

2011 External Advisory Committee: Centers of Biomedical Research Excellence, Pennington Biomedical Research Center, Baton Rouge, LA. April 18-19.
Johns Hopkins University Center for Metabolism and Obesity Research. External Review Committee (Chair): April 27-28.

2012 The 58th Benzon Symposium: Adipose Tissue in Health and Disease. Co-organizer with Susanne Mandrup and Sven Enerback. Copenhagen, Denmark. Aug 27th – 30th, 2012.
American Diabetes Association: Review of regular and late-breaking abstracts for the Integrated Physiology - Adipocyte Biology category. 1/12.
American Diabetes Association: Review of mentor-based postdoctoral fellowship applications

2013 Sabbatical Leave: University of Cambridge, UK

2014 Lipodystrophy in 2014: Leptin and Beyond. Scientific Organization Committee. Ann Arbor, MI. October 17 – 19, 2014.

2016 American Diabetes Association: Review of regular and late-breaking Insulin Signaling - Adipocyte Biology abstracts for the 76th Annual Meeting.

2017 Scientific Advisory Board: ATLAS Center of Excellence. University of Southern Denmark

2018 Co-chaired session at ENDO 2018 on Neuroendocrine Modulation of Body Fat Distribution
Scientific Advisory Board: ATLAS Center of Excellence. University of Southern Denmark

2019 Scientific Advisory Board: ATLAS Center of Excellence. University of Southern Denmark

2020 External Advisory Committee: Centers of Biomedical Research Excellence, Pennington Biomedical Research Center, Baton Rouge, LA.
Promotions Committee: Harvard University
Scientific Advisory Board: ATLAS Center of Excellence. University of Southern Denmark
6th International Meeting on Bone Marrow Adiposity: Review of abstracts
ENDO2020: review of abstracts for national meeting

2021 External Advisory Committee: Centers of Biomedical Research Excellence, Pennington Biomedical Research Center, Baton Rouge, LA.

UK Society for Endocrinology: Panel discussions on Career Landscapes, and Cutting Edge Technologies in Adipose Tissue Research.
Scientific Advisory Board: ATLAS Center of Excellence. University of Southern Denmark

2022 ENDO2022: review of regular and late-breaking abstracts for national meeting
Scientific Advisory Board: ATLAS Center of Excellence. University of Southern Denmark
Sabbatical Leave: University of Edinburgh, Scotland.

2023 Co-Organizer: Adipose Biology – Metabolic Buffering in an Obesogenic World. Edinburgh, Scotland. March 23 – 24, 2023.
Career Development Panelist: Adipose Biology, Edinburgh Scotland. March 23-24,
ENDO2023: review of regular and late-breaking abstracts for national meeting
Fulbright UK Summer Institutes (UKSI) Programme: Review of applications
Scientific Advisory Board: ATLAS Center of Excellence. University of Southern Denmark
Poster Judge: University of Edinburgh Cardiovascular Center Annual Symposium, 2023
BMAS Summer School Networking Activity: A pathway to reach independency in science. September 5-6, 2023.

PATENTS

U.S. Patent No. 7,135,611: Compositions And Methods For Characterizing And Regulating Wnt Pathways. Issued November 14, 2006

CONSULTING:

R&D Systems, Minneapolis MN. (2001)
Health Care Ventures, NJ. (2002)
ProStrakan Pharma, Romainville, France. (2004-2005)
NIH DK066164, Mechanism of Promotion of Adipogenesis by Adenovirus-36, PI: Nikhil Dhurandar (2004)
Scientific Advisory Board, Evolva Ltd, Basel, Switzerland, (2005 to 2007)
Proctor & Gamble Pharmaceuticals, Inc. (2005)
Pennington Biomedical Research Center, Mentor for COBRE grant, (2006-2011)

GRANT SUPPORT:

Past

National Institutes of Diabetes and Digestive and Kidney Diseases National Research Service Award (5 F32 DK08794), "Regulation of C/EBPα Transcription in 3T3-L1 Adipocytes;" 8/24/92-8/23/95, Annual Direct Costs: $24,300. Principal Investigator.

Michigan Diabetes Research and Training Center Pilot Feasibility Study Program, "Cloning of Adipocyte Genes Regulated by Insulin and C/EBPα;" 1/1/97-1/1/98, Annual Direct Costs: $20,000. Principal Investigator.

National Institute of Diabetes and Digestive and Kidney Diseases (RO1 DK 51563), "C/EBPα as a Mediator of Insulin Action in Adipocytes;" 7/1/96 – 7/1/00; Annual Direct Costs: $110,000. Principal Investigator: 35% effort.

Juvenile Diabetes Foundation International, "Role of C/EBPα in Insulin Action." 9/1/97-8/31/99; Annual Direct Costs: $90,910. Principal Investigator.

Gastrointestinal Peptide Research Center Pilot Feasibility Study Program. “Spot 14 as a Transcriptional Coactivator in Liver.” 9/1/98-9/1/99; Annual Direct Costs: $20,000. Principal Investigator.

Chiron Corporation, “Role of Highly Specific Inhibitors of GSK3 on Inhibition of Adipogenesis by the Wnt Signaling Pathway;” 10/15/01-4/15/02; Direct Costs: $4,167. Principal Investigator.

American Diabetes Association Research Award, “Role of p300 In C/EBPα Action,” 1/1/00-12/31/02; Annual Direct Costs: $86,957. Principal Investigator: 18% effort.

Nathan Shock Center Mutant and Transgenic Rodent Core, “Molecular Mechanism of the Body Composition Changes Associated with Aging;” 1/1/01 to 12/31/03; Annual Direct Costs: $9,000. Principal Investigator.

University of Michigan Bone Center - Pilot Project Grant, "Role of Wnt Signaling in Bone Formation;" 7/1/03-6/31/04, Annual Direct Costs: $27,000. Co-investigator with Kurt Hankenson: 0% effort.

National Institutes of Diabetes and Digestive and Kidney Diseases (RO1 DK46072), “Growth Hormone Signaling to the Nucleus;” 7/01/00 - 6/30/04; Annual Direct Costs: $189,000. Co-investigator with Jessica Schwartz: 10% effort.

Nathan Shock Center Mutant and Transgenic Rodent Core, “Molecular Mechanism of the Body Composition Changes Associated with Aging;” 1/1/04 to 6/30/04; Total Direct Costs: $12,000. Principal Investigator.

Centocor, “Role of Wnt Signaling in Differentiation of Human Mesenchymal Stem Cells;” 1/1/04-12/31/05, Annual Direct Costs: $96,153. Principal Investigator.

National Institute of Diabetes and Digestive and Kidney Diseases (RO1 DK51563), "C/EBPα as a Mediator of Insulin Action in Adipocytes;" 4/1/01 – 2/28/06; Annual Direct Costs: $200,000. Principal Investigator: 40% effort.

American Diabetes Association Mentor-Based Postdoctoral Fellowship, 7/01/02 - 6/30/06, Annual Direct Costs: $45,000. Principal Investigator: 0% effort.

National Institute of Diabetes and Digestive and Kidney Diseases (RO1 DK62876), "Role of Wnt in White and Brown Adipose Development;" 2/1/03-6/30/08; Annual Direct Costs: $235,000. Principal Investigator: 25% Effort

American Diabetes Association Research Award, “C/EBPα phosphorylation and insulin sensitivity in adipocytes,” 1/1/06-12/31/08; Annual Direct Costs: $86,957. Principal Investigator: 10% effort.

National Institute of Diabetes and Digestive and Kidney Diseases (R56 DK62876), "Role for Wnt Signaling in White Adipose Tissue;" 7/1/08-6/30/09; Annual Direct Costs: $148,254. Principal Investigator: 20% Effort

National Institutes of Health (RO1 GM39561), "Pharmacological targeting of regulators of G protein signaling;" 9/8/06 – 2/28/09; Annual Direct Costs: $464,575. Co-investigator with Rick Neubig (5% effort).

National Institutes of Health; ARRA Equipment Supplement to "Regulation of Adipocyte Differentiation and Metabolism." 3/1/10-5/31/10; Total Direct Costs: $92,377. Principle Investigator. 0% Effort.

National Institutes of Health, "mTOR signaling: a novel molecular mechanism of Wnt's anabolic effects on bone;" 4/1/06 – 3/31/10; Annual Direct Costs: $250,000. Co-investigator with Hongjiao Ouyang (10% effort).

Eli Lilly, "Wnt signaling and microRNAs in bone biology;" 1/1/08 – 12/31/10. Annual Direct Costs: $32, 895. Principal Investigator.

National Institute of Diabetes and Digestive and Kidney Diseases (R24 DK084970), "Interdisciplinary study of marrow adiposity, mineral metabolism, and energy balance;" 12/22/09 – 11/30/10; Annual direct costs: $300,000. Co-PI on multi-site grant with Rosen, Horowitz, and Klibanski (5% effort).

National Institutes of Health; ARRA Summer Research Experiences for Students and Science Educators. 7/1/09-6/30/11; Annual Direct Costs: $12,368. Principle Investigator. 0% Effort.

National Institute of Diabetes and Digestive and Kidney Diseases (RO1 DK51563), "Regulation of adipocyte differentiation and metabolism;" 7/1/06 – 6/31/12; Annual Direct Costs: $220,000. Principal Investigator: 25% effort.

American Diabetes Association, Mentor Based Postdoctoral Fellowship; 7/1/08 – 6/31/12; Annual Direct Costs: $42,750. Principal Investigator. 0% Effort.

National Institute of Diabetes and Digestive and Kidney Diseases (RO1 DK62876), "Role for Wnt Signaling in White Adipose Tissue;" 7/1/09-6/30/14; Annual Direct Costs: $230,324. Principal Investigator: 21% Effort

Rackham Graduate School, University of Michigan, "Global Engagement of Doctoral Education Grant – UM-Trinity College Dublin Academic Exchange" 7/1/11-6/30/14; Annual Direct Costs: $35,000. Co-PI with Isom and Martens.

Biomet Biologics, LLC, "Analysis of gene expression changes during autologous protein solution processing;" 7/1/13-6/31/14; Total Direct Costs: $22,700. Principal Investigator.

Eli Lilly and Co, "Regulation of marrow adipose tissue" 9/1/12 – 11/17/14. Annual Direct Costs: $28,939. Principal Investigator.

National Institute of Diabetes and Digestive and Kidney Diseases (R24 DK092759), "Interdisciplinary study of marrow adiposity, mineral metabolism, and energy balance;" 9/30/11 – 6/30/15; Annual Direct Costs to MacDougald lab: $156,119. Co-PI on multi-site grant with Rosen, Horowitz, and Klibanski (16% effort).

National Institutes of Health (P30 DK089503; Burant PI) Michigan Nutrition Obesity Research Center. 7/01/10 – 6/30/15; Annual Direct Costs: $750,000. Director of Pilot & Feasibility Grant Program (10% effort).

National Institutes of Health (R03 DK092542; Subauste PI) "Role of lipid intermediates in the limited human adipose tissue expandability associated with obesity induced insulin resistance;" 9/15/12-8/31/15; Annual Direct Costs: $132,000. Co-investigator (5% effort).

National Institutes of Health (R25 DK088752; Schnell PI), "Interfacing computational and engineering with digestive and metabolic physiology;" 7/1/10-11/30/2015; Annual Direct Costs: $100,000. Co-investigator (5% effort).

National Institutes of Health (RO1 DK095705) "Role of sweet taste receptors in adipocyte differentiation and metabolism;" 6/1/12 - 3/31/16; Annual Direct Costs: $212,500. Principal Investigator. (16.7% effort).

Metabolic Solutions Development Company, "Effect of KXN-5514 on brown adipogenesis" 10/1/15 – 5/31/16. Annual Direct Costs: $12,000. Principal Investigator.

National Institutes of Health (K99 DE024178; Scheller PI) "Neural regulation of skeletal biology and periodontal disease;" 1/4/14 - 3/31/16; Annual Direct Costs: $101,412. Mentor. (0% effort).

National Institutes of Health (RO1 DE11723; Franceschi PI) "MAP Kinase regulation of osteoblast function;" 12/1/12 - 11/30/17; Annual Direct Costs: $249,304. Co-investigator. (5% effort).

University of Michigan MCube (Co PI with Kozloff and Franceschi). "Energetics of bone and fat metabolism." 12/1/15-11/30/16; Annual Direct Costs: $60,000.

National Institute of Diabetes and Digestive and Kidney Diseases (RO1 DK62876), "Role for Wnt Signaling in White Adipose Tissue;" 7/14/15 – 6/30/19; Annual Direct Costs: $250,000. Principal Investigator: 16.7% Effort.

National Institutes of Health (T32 DK101357), "Multidisciplinary training program in basic diabetes research;" 9/1/14 – 8/31/19; Annual Direct Costs: $231,912. Co-PI with Arvan (5% effort).

MedImmune (Myers PI). "Enhanced screening of potential therapeutic targets of obesity and diabetes." 1/13/17 – 12/31/19. Annual Direct Costs: $230,000. Co-investigator. (1% effort).

National Institutes of Health (P30 DK089503; Burant PI) Michigan Nutrition Obesity Research Center. 7/01/15 – 6/30/20; Annual Direct Costs: $750,000. Director of Pilot & Feasibility Grant Program (10% effort).

National Institute of Diabetes and Digestive and Kidney Diseases (R24 DK092759), "Interdisciplinary study of marrow adiposity, mineral metabolism, and energy balance;" 8/1/15 – 7/31/20; Annual Direct Costs to MacDougald lab: ~$220,000. Co-PI on multi-site grant with Rosen, Horowitz, and Klibanski (20% effort).

MSK^2 Pilot Grant. "Cellular interactions within the bone marrow niche." 6/1/19 – 5/30/20. Annual Direct Costs: $25,000.

Agilent. "Comparative 'omic analyses of cold exposed adipocytes." 7/1/19 – 6/30/20. Annual Direct Costs: $40,000.

Michigan Diabetes Research Center Interdisciplinary Study Program (coPI with Oral). "Mechanisms by which lamin A/C deficiency causes loss of adipose tissues." 1/1/20 to 12/31/20. Annual direct costs: $50,000.

Regeneron. "Effects of anti-SOST on loss of bone with vertical sleeve gastrectomy." 12/1/19-11/31/20. Direct costs: $25,640.

National Institutes of Health (R25 DK088752; Schnell PI), "Interfacing computational and engineering with digestive and metabolic physiology;" 12/1/2016-8/31/2022; Annual Direct Costs: $100,000. Co-investigator (2% effort).

National Institutes of Health (R01 DK125513; coPI with Oral), "Mechanisms of adipocyte loss in laminopathy-induced lipodystrophy in mice and humans;" 7/7/2020 – 5/31/2023; Annual Direct Costs: $216,000. (10% effort).

Current

National Institutes of Health (T32 DK101357), "Multidisciplinary training program in basic diabetes research;" 9/1/19 – 8/31/24; Annual Direct Costs: $309,591. Co-PI with Arvan (5% effort).

National Institutes of Health (R01 DK121759), "Mechanisms by which adipocytes adapt to cool environmental temperatures;" 7/7/2020 – 5/31/2025; Annual Direct Costs: $254,000. (23% effort).

National Institutes of Health (P30 DK089503; Seeley PI) Michigan Nutrition Obesity Research Center. 7/01/20 – 6/30/25; Director of Adipose Tissue Core (10% effort).

National Institutes of Health (R01 AG069795; Rendina-Reudy PI), "Parathyroid hormone (PTH) modulates lipid metabolism in the skeletal niche;" 9/30/2020 – 8/31/2025; Annual Direct Costs: $284,043. (10% effort).

National Institutes of Health (R01 DK130879). "Effects of Wnt/β-catenin signaling on adipocytes;" 12/15/21 – 11/30/25; Annual Direct Costs: $285,000. (20% effort).

CombiGene AB. "Evaluation of therapy for lipodystrophy in mice." 1/7/22 - 5/6/23; Total Direct Costs: $70,000.

Rejuvenate Bio. "Dual Gene Therapy on LMNA Mice." 5/1/22 – 4/30/23. Total Direct Costs: $120,000.

National Institute of Diabetes and Digestive and Kidney Diseases (R56 AR081251), "Marrow adipocytes modify the neural regulation of bone;" 9/1/22 – 8/31/23; Annual Direct Costs to MacDougald lab: ~$49,662. Co-PI on multi-site grant with Scheller (2% effort).

National Institutes of Health (R56; coPI with Oral), "Mechanisms of adipocyte loss in laminopathy-induced lipodystrophy in mice and humans;" 7/1/2023 – 6/31/2024; Annual Direct Costs: $150,000. (5% effort).

Pending

National Institutes of Health (R25 DK134325; MacDougald PI), "Michigan Summer Undergraduate Research Experience: Diabetes & Metabolic Diseases;" 1/9/2023-8/31/2028; Annual Direct Costs: $100,000. (5% effort).

AWARDS AND HONORS

1985; 1986	Deans Honors List
1986	Centennial Graduate Fellowship
1986	George I. Christie Scholarship
1986	University of Guelph College Royal Celebrant
1986	R.J. Watford Prize
1989	Academic Excellence Award, Department of Physiology
1990-1991	Barnett Rosenberg Fellowship
1991	Jack Hoffert Memorial Award
1991	Sigma Xi Graduate Student Award
1991	Sigma Xi Student Research Grant
1991-1992	College of Natural Science Continuing Graduate Fellowship
1994	Young Investigators Award, FASEB Summer Conference
2005	Henry Pickering Bowditch Award. "One of the American Physiological Societies highest honors. To a distinguished young physiologist less than 42 years of age who has made original and outstanding contributions in physiology."
2005	Basic Science Achievement Award, University of Michigan Medical School
2007	Bio-artography.com: contributed "World of Fat" and "Fungus Amongus"
2010-	John A. Faulkner Collegiate Professor of Physiology, Medical School
2011	Rackham Distinguished Graduate Mentoring Award, University of Michigan
	League of Research Excellence, University of Michigan Medical School
	Bio-artography.com: contributed "Where the ice cream goes"
2012	Fellow of the American Association for the Advancement of Science
2013	League of Educational Excellence, University of Michigan Medical School
	Fellow of The Obesity Society
2013-2014	Fulbright Scholar Award (All disciplines) to the University of Cambridge, UK
2016	Bodil M. Schmidt-Nielsen Distinguished Mentor and Scientist Award, American Physiological Society
	Bio-artography.com: contributed "Honey storage"
2017	Bio-artography.com: contributed "Fabulous Faces of Fat"
2020	Bio-artography.com: contributed "Arranging FAT"
2022	Bio-artography.com: contributed "Fat-free Fat"
2022	University of Michigan "Valuing our Own" Award

MEMBERSHIPS AND OFFICES IN PROFESSIONAL SOCIETIES

American Association for the Advancement of Science
American Diabetes Association
Michigan Society for Medical Research
The Endocrine Society
American Society for Biochemistry and Molecular Biology
American Society for Microbiology
North American Association for Obesity
American Physiological Society
Sigma Xi, The Scientific Research Honor Society
Bone Marrow Adipose Society

TEACHING EXPERIENCE

Michigan State University

1986-1987 ANS400; Teaching Assistant
1989 PSL401; Comparative Physiology Laboratory, Teaching Assistant
1990 PSL431; Teaching Assistant
1991 PSL432; Teaching Assistant

Johns Hopkins University School of Medicine

1992 Molecules and Cells: Led "small group" discussions on intermediary metabolism; Led journal clubs for medical students; graded essay exams

University of Michigan

1998 Lectures (5) in Physiology 502 (Mammalian Physiology for first-year Dental and Non-Physiology graduate students)
Small Group Session with Medical Students on Endocrinology

1999 Lectures (3) in Phys/Pharm 590 (Recent Developments in Cellular and Molecular Endocrinology) on Role of Transcriptional Coactivators and Coinhibitors in Hormone Action
Lectures (5) in Physiology 502 (Mammalian Physiology for first-year Dental and Non-Physiology graduate students)
Small Group Sessions (2) with Medical Students on Gastrointestinal Physiology and Endocrinology

2000 Lectures (4) in Physiology 555 (Integrative Genomics)
Lectures (5) in Physiology 502 (Mammalian Physiology for first-year Dental and Non-Physiology graduate students)
Small Group Sessions (2) with Medical Students on Gastrointestinal Physiology and Endocrinology
Lectures (3) in HG653 (Regulation of Gene Expression III)

2001 Lectures (3) in Physiology 555 (Integrative Genomics)
Lectures (5) in Physiology 502 (Mammalian Physiology for first-year Dental and Non-Physiology graduate students)
Small Group Sessions (2) with Medical Students on Gastrointestinal Physiology, and Endocrinology and Metabolism
Cell and Molecular Biology 850: Faculty Evaluator

2002 Lectures (3) in Physiology 555 (Integrative Genomics)
Lectures (5) in Physiology 502 (Mammalian Physiology for first-year Dental and Non-Physiology graduate students)
Small Group Sessions (2) with Medical Students on Gastrointestinal Physiology, and Endocrinology and Metabolism
Cell and Molecular Biology 850: Faculty Evaluator
Course Coordinator and Lecturer (2) of Cell and Developmental Biology 681 Module on "Organogenesis of Adipose Tissue"

2003 Lectures (3) in Physiology 555 (Integrative Genomics)
Cell and Molecular Biology 850: Faculty Evaluator
Lectures (5) in Physiology 502 (Mammalian Physiology for first-year

Dental and Non-Physiology graduate students)
Lecture in PIBS 503 on Responsible Research

2004 Co-director of Physiology 555 (Integrative Genomics), with J. Metzger
Lectures (3) in Physiology 555 (Integrative Genomics)
Cell and Molecular Biology 850: Faculty Evaluator
Lectures (270 min) in Physiology 502 (Mammalian Physiology
for Pharmacy and Non-Physiology graduate students)
Lecture in PIBS 503 on Responsible Research
Small group discussion leader: PIBS 503
Evaluated student posters and presentations: Physiology 510

2005 Co-director of Physiology 555 (Integrative Genomics), with L. Samuelson
Lectures (4) in Physiology 555 (Integrative Genomics)
Lectures (270 min) in Physiology 502 (Mammalian Physiology
for Pharmacy and Non-Physiology graduate students)

2006 Lecture and small group discussion: PIBS 503 on Responsible Research

2007 Small Group Session with Medical Students on Gastrointestinal Physiology
Lectures (3) in Physiology 555 (Integrative Genomics)
Lecture in PIBS 503: Research Responsibility and Ethics

2008 Small Group Session with Medical Students on Metabolism and Diabetes
Lectures (3) in Physiology 555 (Integrative Genomics)
Lectures (270 min) in Physiology 502 (Mammalian Physiology
for Pharmacy and Non-Physiology graduate students)
Director of "Aspects of Physiological Research" for undergraduate students doing research in departmental labs over the summer
Faculty supervisor: Physiology 606, Current Topics in Physiology – Student Seminar

2009 Co-director of Physiology 555 (Integrative Genomics), with L. Samuelson
Lectures (4) in Physiology 555 (Integrative Genomics)
Director of Physiology 606, Current Topics in Physiology – Student Seminar (Winter and Fall terms).
Director of "Molecular and Integrative Physiology for Undergraduate Researchers" for individuals doing research in departmental labs over the summer

2010 Co-director of Physiology 555 (Integrative Genomics), with L. Samuelson
Lectures (4) in Physiology 555 (Integrative Genomics
Director of Physiology 606, Current Topics in Physiology – Student Seminar (Winter and Fall terms)
Director of "Molecular and Integrative Physiology for Undergraduate Researchers," a noon lecture series for individuals doing summer research in departmental labs

2011 Director of Physiology 606, Current Topics in Physiology – Student Seminar (Winter and Fall Terms)
Director of "Molecular and Integrative Physiology for Undergraduate Researchers," a noon lecture series for individuals doing summer research in departmental labs

2012 Director of Physiology 606, Current Topics in Physiology – Student Seminar (Winter and Fall Terms)
Small Group Session with Medical Students on Gastrointestinal Physiology

Director of "Molecular and Integrative Physiology for Undergraduate Researchers," a lecture series for SURF, STEP, and other undergraduate fellows doing summer research in MIP

2013 Director of Physiology 606, Current Topics in Physiology – Student Seminar (Winter Term)
Co-director of "Molecular and Integrative Physiology for Undergraduate Researchers," a lecture series for SURF, STEP, and other undergraduate fellows doing summer research in MIP
2014 Director of Physiology 606, Current Topics in Physiology – Student Seminar (Fall Term)
2015 Director of Physiology 606, Current Topics in Physiology – Student Seminar (Winter and Fall Terms)
Cell and Developmental Biology 582: Stem Cells in Organogenesis and Regenerative Medicine (1 lecture).
Co-director of "Molecular and Integrative Physiology for Undergraduate Researchers," a series of nine lectures for SURF, STEP, and other undergraduate fellows doing summer research in MIP
2016 Director of Physiology 606, Current Topics in Physiology – Student Seminar (Winter Term)
Co-director of "Molecular and Integrative Physiology for Undergraduate Researchers," a series of ten lectures for SURF, STEP, and other undergraduate fellows doing summer research in MIP
Director of Lecture Series (T32): Multidisciplinary training program in basic diabetes research (gave one lecture).
2017 Director of Lecture Series (T32): Multidisciplinary training program in basic diabetes research
2018 Director of Lecture Series (T32): Multidisciplinary training program in basic diabetes research
2019 Director of Noon Lecture Series on Diabetes Research
2021 Director of Winter Lecture Series (T32): Multidisciplinary training program in basic diabetes research (gave one lecture: Slender story short shrifts stout subject).
Lecture to SIB trainees: Fat: How is it we know so little about something we have so much of!
PIBS503: Led session on Responsible Conduct of Research: Dual Use Research.
PHYS700: Capstone mentor, Johnathan Nguyen.
2022 Director of Lecture Series (T32): Multidisciplinary training program in basic diabetes Research
2023 Director of Lecture Series (T32): Multidisciplinary training program in basic diabetes Research
PIBS503: Led session on Mentoring Relationships and Power Dynamics in Academic Research
PHYS591: Led two sessions on Signaling and Development of Adipose Tissues

SUPERVISOR (SUMMARY)

20 Postdoctoral Fellows
20 Graduate Students
6 Visiting Scientists
1 Co-mentored Postdoctoral Fellow and 9 co-mentored Graduate Students
42 Graduate Student Rotations
71 Undergraduate, Medical and High School students who did research projects in my laboratory
43 Preliminary examination committees
78 Graduate dissertation committees

4 External counselor for graduate students
16 Scientific and Advisory Committees: K awards, T32, Faculty launch committees, etc

POSTDOCTORAL FELLOWS

1. Kenneth A. Longo, Ph.D. Dartmouth Medical School, 1998 – 2003. Endocrinology and Metabolism Training Grant, American Diabetes Association Postdoctoral Fellowship, First Prize in the Poster Competition at the Annual Symposium for Organogenesis at the University of Michigan (2003). Current Position: Vice President, Data Science. WAVE Life Sciences Ltd.

2. Isabelle Gerin, Ph.D. University Catholique de Louvain, 2001 - 2008. BAEF (Belgian American Education Foundation) Fellowship, Center for Organogenesis postdoctoral fellowship, FNRS (Fonds National De La Recherche Scientifique) postdoctoral fellowship, Center for Organogenesis travel award. First Prize, Poster Competition at 6th Intl. Symposium on Stem Cells and Organogenesis (2005). Travel Award from Center for Organogenesis (2006). Current position: Senior Investigator, Universite Catholique de Louvain Christian de Duve Institute of Cellular Pathology

3. Shian-Huey Chiang, Ph.D. University of Michigan, 2003 - 2005, Engineering and Regeneration Training Grant Postdoctoral Fellowship, MARC Travel Award (FASEB summer conference), Chair of Scientific Session at Annual Meeting of the American Diabetes Association (2003). Career Progression: Assistant Research Scientist. Life Science Institute, Ann Arbor, MI. Current Position: Director, Head of Emerging Science Biology, Target Sciences, Pfizer.

4. Vernon Dolinsky, Ph.D. University of Alberta, Canada, 2003 – 2005. Poster Competition Award at 6th Intl. Symposium on Stem Cells and Organogenesis (2005). Current Position: Associate Professor and Associate Department Head. University of Manitoba. Faculty of Medicine. Department of Pharmacology and Therapeutics.

5. Pernille Keller, Ph.D. University of Copenhagen, Denmark, 2006 – 2007. Fellowship from the Lundbeck Foundation. Current Position: Team Leader, Senior Scientist, Novo Nordisk, Copenhagen. Denmark

6. Kyle Sousa, Ph.D. Karolinska Institute, Sweden, 2007 - 2010. Regenerative Sciences Training Grant (2007-2008). Tissue and Engineering Training Grant (2008-2010). Current Position: Associate Professor, Associate Dean of Academic Affairs, Loma Linda University, Department of Pharmaceutical Sciences.

7. Hiroyuki Mori, M.D./Ph.D. Kyushu University, Japan, 2007 – present. Uehara Memorial Foundation Fellowship (2008-2009). Supported by a mentor-based fellowship from the American Diabetes Association (2009-2012). Current Positions: Research Associate Professor; Managing Director, MNORC Adipose Tissue Core.

8. William P. Cawthorn, Ph.D. University of Cambridge, England, 2009 – 2014. Royal Commission for the Exhibition of 1851 (2009-2012). NIH National Research Service Award (declined in favor of Eli Lilly Innovation Fellowship Award (2012-2016). Current Position: Faculty member (Chancellor's Fellow; tenured) at University of Edinburgh, Center for Cardiovascular Sciences.

9. Yao Yao, Ph.D. Shanghai Institute for Biological Science, China. 2011 – 2012. Assistant Research Scientist, Life Sciences Institute, University of Michigan. Current Position: Senior Scientist, Johnson & Johnson.

10. Erica L. Scheller, D.D.S./Ph.D., University of Michigan, 2011 – 2016. Rackham Travel Grant (2012). ASBMR Presidents's Poster Competition Winner (2013), ASBMR John Haddad Young Investigator Award (2014). K99 DE024178, Neural regulation of skeletal biology and periodontal disease progression in type 1 diabetes (2014-2016). Current position: Associate Professor at Washington University in St Louis.

11. Sebastian D. Parlee, Ph.D., Dalhousie University, Canada, 2012 – 2016. Center for Organogenesis Non-Traditional Postdoctoral Fellowship (2012 - 2013). Presidential Poster Winner – ENDO2015. Canadian Society of Pharmacology and Therapeutics Travel Bursary (2015), NRC Research Press K.M. Piafsky Trainee Presentation Award (2015). Current Position. Research Scientist-Biology, Novo Nordisk.

12. Aaron Burr, Ph.D. Wayne State University. 2015 to 2016. Center for Organogenesis T32 Postdoctoral Fellowship (2015-2016). Current Position: Senior Medical Writer, MMS Holdings.

13. Callie Corsa, Ph.D. Washington University in St Louis. 2015 to 2020. Postdoctoral Fellowship: T32 Multidisciplinary Training Program in Basic Diabetes Research (2015-2017), Postdoctoral Fellowship: American Diabetes Association (2018 to 2021), Annual NORC Symposium Poster Award (2019). Current Position: Scientific Writer, JB Ashtin.

14. Ziru Li, Ph.D. Peking University Health Science Center. 2016 to 2022. Postdoctoral Fellowship: American Diabetes Association (2018 to 2021), MIP Postdoctoral Award in Research Excellence (2019). BMA2020 Basic/Translational Research Award (1st prize). 2022 CDI-MOD First Place Poster Award. Current Position: Assistant Professor at Maine Medical Center Research Institute.

15. Colleen Dugan, Ph.D. University of Michigan. 2016 to 2017. Current Position: Senior Scientist at GlaxoSmithKline.

16. Kenneth Lewis, Ph.D. Wayne State University. 2018 to 2023. Postdoctoral Fellowship: T32 Developmental Origins of Metabolic Disorders (2018 to 2019). F32 National Research Service Award (2019 to 2021). BMA2020 Poster Award (Audience Choice). Current position: Assistant Professor at Central Michigan University College of Medicine.

17. Rebecca Schill, Ph.D. Medical College of Wisconsin. 2018 to present. Postdoctoral Fellowship: T32 Multidisciplinary Training Program in Basic Diabetes Research (2018 to 2019). F32 National Research Service Award (2019 to 2021). BMA2020 Poster Award. BMAS Summer School Highest Scored Abstract Award (2021). Bishr Omary Physiology Postdoctoral Teaching/Service Award (2022). UMPDA Conference Travel Award (2023).

18. Carolyn Walsh, Ph.D. University of California at Berkeley. 2020 to 2021. Postdoctoral Fellowship: Michigan Life Sciences Institute Fellowship (2020 to 2021). T32 Developmental Origins of Metabolic Disorders (2020 to 2021). Current Position: Senior Medical Information Manager, AstraZenica, UK.

19. Romina Uranga, Ph.D. Universidad Nacional del Sur. Argentina. 2021 to present.

20. Hadla Hariri, Ph.D. McGill University, 2022 to present.

GRADUATE STUDENTS

1. Sarah E. Ross, Ph.D. 1996 - 2001, Department of Physiology. Natural Sciences and Engineering Research Council Fellow (Canada), Rackham Predoctoral Fellowship, Keystone Travel Award, Susan B. Lipschutz Award for outstanding Female Graduate Student at the University of Michigan, Rackham Travel Awards, University of Michigan Teaching Award, Outstanding Poster Award at Annual Organogenesis Symposia, Department of Physiology Outstanding Teacher Award, Horace H. Rackham School of Graduate Studies Distinguished Dissertation Award (8 awarded out of a pool of ~700). Career Path: Postdoctoral Fellow and Assistant Research Scientist, Harvard Medical School. Current Position: Associate Professor, Departments of Neurobiology and Anesthesiology, University of Pittsburg.

2. Robin L. Erickson, M.D./Ph.D. 1997 – 2001, Department of Physiology 2001. Natural Sciences and Engineering Research Council Fellow (Canada), Rackham Predoctoral Fellowship, 2001 award for "Overall Excellence in Research and Service" presented by the Office of Research and Graduate Studies, Keystone Symposia Travel Award, Rackham Travel Award, Horace Davenport Fellowship. Career Path: M.D., University of Alberta; Pediatrics Residency, University of Calgary; Pediatric Nephrology Fellowship, University of Manitoba; Current Position: Pediatric Nephrologist, Auckland DHB, New Zealand

3. Christina Bennett, Ph.D. 2000 - 2005, Department of Molecular & Integrative Physiology, Systems in Integrative Biology Training Grant, Rackham Travel Award, Rackham Merit Fellowship, American Diabetes Association Summer Internship Award (2002), Tissue Engineering and Regeneration Training Grant, Porter Fellowship from the American Physiological Society. Rackham Distinguished Dissertation Award: Honorable Mention. Career Path. Postdoctoral Fellow, National Institutes of Health. Current Position: Assistant Director (Publisher), American Chemical Society.

4. Jennifer Kennell, Ph.D. 2000 – 2005, Cell and Molecular Biology Program, Cell and Molecular Biology Training Grant, Systems in Integrative Biology Training Grant, Center for Organogenesis Training Grant (Declined), Third Prize for Poster at Annual Cell and Molecular Biology Symposia (2001). Outstanding Abstract for Cancer Center Symposia (selected for short talk), Rackham Travel Award, First Prize for Poster at Annual Cell and Molecular Biology Symposia (2002), Arthur Vander Teaching Award (2002), Rackham Predoctoral Fellowship (2003), 2003 award for "Overall Excellence in Research and Service" presented by the Office of Research and Graduate Studies, Keystone Symposia Travel Fellowship (Mar, 2004), 2004 award for "Overall Excellence in Teaching" presented by the Office of Research and Graduate Studies. Rackham Outstanding Graduate Student Instructor Award (2004-2005). Career Path: Postdoctoral Fellow, Ken Cadigan, University of Michigan. Current Position: Associate Professor of Biology and Director of Biochemistry, Vassar College.

5. Paul DeRose, M.D./M.S. 2001 – 2003, Molecular & Integrative Physiology, Medical Science Training Program, Bean Fellowship, Systems and Integrative Biology Training Grant. Training: PGY2 Radiation Oncology Resident, University of Texas Southwestern Medical Center. Current Position: Radiation Oncologist, Methodist Richardson Medical Center, Texas.

6. Sona Kang, Ph.D. 2002 - 2006, Molecular & Integrative Physiology, Jack Lapides Fellowship, Rackham Travel Fellowship (2004), Rackham Predoctoral Fellowship (2005), and Bean Fellowship (2006). Postdoctoral Fellow, Harvard Medical School. Current Position: Associate Professor, Department of Nutritional Sciences & Toxicology, University of California, Berkeley.

7. Brian (Hyuk) Cha, M.D./Ph.D. 2002 - 2006, Molecular & Integrative Physiology, Medical Science Training Program, Center for Organogenesis Training Fellowship (2004-2006).

Residency, University of Michigan, Current position: Academic Dermatologist, St Joseph Mercy Health System.

8. Tyler Prestwich, D.D.S./Ph.D. 2005 – 2008. Cell and Molecular Biology Program. Cell and Molecular Biology Training Grant, Loeb Predoctoral Fellowship (2006-2007). University of Michigan Regents Fellow (2007-2008). Honorable mention for poster presentation at Annual CMB Symposium (2007). Current Position: Prestwich Orthodontics, Minot, ND.

9. John Petrie, M.S. 2006 – 2009. Molecular & Integrative Physiology, Maas Fellowship, Cellular & Molecular Approaches to Systems and Integrative Biology Training Grant (2006-2008). John Bean Award (2007). Center for Organogenesis Training Fellowship (2008 – 2009). Rackham Graduate Student Research Grant (2008). Current Position: American Journal Experts.

10. Baowen Du, Ph.D. 2009 - 2013. Northwest A&F University, China. Fellowship from China Scholarship Council. Current Position: Postdoctoral Researcher, Chengdu Institute of Biology, Chinese Academy of Science. Current position: Research Assistant. Sichuan University, Chengdu.

11. Becky Simon, Ph.D. 2009 – 2013. Cell and Molecular Biology Program, Rackham Merit Fellowship. Cell and Molecular Biology Training Grant (2009-2010). Rackham Graduate Student Precandidate Research Grant (2009). Center for Organogenesis Predoctoral Fellowship (2010-2012). Honorable mention for poster presentation at Annual CMB Symposium (2010). First prize at UM-WSU Physiology Symposium Poster Competition (2011). Second prize for poster presentation at Annual CMB Symposium (2011). Rackham Travel Award (2012). Abstract picked for oral presentation at the American Diabetes Meeting (6/12/12). Postdoctoral Fellow with Dean Brenner, University of Michigan. Current position: Senior Analyst, Biopharma. San Francisco Bay Area, CA.

12. Adam Bree, D.M.D./M.S. 2011 – 2012. Molecular & Integrative Physiology, Systems and Integrative Biology Training Grant (2011-2012). Rackham Graduate Student Precandidate Research Grant (2012). NIH Predoctoral National Research Service Award (declined), Dental School, University of Missouri. Current position: General Dentistry, Premier Dental Partners West County, St Louis, MO.

13. Ning Xiaomin, Ph.D. 2012 – 2014. Northwest A&F University, China. Fellowship from "Chinese Top University Graduate Students Studying Abroad."

14. Shaima Khandaker, M.D./M.S. 2015 – 2016. Molecular & Integrative Physiology Master's program. Rackham Graduate Student Research Grant. Medical School, Michigan State University. Current Position: Physician, Physical Medicine & Rehabilitation. Taylor MI.

15. Devika Bagchi, M.D./Ph.D. 2015 – 2020. Molecular & Integrative Physiology, Medical Science Training Program. Center for Organogenesis Predoctoral Fellowship (2016-2018). Tylenol Future Care Scholarship (2016-2017). Rackham Conference Travel Grant. Office of Graduate and Postdoctoral Studies Excellence in Service Award (2017). Arthur Vander Teaching Award (2017), John Williams Service Award (2017). Rackham Conference Travel Grant (2017). Rackham Graduate Student Research Grant (2019). Davenport Award Finalist (2020). Rackham Outstanding Graduate Student Instructor Award (2020). Proquest Distinguished Dissertation Award from Rackham Graduate School (2020). George R. DeMuth Award (2022). Dr. Harry A. Towsley Award (2022). Current Position: Internship/Residency at Boston Children's Hospital, Harvard Medical School.

16. Steven Romanelli, Ph.D. 2017 – 2021. Molecular & Integrative Physiology. Cellular Biotechnology T32 Training Program (2017 – 2019). Rackham Graduate Student Precandidate Research Grant (2017), Internship at MedImmune, Cambridge, May-August 2018. Rackham Candidate Research Grant (2018). Annual Diabetes Research Center Symposium Poster Award (2019), Excellence in Basic Science Award from UM EBS, Annual NORC Symposium Poster Award (2019). F31 National Research ~~Service~~ Award (2019 to 2022). MIP Symposium People's Choice Poster Award (2020). Davenport Award Finalist (2021). Current Position: Senior Consultant, Trinity Health Sciences.

17. Ameena Benchamana, Ph.D. 2019. Department of Physiology Mahidol University Thailand. Current Position: Assistant Professor, Department of Physiology, Faculty of Medicine, Prince of Naradhiwas University, Thailand.

18. Jessica Maung, 2021 to present. Molecular & Integrative Physiology. Rackham Graduate Student Precandidate Research Grant (2021), Center for Cell Plasticity and Organ Design Training Program (2021-2023). John Bean Award for Academic Excellence (2021). Vander Award for Excellence in Teaching (2022). Rackham International Travel Grant (2023). Outstanding Early Career Researcher Award (Adipose Biology – Metabolic Buffering in an Obesogenic World, Edinburgh 2023).

19. Isabel Hermsmeyer, 2022 to present. Department of Anthropology.

20. Bonje Obua, 2023 to present. Cell and Molecular Biology Program. Cell and Molecular Biology Training Grant (2023-2024).

EXTERNAL COUNSELOR

1. Philip Hallenborg. 2005 - 2008. Graduate Student, University of Southern Denmark. Proposed Dissertation Title: Lipoxygenases in adipogenesis.

2. Maria S. Boysen. 2005 - 2006. Graduate Student, University of Southern Denmark. Proposed Dissertation Title: Regulation of gene expression by CLA and glucose – implications for type 2 diabetes.

3. Lars Kristensen. 2006 – 2008. Graduate Student, University of Southern Denmark.

4. Malene Olesen. 2008 – 2010. Graduate Student, University of Southern Denmark. Proposed Dissertation Title: Bone-related proteins in the arterial wall in diabetes: The significance of osteoprotegerin (OPG).

RESEARCH ROTATIONS

1. Sarah E. Ross, Department of Physiology, 1996
2. Robin L. Erickson, Department of Physiology, 1997
3. Christina Consolino, Department of Physiology, 1998
4. Daniel Becker, Medical Science Training Program, and Cell and Molecular Biology Training Program, 1998
5. Christina Bennett, Department of Physiology, 2000
6. Jennifer Kennell, Program in Biomedical Sciences, 2000
7. Jonathan Winnay, Program in Biomedical Sciences, 2000
8. Paul DeRose, Medical Science Training Program, 2001
9. Margaret Ochocinska, Program in Biomedical Sciences, 2001

10. Sona Kang, Program in Biomedical Sciences, 2002
11. Erin O'Leary, Program in Biomedical Sciences, 2002
12. Brian (Hyuk) C. Cha, Medical Science Training Program, 2002
13. Nicole Acevedo, Program in Biomedical Sciences, 2002
14. Christa Van Dort, Program in Biomedical Sciences, 2004
15. Tyler Prestwich, Program in Biomedical Sciences, 2005
16. Nathan Palpant, Program in Biomedical Sciences, 2005
17. John Petrie, Program in Biomedical Sciences, 20053
18. Deepti Nagarkar, Program in Biomedical Sciences, 2006
19. Nicole Evans, Program in Biomedical Sciences, 2006
20. Michael Doche, Program in Biomedical Sciences, 2007
21. Andrew Miller, Program in Biomedical Sciences, 2007
22. Jiwon Roh, Program in Biomedical Sciences, 2008
23. Guoxiao (Grace) Wang, Program in Biomedical Sciences, 2008
24. Sarah Kampert, Program in Biomedical Sciences, 2008
25. Amanda Marie Day, Program in Biomedical Sciences, 2009
26. Becky Simon, Program in Biomedical Sciences, 2009
27. Scott Zaweija, Program in Biomedical Sciences, 2010
28. Jun Young Hong, Program in Biomedical Sciences, 2010
29. Gabriel Martinez-Santibanez, Program in Biomedical Sciences, 2010
30. Corinne Weisheit – Program in Biomedical Sciences (2011)
31. Adam Bree – Program in Biomedical Sciences (2011)
32. Mangala Iyengar – Medical Sciences Training Program (2011)
33. Devika Bagchi – Medical Sciences Training Program (2015)
34. Hanh Truong – Program in Biomedical Sciences (2016)
35. Steven Romanelli – Program in Biomedical Sciences (2017)
36. Jessica Maung - Program in Biomedical Sciences (2021)
37. Ruth Azaria - Program in Biomedical Sciences (2021)
38. Warren Yacawych – Program in Biomedical Sciences (2021)
39. Hannah Thompson – Program in Biomedical Sciences (2021)
40. Maria Del Mar Mendez-Casillas - Program in Biomedical Sciences (2022)
41. Bonje Obua – Program in Biomedical Sciences (2023)
42. Brian Desrosiers – Program in Biomedical Sciences (2023)
43. Emily Wang – Program in Biomedical Sciences (2024 – planned)

VISITING SCIENTISTS

1. Laszlo Bajnok, M.D. 2000 – 2002. University Medical School of Debrecen, Hungary
2. Beatriz Soret, Ph.D. 2006. Public University of Navarra, Spain
3. Minna Huttunen, Ph.D. 2006. University of Helsinki, Finland
4. Amiya Hajra, Ph.D. 2006-2010, University of Michigan
5. Inho Choi, Ph.D. 2011, Yeungnam University, South Korea
6. Ellen Gammelmark Klinggaard. 2022. University of Southern Denmark

CO-MENTOR

1. Hema Chandrasan, Organogenesis Postdoctoral Fellowship (with Martha Sommerman)
2. Kelly Bromfield, Organogenesis Predoctoral Fellowship (with Sally Camper)
3. Robert Loberg, Systems and Integrative Biology Training Grant (with Frank Brosius)
4. Eileen Vesely, Systems and Integrative Biology Training Grant (with Frank Brosius)
5. Lalitha Subramanian - Postdoctoral Fellowship from American Heart Association (with Jorge A. Iniguez)
6. David Parker, Organogenesis Predoctoral Fellowship (with Ken Cadigan)
7. David Morris, Systems and Integrative Biology Training Grant (with Liangyou Rui)

8. Nathan Palpant, Systems and Integrative Biology Training Grant (with Joe Metzger)
9. Gail Butler, Systems and Integrative Biology Training Grant (with Linda Samuelson)
10. Alivia Wu, American Heart Association Fellowship (with Ling Qi)

SCIENTIFIC AND ADVISORY COMMITTEES

1. Taehwa Chun, M.D., Ph.D. K08 Career Development Award, Department of Internal Medicine, University of Michigan, 2009 to 2011.
2. Emilyn Alejandro, Ph.D. K01. Mentored Research Scientist Development Award. Department of Internal Medicine, University of Michigan. 2014 to 2015
3. Lisa Guth, Ph.D. MEND T32, University of Michigan, 2014 to 2015
4. Eric Buras, M.D. PSTP program, University of Michigan, 2016 – 2019; K08 co-mentor, 2019 to 2021.
5. Michael Schleh, Kinesiology, University of Michigan, 2017 to 2020.
6. Emily Bowers, Immunology T32, Cell & Developmental Biology, 2018 to 2020.
7. Tristan Maerz, Ph.D. Assistant Professor, Department of Orthopaedic Surgery, 2019 to 2021.
8. Alexander Knights, Ph.D. Michigan Postdoctoral Pioneer Fellowship Program, 2020 to present.
9. Jason Miller, M.D. K08 Scientific Advisory Committee, 2021 to 2024.
10. Cristina Sáenz de Miera, Ph.D. Co-Mentor, MNORC Pilot & Feasibility Grant Awardee, 2021 to 2022.
11. Maria Foss de Freitas, M.D. Co-Mentor, MICHR Postdoctoral Translational Scholars Program, 2021 to 2023.
12. Jacqueline Fisher. M.D. Advisory committee. Pediatric Endocrinology Fellow. 2022 to present.
13. Erin Giles, Ph.D. New Faculty Advisory Committee, School of Kinesiology, 2022 to present.
14. Nadejda Bozadjieva Kramer, Department of Veterans Affairs; BLRD Career Development Award, 2022 to present.
15. Ramiah Jacks, Ph.D. Internal mentor: URM MNORC Pilot & Feasibility Grant recipient. 2023 to 2024.
16. Tijana Mitic, Centre for Cardiovascular Sciences, University of Edinburgh. Advisory committee. 2023.

GRADUATE COMMITTEES

1. Sarah Ross, Ph.D. – Department of Physiology, 1996-2001 (Chair)
2. Yifei Wu, Ph.D. - Cell and Molecular Biology Program, 1997 - 2000
3. Robin Erickson, MD/Ph.D. Department of Physiology, 1997-2001 (Chair)
4. Eric Tang, MD/Ph.D. - MSTP, and Cell and Molecular Biology Program, 1998 - 2001
5. Karen O'Brien, Ph.D. - Cell and Molecular Biology Program, 1998 - 2002
6. Jacob B. Hansen, Ph.D. - Dept of Mol Biology, Odense Univ., Denmark, 1998 - 2001
7. Glenn Micalizio, Ph.D. - Department of Chemistry, University of Michigan, 1999-2001
8. Heidi Campbell, Ph.D. - Department of Biological Chemistry, 1999-2003
9. Narayani Moorthy, Ph.D. - Cell and Molecular Biology Program, 1999 - 2001
10. Tyler Sisk, Ph.D. - Department of Microbiology and Immunology, 1999 - 2001
11. Jennifer Kennell, Ph.D. – Cell and Molecular Biology Program, 2000 – 2005 (Chair)
12. Christina Bennett, Ph.D. – Department of Physiology, 2000 – 2005 (Chair)
13. Brian Gummow – Ph.D. Department of Physiology, 2001 to 2005
14. Robert Loberg, Ph.D. – Department of Physiology, 2001 to 2003
15. Blair Madison, Ph.D. – Cell and Molecular Biology, 2001 to 2005

16. Anna Mazurkiewicz, Ph.D. – Cell and Molecular Biology Program, 2001 to 2005
17. Jeffrey Huo, Ph.D. – Medical Scientist Training Program. 2001 to 2005
18. Yannan Shen – Department of Biological Chemistry, 2001 to 2003
19. Paul DeRose, MD/MS - Molecular & Integrative Physiology, 2001 to 2003 (Chair)
20. David Van Mater, MD/Ph.D. - Medical Scientist Training Program. 2001 to 2004
21. Kelly Cha, MD/ Ph.D. – Department of Human Genetics. 2001 -2004
22. Mark Ribick, M.S. - Department of Biochemistry, 2002 to 2006
23. Sona Kang, Ph.D. – Molecular & Integrative Physiology, 2001 to 2006 (Chair)
24. Brian Cha, MD/Ph.D. - Medical Scientist Training Program, Department of Molecular & Integrative Physiology, 2001 to 2006 (Chair)
25. Kari Anne Risan Tobin, Ph.D. - University of Oslo, 2002
26. Michael Friedman, Ph.D. - Cell and Molecular Biology Program, 2002 to 2006
27. Jonathan Winnay, Ph.D. – Dept. of Molecular & Integrative Physiology, 2002 to 2005
28. Lara Hall, Doctor of Music Arts (DMA) - School of Music, 2003 to 2005
29. Teresa Cesena, Ph.D. - Cell and Molecular Biology Program, 2003 to 2007
30. Michael Corradetti, Ph.D. – Cell and Molecular Biology Program, 2003 to 2006
31. Zhuoran Zhao, Ph.D. – Oral Health Sciences Program, 2004 to 2006
32. Nicole Slawny, Ph.D. – Cell and Molecular Biology Program, 2004 to 2010
33. Rasmus Peterson, Ph.D. – Dept. of Molecular Biology, Univ. of Southern Denmark, 2005
34. Tyler Prestwich, DDS/Ph.D. – Cell and Molecular Biology Program, 2005 to 2008 (chair)
35. Diana Lungu, D.M.A. – School of Music, Violin Performance, 2005 to 2006
36. David Morris, Ph.D. – Department of Molecular & Integrative Physiology, 2006 to 2009
37. John Petrie, MS – Molecular & Integrative Physiology, 2006 to 2009 (Chair)
38. Hui Li, Ph.D. – Dept. of Molecular, Cellular, and Developmental Biology, 2006 to 2009
39. Kelli VanDussen, Ph.D. – Dept. of Molecular & Integrative Physiology, 2006 to 2010
40. Hailu Shitaye, Ph.D. – Cell and Molecular Biology Program, 2006 to 2009
41. Anna Clark, Ph.D. – Department of Chemistry, 2007 to 2010.
42. Mathew M. Molusky, Ph.D. – Cell and Molecular Biology Program, 2007 to 2011
43. Zhao Lin, DDS/Ph.D. – School of Dentistry, 2007 to 2010
44. Phillip Delekta, Ph.D. – Cell and Molecular Biology Program, 2008 to 2011
45. Jennifer MacKeller, M.S. – Department of Molecular and Integrative Physiology, 2008
46. Erica Scheller DDS/Ph.D. –Oral Health Sciences Program, 2008 to 2011
47. Brent VanderHart – Cellular and Molecular Basis of Human Disease Program, Van Andel Institute, 2008.
48. Michael Doche, Ph.D. – Molecular & Integrative Physiology, 2008 to 2012
49. Becky Simon, Ph.D. – Cell and Molecular Biology Program, 2009 to 2013 (Chair)
50. Baowen Du, Ph.D. – Northwest A&F University, China, 2009 to 2013 (Co-chair)
51. Jon Mowers, MD/Ph.D.- Medical Scientist Training Program, Department of Molecular & Integrative Physiology, 2009 to 2012
52. Jose A. Rodriguez-Nieves – Cell and Molecular Biology Program, 2010 – 2011
53. Guoxiao (Grace) Wang, Ph.D. – Cell and Molecular Biology Program, 2010 -2014
54. Adam Bree, M.S. – Molecular & Integrative Physiology, 2011 to 2012 (Chair)
55. Colleen Dugan, Ph.D. – Department of Chemistry, 2012 to 2016
56. Gabriel Martinez-Santibanez, Ph.D. – Cell and Molecular Biology Program, 2012 to 2015
57. Yuqing Sun – Molecular and Cellular Pathology Program, 2013 to 2014
58. Anders Haakonsson, Ph.D. – University of Southern Denmark, 2014.
59. Chanisa Thonusin, Ph.D. – Molecular & Integrative Physiology, 2014 to 2017
60. Elizabeth Abshire, Ph.D. – Biological Chemistry, 2015 to 2019
61. Devika Bagchi, Ph.D. – Medical Scientist Training Program, Department of Molecular & Integrative Physiology, 2015 to 2020 (Chair)
62. Henry Kuang, Ph.D. – Medical Science Training Program, Cell and Development Biology Program, 2016 to 2020
63. Steven Romanelli, Ph.D. – Molecular & Integrative Physiology, 2017 to 2021 (Chair)
64. Helen (Huilin) Wang, Ph.D. - Molecular & Integrative Physiology, 2017 to 2021

65. Hanh Truong, Ph.D. Department of Molecular & Integrative Physiology, 2018 to 2019
66. Victoria Demanbro, Ph.D. Maine Medical, 2018 to 2019
67. Alivia Wu, Ph.D. – Molecular & Integrative Physiology, 2019 to 2023
68. Matthew Sorensen, Ph.D – Department of Chemistry, 2017 to 2021
69. Logan Townsend, Ph.D. – University of Guelph, 2020
70. Michael Schleh, Ph.D. – Department of Kinesiology, University of Michigan, 2019 to 2022
71. Jessica Maung, Molecular & Integrative Physiology, 2021 to present (Chair)
72. Elvira van Hauwaert, Ph.D. Center for Functional Genomics and Tissue Plasticity, University of Southern Denmark, 2021.
73. Xiao Zhang, Department of Biomedical Engineering, Washington University in St. Louis. 2021 to present.
74. Desiree Gordian, Cell and Molecular Biology Program, 2022 to present.
75. Rebecca McBride, MScR. Institute of Cell Biology, University of Edinburgh, 2023.
76. Christopher (Quoc) Huynh, Molecular & Integrative Physiology, 2023 to present.
77. Faith Carranza, Cell and Molecular Biology Program, 2023 to present.
78. Bonje Obua – Cell and Molecular Biology Program, 2023 to present. (Chair).

PRELIMINARY/QUALIFYING EXAM COMMITTEES

1. Douglas Johns - Department of Physiology, 1997
2. Daquing Sun - Department of Physiology, 1997
3. Eric Tang –MSTP and Cell and Molecular Biology Program, 1997
4. Yue Ge - Cell and Molecular Biology Program (Chair), 1999
5. Philip E Schaner - Cell and Molecular Biology Program (Chair), 1999
6. Glenn Micalizio - Department of Chemistry, University of Michigan, 1999
7. Brian Gummow - Department of Human Genetics (Chair), 2001
8. Allison Moffa – Cell and Molecular Biology Program, 2001
9. Genevieve Kruger - Cellular and Molecular Biology, 2001
10. Jonathan Winnay - Department of Physiology, 2002
11. Norma DeJesus - Cell and Molecular Biology Program, 2002
12. Nicole Acevedo - Department of Molecular and Integrative Physiology, 2003
13. Phil Palmbos - Cell and Molecular Biology Program, 2003
14. Lymari Lopez-Diaz - Cell and Molecular Biology Program, 2003
15. Rachael Adams – Cell and Molecular Biology Program, 2004
16. Rebecca Leshan – Department of Molecular and Integrative Physiology, 2005
17. Greg Gurda – MSTP and Department of Molecular and Integrative Physiology, 2005
18. Joseph Dosch – Cell and Molecular Biology Program, 2005
19. Steve Yang – Cell and Molecular Biology Program, 2005
20. Anna Clark – Department of Chemistry, 2007
21. Matthew Campbell – Department of Molecular and Integrative Physiology (Chair), 2008
22. Michael Doche – Department of Molecular and Integrative Physiology, 2008
23. Jon Mowers – MSTP and Department of Molecular & Integrative Physiology (Chair), 2009
24. Daniel Chiang – Department of Molecular and Integrative Physiology (Chair), 2009
25. Grace Wang – Cell and Molecular Biology Program, 2010 (Chair)
26. Hilary Archbold – Cell and Molecular Biology Program, 2010
27. Jordan Wright –MSTP and Dept. of Molecular & Integrative Physiology (Chair), 2010
28. Ryan O'Connell - Department of Molecular and Integrative Physiology (Chair), 2010
29. Mie Kasanuki, Cell and Molecular Biology Program (Chair), 2011
30. Alexis Carulli, MSTP and Department of Molecular & Integrative Physiology, (Chair), 2011
31. Danielle Burgenske, Van Andel Institute Graduate School (External Examiner), 2011
32. Colleen Dugan, Department of Chemistry, 2012
33. Kevin Swift, Department of Molecular & Integrative Physiology, 2015

34. Megan Hoffman, Department of Molecular & Integrative Physiology, 2015
35. Stephen Robinson, Department of Biomedical Engineering, 2016
36. Huilun Wang, Department of Molecular & Integrative Physiology, 2017
37. Matthew Sorensen, Department of Chemistry, 2017
38. Hanh Truong, Cell and Molecular Biology Program, 2018
39. Kevin McGowan, Department of Molecular & Integrative Physiology, 2018
40. Michael Schleh, Department of Kinesiology, 2019
41. Desiree Gordian, Cell and Molecular Biology Program, 2022
42. Stephanie Steltzer, Department of Molecular & Integrative Physiology, 2022
43. Maria Del Mar Mendez Casillas, Molecular & Integrative Physiology, 2023

HIGH SCHOOL, UNDERGRADUATE, and MEDICAL STUDENT RESEARCH PROJECTS

1. David Hong – UM Undergraduate, 1997
2. Esther Kim - UM Undergraduate, 1997
3. Robert Hennighausen - UM Undergraduate, 1997
4. Zulma Garcia – University of Puerto Rico at Cayey Undergraduate, Minority Biomedical Research Program, 1998
5. Lorean Serra - University of Puerto Rico at Cayey Undergraduate, Minority Biomedical Research Program, 1999
6. Annie Miao – UM Undergraduate, 2002
7. Nikil Oak, MD – UM Undergraduate, 2003 – 2006. Phys405, Undergraduate Research Opportunity Program, and Cell and Molecular Biology Honors Thesis.
8. Jacob Miller – UM Undergraduate, 2004. Phys405
9. Brett Schroeder, M.D. – UM Undergraduate, 2005. Phys405
10. Mohamad A. Saghir, M.D. – UM Medical Student, 2005
11. Lauren Rapp, MD – UM Undergraduate, Psych331, 2006
12. Wendy Wong. Ph.D. – UM Undergraduate, 2006 – 2009
13. Laura Munn – UM Undergraduate, 2006 – 2008
14. Jasmine Zheng, MD – UM Undergraduate, pre-MHIRT program, 2007 – 2008, MCDB 300: Fall 2007, Winter 2008, Fall 2008, and Winter 2009. Fall 2008/Winter2009 - Molecular Cellular and Developmental Biology Honors Thesis
15. Ammar Salhadar, MD – UM Undergraduate, MCDB 400, Fall 2007; Winter, 2008
16. Sam Langberg, MD - UM Undergraduate, 2008 - 2009
17. Paul Kim – UM Undergraduate, MCDB 300, Fall 2008, Winter 2009
18. Michael Reid, Ph.D. - UM Undergraduate, 2008-2010, 2009 SURF Fellowship.
19. Katie Hinchee, M.D./Ph.D. - Duke University Undergraduate, 2009. SURF Fellowship
20. Elizabeth Feenstra, MD - Calvin College Undergraduate, 2009, 2010. SURF Fellowships.
21. David Broome, MD - Michigan State University, 2010. SURF Fellowship.
22. Abigail Burant - Pioneer High School, 2010
23. Rachel McWilliams - UM Undergraduate, 2008 to 2013
24. Michael Stevens - UM Undergraduate, 2009 to 2010
25. Sandra Soliman - American University of Cairo. SURF Program. 2011.
26. Khanh San Pham - Pioneer High School, UM, 2010 to 2016.
27. Alison Su, Ph.D. - Dartmouth University, STEP Fellowship. 2012.
28. Maria Sterrett, Ph.D. - Carlton College, SURF Program. 2012.
29. Austin MacDougald-Tassava - Huron High School, 2012.
30. Seth Bear – Skyline High School, 2012 to 2013.
31. Ben Schell – UM Undergraduate, 2013 to 2014.
32. Wesley Hebert – Norwich College, SURF Program. 2013.
33. Bofeng Zhang, Ph.D. – Johns Hopkins University, STEP Fellowship. 2013.

34. Hoai An Pham – 2013 – 2017. Pioneer High School, Competed at Pioneer High School (1st), SE Michigan Regional (3rd), and State of Michigan (3rd) Science Fair Competitions. SURF Program (2015).
35. Shaima Khandaker, M.D./M.S. - UM Undergraduate. UROP, Phys405. 2013-2015.
36. Lindsay Anderson - UM Undergraduate. Phys306. Winter 2014
37. Alexandra Washabaugh – Albion College, SURF Program, 2014
38. Annabel Lemke – UM Undergraduate. UROP, 2014-2015.
39. Brent Wu, Ph.D. – University of Illinois Urbana-Champaign, STEP Fellowship, 2014
40. Matthew Oram – Calvin College, SURF Program, 2015
41. Samira Monavvari, M.D. – Central Michigan Medical School, 2015
42. Michael Breed, Ph.D. – UM Undergraduate. UROP, Phys306, 2015 to 2017
43. Destiny Stewart – University of Michigan, SURF Program, 2016
44. Catherine Salamon, University of Michigan – Flint, STEP program, 2016, 2017
45. Akira Nishii, University of Michigan. STEP Program (2017), MCDB400 (2018), SURF Program, 2018. Outstanding Presentation Award: 2018 Gulf Coast Undergraduate Research Symposium in Nashville. 2018 University of Michigan Undergraduate of the Year (1 of 7 from a pool of >43,000 students)
46. Audrey Cheng, University of Aberdeen, SURF Program, 2017
47. Sara Kitterman, Aquinas College, SURF Program, 2017
48. Matthew Askar, UM Undergraduate, STEP Program, 2017
49. Natalie Gaines, UM Undergraduate, IntMed499, 2018. SURF Program, 2018
50. Johena Sanyal, UM Undergraduate, UROP, 2018 - 2019
51. Jihan Khandaker, UM Undergraduate, UROP, 2018 – 2019
52. Katrina Granger, UM Undergraduate, SURF Program 2019, MCDB300, 2019
53. Landon Belanger, Quest University, SURF Program, 2019.
54. Jack Visser, Calvin College, SURF Program, 2019.
55. Thomas Cadenhead, Rochester University, STEP Program, 2019
56. Sydney Peterson, UM Undergraduate, UROP, 2019 – 2023. SURF Program, 2022.
57. Ahmad Mustafa, UM Undergraduate, UROP, 2019 – 2020
58. Patricia Lin, UM Undergraduate, 2019 - 2020
59. Kevin Qiu, UM Undergraduate, SURF Program, 2021 - 2022.
60. John Bonoris, University of Pittsburgh Undergraduate, SURF Program, 2021
61. Lily Oles, UM Undergraduate, SURF Program, 2021, 2022, UROP, 2021– 2023.
62. Arianna Kapotas, UM Undergraduate, UROP, 2021-2022.
63. Emma Paulsson, UM Undergraduate, UROP, 2021-2023.
64. Jingtong Zhao, UM Undergraduate, 2021-2022.
65. Rachel Simmermon, UM Undergraduate, SURF Program, 2022, M-SURE 2023.
66. Jannis Jacobs, UM Undergraduate, SURF Program, 2022. 2022-2023.
67. Mohamed Farhan, UM Undergraduate, MCDB300, 2022.
68. Myrra Arya, UM Undergraduate, UROP 2022-2023.
69. Gabriel Ferguson, Vanderbilt University, M-SURE 2023.
70. Mariah Ashby, BioMed Focus Scholar, 2023.
71. Lanna Lewis, UM Undergraduate, UROP, 2023-2024.

SERVICE:

Department of Molecular & Integrative Physiology
Graduate Affairs Committee, 1997-2001, 2004 – 2005, 2006-2008
Seminar Series Coordinator, 1998-2001
Space Committee, 1998-2000, 2000-2001 (Chairperson)
Physiology Faculty Search Committee, 1999-2000
Chair's Advisory Committee, 2001-2005, 2006 - 2011

Departmental Faculty Mentor: Liangyou Rui, 2002 – 2010
Faculty Search Committee, 2008
Departmental Faculty Mentor: Ken Inoki, 2008 to 2011
Director of Graduate Studies, 2008 to 2011
Sewell Collegiate Chair Search Committee, 2012
Director of Summer Undergraduate Research Fellowship (SURF), 2009 – 2016
Co-director of SURF program (with Y. Shah), 2017
Co-director of STEP undergraduate research program (with S. Schnell), 2010 to 2022
MIP Awards Committee, 2012 – 2013, 2014-2021
Alumni Relations Committee, Chair. 2012 to present
Departmental Faculty Mentor: Jun Wu, 2013 to 2018
John A Faulkner Lectureship Committee, 2015 to present
Faculty Search Committee (Chair), 2023 to 2024

School of Medicine
Program in Biomedical Sciences: International Applicant Evaluation Committee, 1999- 2002
Summer Research Opportunity Program: Applicant Evaluation Committee, 1999
Cell and Molecular Biology Program: Organization of the Annual Symposium, 2000
Department of Physiology Internal Review, 2000-2001
Reviewer for University of Michigan BMRC grants program, 2000
Reviewer for University of Michigan OVPR Faculty Grants and Proposals, 2000
Reviewer for MDRTC Pilot Grant Proposal, 2001
Basic Science Research Building: Luncheon to discuss building design, 2001
Postdoctoral Seminar Series: "For Graduate Students: Finding a Post-doc Position," 2002
Metabolomics Seminar Series: Operating Committee, 2005
Metabolomics and Obesity Center: Organizing Committee, 2005 to 2010
Metabolomics and Obesity Center: Steering Committee, 2005 to 2010
Cell and Molecular Biology Annual Symposium: Poster Evaluation, 2006
Reviewer for OVPR Faculty Grants, 2006
Program in Biomedical Sciences: Applicant Evaluation Committee, 2007 – 2011
Program in Biomedical Sciences: Operating Committee, 2009 to 2011
Cell and Molecular Biology Program Committee, 2007-2010
Nutrition and Obesity Research Center Planning Committee, 2008 to 2010
Dean's Review Committee: Center for Organogenesis, 2008 - 2009
Center for Integrative Genomics: Operating Committee, 2008 to 2010
Search Committee; Director of the Center for Organogenesis, 2009
Metabolomics and Obesity Center: Review Committee for Pilot/Feasibility Grants, 2009, 2010
Program In Biomedical Sciences: PREVIEW Selection Committee, 2009
Systems and Integrative Biology Training Grant Operating Committee, 2008 - 2013
Associate Director, SIB Training Grant, 2008 to 2011
Center for Organogenesis: Review of Postdoctoral Fellowship applications, 2010
Obesity Club: Host for seminar series, Winter 2012
Search Committee: Director of the Cell and Molecular Biology Program, 2012
FastForward Initiative: Co-champion with Burant, Myers, and Lumeng. 2012
65th Anniversary of the Fulbright Program in Italy: Presentation on PIBS and MIP graduate programs, University of Udine, Italy. November 21, 2013
Biological Sciences Scholars Program (BSSP) search committee, 2014 to 2016
Executive Committee: Multidisciplinary Training Program in Basic Diabetes Research, 2014 to 2015.
Internal Medicine Physician Scientist Program: Interviewed candidates, Dec 2014.
Center for Organogenesis: Review of Predoctoral Fellowship applications, 2015.
Center for Organogenesis: Steering Committee, 2015-2020
Director, Pilot & Feasibility Grant Program, MNORC, 2011 – 2013, 2014 to 2020.

Diabetes Research Center P&F grant review panel, 2011, 2012, 2014 to 2022.
Eli Lilly External Innovation/Academic Collaboration: Organized and chaired, 2016.
Search Committee: Chief Scientific Officer of UM Medical School, 2016 to 2017.
Internal Advisory Board: P30AR069620; Musculoskeletal Center, 2016 to present.
Diabetes Research Center Molecular Genetics Core: Advisory Committee, 2017 to present.
Candidate evaluation: Internal Medicine Physician Scientist Program, 2017.
Director: Multidisciplinary Training Program in Basic Diabetes Research, 2015 to present.
Director: Adipose Tissue Core, MNORC, 2018 to present.
MNORC Pilot & Feasibility Grant Program Reviewer, 2020 to present.
Center for Cell Plasticity and Organ Design: Steering Committee, 2020 to present
Medical School Office of Regulatory Affairs: Consultant, 9/2021
Mallinckrodt Scholars Program Grant Review Committee. 2021
MNORC/MDRC P&F grant review panel. 2023

University of Michigan

University of Michigan Health System Strategic Planning Committee: Research, 1999
LSI Cell Biology Task Force, 2002 to 2004
Operating Committee: Tissue Engineering and Regeneration Training Grant, 2002 - 2005
Operating Committee: Cell and Molecular Biology Core, MDRTC, 2002- 2010
Promotions Committee: Jean-Marie Rouillard, Department of Chemical Engineering, 2006
Science and Technology Excellence Program, 2007 – 2008, 2010
Search Advisory Committee for Dean, Division of Kinesiology, 2008
Rackham Graduate School: Predoctoral Fellowship review committee, 2009, 2010
Rackham Graduate School: Faculty Recognition Awards Committee, 2012, 2013
Rackham Graduate School: MORE (Mentoring Others Results in Excellence) Committee, 2012 - 2013
Reviewer for University of Michigan Regional Comprehensive Metabolomics Resource Core (MRC2) Pilot and Feasibility Grant Program, April 2014
Life Sciences Institute Promotions Review Committee, 2012, 2014, 2015
Intramural seminars presented to Pediatrics (2001), Cell and Developmental Biology (2005), Endocrine Division of Pediatrics (2006), Molecular, Cellular and Developmental Biology (2008), Nephrology Division of Internal Medicine (2014), Metabolism, Endocrinology and Diabetes Division of Internal Medicine (2015), Musculoskeletal Research in Progress (2016), Annual Michigan Musculoskeletal Symposium (2017, 2021), Oral Health Sciences Seminar Series (2023),
American Diabetes Association Pathway Award: UM internal selection committee, 2016-present
Michigan Regional Comprehensive Metabolomics Research Core: Pilot and Feasibility Grant Reviewer, 2016
Musculoskeletal Symposium: Poster judge, April 6, 2018
M-Diabetes Executive Committee Member: 2019 to 2021
M-Diabetes Education Committee Co-director: 2019 to 2021
Poster Judge: MNORC and MSK Annual Symposia, 2019
Michigan Integrative Musculoskeletal Health Core Center: Review of P&F grants, 2020
Bioartography Advisory Committee: 2020 to 2023.
Research Integrity Committee: 2020
Musculoskeletal Symposium: Poster judge, May 19, 2021
Caswell Diabetes Institute Faculty Search Committee: 2021-2022.
Caswell Diabetes Institute Datablitz Evaluation Committee: 2022.

EXTRAMURAL INVITED PRESENTATIONS

1) 18th Annual Johns Hopkins In-House Cell Biology Symposium, June 1994.

2) Mid-Atlantic Diabetes Research Symposium, NIH, September 1994. "Regulation of C/EBPα Transcription by Glucocorticoids in 3T3-L1 Adipocytes and White Adipose Tissue"

3) National Institute on Aging (Diabetes Unit), October 1994. "Regulated Expression of the *obese* Gene Product (Leptin) in White Adipose Tissue and 3T3-L1 Adipocytes"

4) University of California at Davis, Dept of Molecular Medicine, October 1994. "Transcriptional and Posttranslational Regulation of C/EBPα in 3T3-L1 Adipocytes"

5) Indiana University School of Medicine, Dept of Biochemistry, February 1995. "Transcriptional and Posttranslational Regulation of C/EBPα in 3T3-L1 Adipocytes"

6) University of Michigan School of Medicine, Dept. of Physiology, March 1995. "Transcriptional and Posttranslational Regulation of C/EBPα in 3T3-L1 Adipocytes"

7) University of California at Berkeley, Dept. of Nutrition, April 1995. "Transcriptional and Posttranslational Regulation of C/EBPα in 3T3-L1 Adipocytes"

8) Endocrine Grand Rounds at the Johns Hopkins Hospital: November 1995. "Role of Leptin in Obesity"

9) Parke-Davis Pharmaceutical Research, Signal Transduction Dept., Ann Arbor MI: December 1996. "Transcriptional and Posttranslational Regulation of C/EBPα in 3T3-L1 Adipocytes"

10) Odense University, Denmark: September 13-15, 1998 (Symposium on Transcriptional Regulation and Cellular Differentiation). "Transcriptional and Posttranslational Regulation of C/EBPα in 3T3-L1 Adipocytes"

11) Cayey University, Dept. of Biology, Puerto Rico, February 1999. "Transcriptional and Posttranslational Regulation of C/EBPα in 3T3-L1 Adipocytes"

12) University of Guelph, Dept. of Nutrition, Canada, May 12, 1999. "Role of C/EBPα in Adipocyte Development and Metabolism"

13) Steenbock Symposium on Adipocyte Biology and Hormone Signaling, University of Wisconsin, Madison WI, June 1999. "Role of C/EBPα in Adipocyte Development and Metabolism"

14) Case Western Reserve University, Dept. of Nutrition, September 1999. "Role of C/EBPα in Adipocyte Development and Metabolism"

15) Keystone Meeting on Molecular Control of Adipogenesis and Obesity,
Taos, New Mexico, February 2000. "Inhibition of Adipogenesis by Wnt Signaling"

16) University of Minnesota School of Medicine, Dept. of Biochemistry, April 2000. "Inhibition of Adipogenesis by Wnt Signaling"

17) Texas A&M University, Nutritional Sciences Program, April 2000. "Inhibition of Adipogenesis by Wnt Signaling"

18) R&D Systems, Minneapolis, June 2000. "Inhibition of Adipogenesis by Wnt Signaling"

19) University of Illinois, Department of Nutrition, December 6, 2000 “Inhibition of Adipogenesis by Wnt Signaling”

20) Novo Nordisk – Boehringer Ingelheim Obesity Symposium, Copenhagen, Denmark. January 14-16, 2001 Two seminars entitled: “Inhibition of Adipogenesis by Wnt Signaling” and “Genetic Cascades during Adipogenesis”

21) Johns Hopkins University School of Medicine, Dept. of Biological Chemistry, January 30, 2001. “Inhibition of Adipogenesis by Wnt Signaling”

22) University of Southern Denmark, Odense Denmark, Dept. of Molecular Biology. March 15, 2001. “Inhibition of Adipogenesis by Wnt Signaling.”

23) University of Alberta, Edmonton, Canada, Graduate Student/Postdoctoral Fellow Symposium. CIHR Group on the Molecular and Cell Biology of Lipids, April 23, 2001. “Inhibition of Adipogenesis by Wnt Signaling.”

24) Arkansas Cancer Research Center, May 14, 2001. “Inhibition of Adipogenesis by Wnt Signaling.”

25) Wnt Meeting 2001. Memorial Sloan-Kettering Cancer Center. New York NY, May 18-20, 2001, “Use of Microarray Analyses to Identify Wnt-Regulated Transcriptional Repressors that Inhibit Adipogenesis.

26) 61st American Diabetes Association, Philadephia, PA, June 22-26, 2001. Inhibition of Adipogenesis by Wnt Signaling.

27) Kyoto University, Kyoto, Japan, Department of Medicine and Clinical Medicine, August 17, 2001. “Regulation of Fat Cell Development: Molecular Analyses of C/EBPα.”

28) 6th Annual Adiposcience Meeting, Osaka, Japan, August 18, 2001. “Regulation of Fat Cell Development: Role of Wnt Signaling.”

29) Sumitomo Pharmaceutical Co., Ltd., Osaka, Japan, August 20, 2001. “Regulation of Fat Cell Development: Molecular Analyses of C/EBPα.”

30) Biocenter Oulu, Finland. October 25, 2001. “Regulation of Fat Cell Development: Role of Wnt Signaling.”

31) 4th Nordic Meeting on Medical and Biochemical Aspects of Lipid Metabolism at Rokua (Oulu), Finland, October 25-17 2001. “Regulation of Fat Cell Development: Role of Wnt Signaling.”

32) Keystone Symposium on Molecular Control of Adipogenesis and Obesity, January 10-16, 2002. "Wnt Signaling in Regulation of Adipogenesis." Keystone, Colorado.

33) Pennington Research Institute, Baton Rouge, LA. February 28, 2002. "Regulation of Adipogenesis: Role of C/EBPα and Wnt Signaling."

34) Harvard Institutes of Medicine, Division of Hematology/Oncology, Boston, MA, May 22, 2002. "Regulation of Adipose Tissue Development by Wnt Signaling."

35) University of Southern Denmark, Department of Molecular Biology, Odense Denmark. June 14, 2002, "Regulation of Adipose Tissue Development by Wnt Signaling."

36) AstraZenica R&D. Gothenberg, Sweden, June 17, 2002. "Regulation of Adipocyte Differentiation and Metabolism by LXRα."

37) International Congress on Obesity, Sao Paolo, Brazil, August 24-29, 2002. "Wnt Signaling in Regulation of Adipose Tissue Development."

38) Vanderbilt University, Vanderbilt Diabetes Center and Department of Molecular Physiology and Biophysics. September 19, 2002. "Wnt Signaling in Regulation of Adipocyte Development."

39) University of Oslo, Norway, Institute for Nutrition Research, October 7, 2002. "Role of Wnt Signaling in Adipocyte Development."

40) University of Bergen, Norway, Department of Clinical Biochemistry, October 9, 2002. "Role of Wnt Signaling in Adipocyte Development."

41) European Council for Blood Pressure and Cardiovascular Research, Seeheim, Germany, October 11-13, 2002. "Role of Wnt Signaling in Adipocyte Development."

42) University of Pennsylvania School of Medicine, Diabetes Research Seminar, December 10, 2002. "Role of Wnt Signaling in Adipocyte Development."

43) Michigan State University, Department of Physiology, January 16, 2003. "Regulation of Adipose Tissue Development by Wnt Signaling."

44) University of Southern California, Biomedical Research Seminar Series, Center for Cranial-Facial Research. February 3, 2003. "Regulation of Adipose Tissue Development by Wnt Signaling."

45) National Institute on Aging, Intramural Program, Baltimore, MD. March 7, 2003. "Regulation of Adipose Tissue Development by Wnt Signaling."

46) Medical College of Ohio, Molecular Basis of Disease Seminar Series, Toledo, OH. April 15, 2003. "Wnt signaling: Role in adipose, bone, and muscle development."

47) University of Alabama at Birmingham. Department of Cell Biology. May 7, 2003. "Wnt signaling: Role in adipose, bone, and muscle development."

48) Centocor, Inc. Malvern, PA. May 29, 2003. “Role of Wnt Signaling in Development of Adipose, Bone, and Muscle.”

49) Pfizer, Inc. Groton, CT. August 11, 2003. “Role of Wnt Signaling in Development of Adipose, Bone, and Muscle.”

50) American Society for Bone and Mineral Research Plenary Lecture. Minneapolis, MN, September 20-23, 2003. “Role of Wnt10b in Development of Adipose Tissues and Bone.

51) North American Association for the Study of Obesity. Fort Lauderdale, FL. October 11-15, 2003. “Role of Wnt Signaling in Adipose Tissue Development.”

52) University of Indiana School of Medicine, Department of Biochemistry, Indianapolis, IN, December 1, 2003. “Role of Wnt Signaling in Development of Adipose Tissue, Bone, and Muscle.”

53) Eli Lilly and Company, Division of Gene Regulation, Bone, & Inflammation, Indianapolis, IN, December 3, 2003. “Role of Wnt Signaling in Development of Adipose Tissue, Bone, and Muscle.”

54) University of Connecticut Health Center, Division of Endocrinology & Metabolism, Endocrine Scholar’s Seminar. Farmington, CT, January 13, 2004. “Role of Wnt Signaling in Development of Adipose Tissue, Bone, and Muscle.”

55) Albert Einstein College of Medicine, Department of Cell Biology. Bronx, NY, January 14, 2004. “Role of Wnt Signaling in Development of Adipose Tissue, Bone, and Muscle.”

56) Keystone Symposia on Molecular Control of Adipogenesis and Obesity, March 4-10, 2004. "Role of Wnt10b in Development of Adipose Tissues and Bone." Banff, Alberta, Canada.

57) Proskelia, Paris France, March 18th 2004: Role of Wnt Signaling in Fate of Mesenchymal Stem Cells

58) Frontiers of Skeletal Biology, 10th Workshop on Cell Biology of Bone and Cartilage in Health and Disease. Davos, Switzerland, March 20-24, 2004.”Role of Wnt10b in development of adipose tissues and bone.”

59) University of Illinois at Chicago, Department of Medicine. Chicago, IL. April 20, 2004. Role of Wnt Signaling in Development of Adipose Tissues and Bone.

60) Symposium on Molecular and Physiological Aspects of Type II Diabetes and Obesity – Nobel Forum. Stockholm Sweden. May 7, 2004. Role of Wnt Signaling in Development of Adipose Tissues and Bone.

61) The Wnt Meeting, Ann Arbor, MI. May 20 –23, 2004. Role of Wnt Signaling in Development of Adipose Tissue and Bone.

62) 86th Annual Meeting of the Endocrine Society. New Orleans, LA. June 16 – 19, 2004. Role of Wnt Signaling in Development of Adipose Tissues and Bone.

63) Wyeth Research, Collegeville PA. July 13, 2004. Role of Wnt Signaling in Development of Adipose Tissues and Bone.

64) ProStraken Pharma, Romainville, France. October 21, 2004. On the Relationship Between Osteoblastogenesis and Adipogenesis.

65) North American Association for the Society of Obesity. Las Vegas, NV, Nov 14-18, 2004. “Role of LXRs and Wnts in Adipocyte Biology.

66) Case Western Reserve University. Department of Genetics. Cleveland, OH. December 15, 2004. Role of Wnt Signaling in Development of Adipose Tissues and Bone.

67) Jackson Laboratories. Bar Harbor, Maine. December 16, 2005. Role of Wnt Signaling in Development of Adipose Tissues and Bone.

68) Proctor & Gamble Pharmaceuticals, Inc. January 26, 2005. Role of Wnt Signaling in Development of Adipose Tissues and Bone.

69) Bowditch Lecture, Experimental Biology Meeting, San Diego, CA. April 3, 2005. Role of Wnt Signaling in Development of Adipose Tissues and Bone.

70) Ottawa Health Research Institute, Ontario, Canada. May 2, 2005. Role of Wnt Signaling in Development of Adipose Tissues and Bone.

71) Cellular Niches Workshop, NIDDK. May 16-17, 2005. Role of Wnt Signaling in Development of Adipose Tissues and Bone.

72) Centocor, Inc. Malvern, PA. May 18, 2005. Role of Wnt Signaling in Development of Adipose Tissues and Bone.

73) International Bone and Mineral Society and European Calcified Tissue Society Plenary Lecture. Geneva Switzerland, June 25-29, 2005. "Role of Wnt signaling in development of bone."

74) BMB-BioLigands Symposium on LXRs and PPARs, Odense, Denmark, June 30, 2005. "LXRs in adipose tissue biology and beyond."

75) University of Southern Denmark Graduate School in Metabolism. Nyborg. September 8, 2005 Plenary Lecture: Role of Wnt signaling in development of adipose tissues and bone.

76) University of Dundee, Scotland. September 13, 2005, Role of Wnt signaling in development of adipose tissues and bone.

77) State University of New York, Department of Pharmacology. Stony Brook, NY. October 18, 2005. Role of Wnt signaling in development of adipose tissues and bone.

78) Society for Women's Health Research-ISIS Fund Network on Metabolism. Washington, D.C. November 4, 2005. Role of Wnt signaling in development of adipose tissues and bone.

79) University of Kentucky, Graduate Program in Nutritional Sciences, Lexington, KY, November 17, 2005. Role of Wnt signaling in development of adipose tissues and bone.

80) Medical University of Ohio, Toledo, OH, December 13, 2005. Role of Wnt signaling in development of adipose tissues and bone.

81) Keystone Symposium: Adipogenesis, Obesity and Inflammation. January 21 – 26, 2006. Vancouver, British Columbia. Role of Wnt signaling in development of adipose tissues and bone.

82) Michigan State University, Department of Animal Science, East Lansing, MI, February 23, 2006. Role of Wnt signaling in development of adipose tissues and bone.

83) Society of Toxicology, San Diego, CA. Mar 5-9, 2006. An overview of obesity and adipose development.

84) University of Arkansas Medical Center (Keynote Speaker, Student Research Forum), April 6, 2006, Role of Wnt signaling in development of adipose tissues and bone.

85) Eli Lilly and Company, Division of Gene Regulation, Bone, & Inflammation, Indianapolis, IN, May 17, 2006. "Role of Wnt Signaling in Development of Adipose Tissues and Bone."

86) The 134th Nobel Symposium:"The Adipocyte a Multifunctional Cell,"Göteborg, Sweden, August 6-9, 2006. "Role of Wnt Signaling in Development of Adipose Tissues and Bone."

87) University of Nebraska NSF-EPSCoR Symposium. Omaha, NE, March 21, 2007.

88) American Diabetes Association National Meeting, "Regulation of Adipocyte Metabolism by MicroRNAs." Chicago, June 22-26, 2007.

89) Stedman Nutrition and Metabolism Center at Duke, December 11, 2007, "Wnt signaling and regulation of adipocyte differentiation and metabolism."

90) Keystone Symposium: Molecular Mechanisms of Adipogenesis and Obesity, Feb. 19-24th 2008, Banff Canada

91) Wayne State University. Department of Physiology, March 27 2008. "Wnts and MicroRNAs in adipocyte biology"

92) 35th Annual Association of Graduate Students in Biological Science Symposium, York University, Canada, March 29th, 2008. "Wnts and microRNAs in adipocyte biology"

93) University of California-Berkeley. Department of Toxicology and Nutritional Sciences, April 9th 2008. "Wnts and MicroRNAs in adipocyte biology"

94) NIDDK symposium on "The establishment, maintenance and turnover of fat depots" May 21-22, 2008. Bethesda MD

95) The 2nd International Conference on Osteoimmunology: Interactions of the Immune and Skeletal Systems, June 8 – 13, 2008, Rhodes Greece.

96) Van Andel Research Institute – August 20, 2008. "Roles for Wnt signaling in adipose tissues and bone." Grand Rapids, MI.

97) New Frontiers in Skeletal Research: Bone, Fat, and Brain Connections. April 27-28, 2009. "Roles for Wnt signaling in adipose tissue." Bethesda MD

98) Keystone Symposium on Adipose Tissue Biology, January 24-29, 2010. Keystone Colorado.

99) INSERM-sponsored meeting on "Adipose Tissue: a key target for prevention of the metabolic syndrome." Toulouse, France June 3 – 5, 2010.

100) 92nd Annual Meeting of the Endocrine Society, June 19-22, 2010. Roles for Wnt Signaling in Adipocyte Differentiation and Metabolism. San Diego, CA

101) Wayne State University. Endocrine Grand Rounds. Dec 1, 2010. Roles for Wnt Signaling in Adipocyte Differentiation and Metabolism.

102) Sanford/Burnham Medical Research Institute, Orlando, FL. March 17th, 2011.

103) 12th Annual Research Day, Yale Core Center for Musculoskeletal Disorders, New Haven, CT. April 21, 2011.

104) University of Chicago Medical Center/ Molecular Metabolism and Nutrition Seminar Series. May 10-11, 2011.

105) 34th Steenbock Symposium "Lipid Metabolism: Implications in Human Diseases" University of Wisconsin-Madison. May 22-25, 2011.

106) Obesity Society Meetings, "Role of Sweet Taste Receptors in Adipocyte Differentiation and Metabolism" Orlando, FL. October 1-5, 2011.

107) Yeungnam University, "Role of Sweet Taste Receptors in Adipocyte Differentiation and Metabolism" South Korea. Oct 20/21, 2011.

108) Institute of Biomedical Sciences, Fudan University Shanghai Medical College. China, Oct 24, 2011. "Roles for sFRP5 and sweet taste receptors in adipocyte differentiation and metabolism."

109) Eli Lilly & Company, February 14th, 2012. "Roles for sFRP5 and sweet taste receptors in adipose tissue biology." Indianapolis, IN.

110) 57th Annual Meeting of the Plastic Surgery Research Council. June 14th, 2012. "The role of sweet taste receptors in adipose tissue biology." Ann Arbor, MI.

111) The 58th Benzon Symposium: Adipose Tissue in Health in Disease. "Role of Sweet Taste Receptors in Adipocyte Differentiation and Metabolism." August 27 – 30, 2012 Copenhagen, Denmark.

112) Duquesne University, "Role of Sweet Taste Receptors in Adipocyte Differentiation and Metabolism." Pittsburg, PA. Nov 2nd, 2012

113) The Scripps Research Institute, "Role of Sweet Taste Receptors in Adipocyte Differentiation and Metabolism." La Jolla, CA, Dec 13th, 2012.

114) University of Pennsylvania, "Role of Sweet Taste Receptors in Adipocyte Differentiation and Metabolism." Philadephia, PA, Feb 5th 2013

115) University of Wisconsin. "Role of Sweet Taste Receptors in Adipocyte Differentiation and Metabolism." Madison, WI Mar 21st, 2013

116) Michigan Diabetes Research Center Annual Symposium. "Recent insights into adipose tissue biology." April 27th 2013. Ann Arbor

117) 33rd Blankenese Conference. Nutrient Sensing: from brain to gut. "Role of Sweet Taste Receptors in Adipose Tissue Biology." Hamburg Germany, May 25-29 2013

118) Sahlgrenska Center for Cardiovascular and Metabolic Research, University of Gothenburg, "Recent insights into adipose tissue biology." Sweden. May 30th, 2013

119) 73rd Annual Meeting of the American Diabetes Association, "Role of sweet taste receptors in adipocyte differentiation and metabolism." Chicago Illinois. June 21-25, 2013

120) Annual Meeting of the American Society for Bone and Mineral Research, "Marrow adipose tissue: endocrine functions and metabolism. Baltimore, Maryland, USA. October 4-7, 2013

121) Institute of Metabolic Science, University of Cambridge, "Marrow adipose tissue – more than just candy for canines?" Cambridge, U.K. Nov 14th, 2013.

122) 65th Anniversary of the Fulbright Program in Italy. Fulbright Lecture: Marrow adipose tissue: metabolism and endocrine functions. University of Udine, Italy. November 21, 2013.

123) European UnionFP7 BetaBAT consortium symposium: Examining inter-organ crosstalk and cellular dysfunction in metabolic disease. "Marrow Adipose Tissue: Metabolism and Endocrine Functions," Cambridge, U.K. December 10, 2013.

124) British Heart Foundation Workshop on Fat Cell Fate to Function. "Marrow Adipose Tissue: Metabolism and Endocrine Functions," University of Edinburgh, U.K. Dec 12-13, 2013.

125) Fulbright Scholar's Symposium. "Do saccharin and/or sweet taste receptors influence susceptibility to obesity?" University of Durham, U.K. January 6-10, 2014.

126) Center for Cardiovascular Science, "Marrow Adipose Tissue: Metabolism and Endocrine Functions," University of Edinburgh, U.K. Feb 4, 2014.

127) Rowett Institute for Nutritional Sciences, "Marrow Adipose Tissue: Metabolism and Endocrine Functions," University of Aberdeen, U.K. April 29, 2014.

128) Syddansk University, "Marrow Adipose Tissue: Metabolism and Endocrine Functions," Odense, Denmark. May 2, 2014.

129) Royal Swedish Academy of Sciences Key Symposium: Molecular and clinical prediction of the risk for osteoporotic fractures. "Marrow Adipose Tissue: Metabolism and Endocrine Functions," Stockholm, Sweden. June 3 - 4, 2014.

130) Distinguished Lecture – Henry Ford Hospital/Wayne State University. "Marrow Adipose Tissue: Metabolism and Endocrine Functions," Detroit, MI, Sept 4, 2014.

131) Lipodystrophy in 2014: Leptin and Beyond. "Marrow Adipose Tissue: Metabolism and Endocrine Functions," Ann Arbor MI Oct 17-19, 2014.

132) Obesity Week - Annual Meeting of the Obesity Society. "Development, endocrine functions, and metabolism of marrow adipose tissue" Boston, MA. Nov 2-7, 2014.

133) Pennington Biomedical Research Center. “Development, endocrine functions, and metabolism of marrow adipose tissue” Baton Rouge LA Feb 5th, 2015.

134) 99th Annual Meeting of the Endocrine Society. “Development, endocrine functions, and metabolism of marrow adipose tissue” San Diego CA, March 5 – 8, 2015.

135) Wayne State University, Department of Pharmaceutical Sciences, “Development, endocrine functions, and metabolism of marrow adipose tissue.” Detroit, MI. April 15, 2015.

136) Washington University in St. Louis, “Development, endocrine functions, and metabolism of marrow adipose tissue.” St. Louis, MO. April 23, 2015.

137) University of Southern California, Department of Pharmacology and Pharmaceutical Sciences, “Development, endocrine functions, and metabolism of marrow adipose tissue” May 8, 2015.

138) Plenary Lecture – Annual Meeting of Michigan Community College Biologists, “Development, endocrine functions, and metabolism of marrow adipose tissue” MacMullen Conference Center, Roscommon, MI. May 30th.

139) 75th Annual Meeting of the America Diabetes Association, “Development, endocrine functions, and metabolism of marrow adipose tissue” Boston, MA. June 5 - 9, 2015.

140) University of Illinois at Chicago, Department of Physiology and Biophysics, “Development, endocrine functions, and metabolism of marrow adipose tissue.” Chicago, IL. July 9, 2015.

141) Metabolic Signaling & Disease: From Cell to Organism, “Development, endocrine functions, and metabolism of marrow adipose tissue.” Cold Spring Harbor Laboratory. August 11 – 15, 2015.

142) University of Toledo, Center for Diabetes and Endocrine Research, “Development, endocrine functions, and metabolism of marrow adipose tissue.” Toledo, OH. October 7, 2015.

143) Medical College of Wisconsin, “Development, endocrine functions, and metabolism of marrow adipose tissue.” Milwaukee, WI. October 15, 2015.

144) Tumor Biology and Microenvironment Program, Annual Research Retreat – Karmanos Cancer Institute, “Development, endocrine functions, and metabolism of marrow adipose tissue.” November 18th, 2015 (Keynote).

145) University of Illinois at Urbana-Champaign, Department of Molecular & Integrative Physiology. “Development, endocrine functions, and metabolism of marrow adipose tissue.” Urbana-Champaign, IL December 3, 2015.

146) Plenary lecture: 100th Annual Meeting of the Endocrine Society. “Development, endocrine functions, and metabolism of marrow adipose tissue.” Boston, MA. April 1 to 4, 2016.

147) Experimental Biology 2016. Bodil Schmidt-Neilsen Award Presentation: "Mentoring Tips from a Fat Physiologist." San Diego, CA April 2 – 6, 2016.

148) 18th European Congress of Endocrinology, "Development, endocrine functions, and metabolism of marrow adipose tissue." Munich, Germany. May 28 – 31, 2016

149) International Symposium on Mesenchymal Stem Cell Differentiation. "Development, endocrine functions, and metabolism of marrow adipose tissue." Odense, Denmark. June 27 – 28, 2016

150) University of Utah, Seminars in Metabolism. "Development, endocrine functions, and metabolism of marrow adipose tissue." Salt Lake City, UT, November 17, 2016.

151) Symposium on Functional Genomics and Metabolism. "Raindrops on roses." University of Southern Denmark, Odense, Denmark. June 6-7, 2017.

152) Novo Nordisk. "Development, endocrine functions, and metabolism of marrow adipose tissue." Copenhagen, Denmark. June 8, 2017.

153) Neurobiology of Obesity Symposium. "Effects of environmental temperature and vertical sleeve gastrectomy on marrow adipose tissue." Aberdeen Scotland. Aug 16-18, 2017.

154) 39th Annual Molecular and Cellular Biology Graduate Student Symposium, Baylor College of Medicine, "Development, endocrine functions, and metabolism of marrow adipose tissue." Houston, TX. August 21 -22, 2017.

155) Institute for Diabetes, Obesity and Metabolism, University of Pennsylvania, "Development, endocrine functions, and metabolism of marrow adipose tissue." Philadelphia, PA. November 14, 2017.

156) CORS symposium: Bone marrow fat and its importance for the skeleton. "Development, endocrine functions, and metabolism of marrow adipose tissue." Gothenberg, Sweden. December 5 – 7, 2017.

157) 102nd Annual Meeting of the Endocrine Society. "Bone marrow adipose tissue: regulation, lipid composition, and secretion of adipokines. Chicago IL. March 17-20, 2018.

158) University of Miami, Division of Endocrinology. "Development, endocrine functions, and metabolism of marrow adipose tissue." Miami, FL. March 22nd 2018.

159) Touchstone Diabetes Center, Metabolism Seminar Series. "Development, endocrine functions, and metabolism of marrow adipose tissue." UT Southwestern, Dallas TX. April 26th, 2018

160) Henry Ford Health System, Hypertension and Vascular Research Division. "Development, endocrine functions, and metabolism of marrow adipose tissue." Detroit MI. June 8th, 2018.

161) ATLAS Center for Functional Genomics and Tissue Plasticity, "Development, endocrine functions, and metabolism of marrow adipose tissue." Faaborg, Denmark. June 18-19, 2018.

162) European Society of Toxicology and Pathology: Adipose Tissue and Central Nervous System in Metabolic and Neurodegenerative Diseases, "Development, endocrine functions, and metabolism of marrow adipose tissue." Copenhagen, Sept 11-14, 2018

163) Endocrine Grand Rounds, University of Rochester School of Medicine, "How the bone marrow niche is influenced by bariatric surgery and environmental temperature." Rochester, NY. December 14, 2018

164) Regeneron Pharmaceuticals, Inc., "How bariatric surgery and environmental temperature influence the bone marrow niche." Tarrytown NY. January 15, 2019

165) Mahidol University, Department of Physiology. "How bariatric surgery and environmental temperature influence the bone marrow niche." Bangkok, Thailand, March 8, 2019.

166) Johns Hopkins Medical Institutions, Department of Physiology. "How bariatric surgery and environmental temperature influence the bone marrow niche." Baltimore, MD, March 27th, 2019.

167) Atlas International Symposium, Danish National Research Foundation. "G-CSF partially mediates effects of sleeve gastrectomy on the bone marrow niche," Middelfart, Denmark, June 30-July 1, 2019

168) Cardiovascular Center, Medical College of Wisconsin. "How bariatric surgery and environmental temperature influence the bone marrow niche." Milwaukee, WI, November 20, 2019

169) Agilent Technologies, Inc. "Animal and cellular models with altered adipocyte metabolism: application of Seahorse and other approaches to understand mechanism." Santa Clara, CA. November 25, 2019.

170) University of Minnesota, Department of Integrative Biology and Physiology. "How bariatric surgery and environmental temperature influence the bone marrow niche." December 5, 2019.

171) Wayne State University, Lipids@Wayne Seminar Series. "How bariatric surgery and environmental temperature influence the bone marrow niche." January 8, 2020.

172) 6th International Meeting on Bone Marrow Adiposity. Keynote Address. "On the physiology of bone marrow adipocytes". Sept 9–10, 2020 (virtual).

173) ATLAS/ADIPOSIGN Meeting. "On the role of Wnt signaling in mature adipocytes". Odense Denmark, Oct 21-22, 2020 (virtual)

174) World Rare Disease Day Symposium. “How animal models help us understand rare diseases: Adipocyte-specific deletion of lamin A/C as a model for familial partial lipodystrophy type 2.” Ann Arbor, MI., February 26-28, 2021 (virtual).

175) University of Connecticut, Department of Animal Science. “On the physiology of bone marrow adipocytes.” March 5th, 2021 (virtual)

176) Early Career Forum, Endocrine Society. “Lessons learned during my life as a fat physiologist.” June 5th, 2021 (virtual).

177) University of Southern Denmark Atlas/AdipoSign meeting. “BAd-CRISPR: inducible gene knockout in brown adipose tissue of adult mice.” August 23, 2021 (virtual).

178) Vanderbilt University, Department of Physiology and Biophysics. "New animal models to study brown and bone marrow adipose tissues." October 7, 2021 (virtual).

179) University of Kansas Medical Center, School of Medicine Bohan Distinguished Lecturer. "New approaches to study brown and bone marrow adipose tissues." November 15, 2021 (virtual).

180) Biochemical Society Meeting: The adipocyte across biological scales. "New approaches to study brown and bone marrow adipose tissues." Edinburgh, Scotland. December 9-10, 2021

181) Eli Lilly Roundtable Discussion on Diabetes Research. "An adipocentric approach to understanding (mostly) mouse physiology." January 25, 2022 (virtual).

182) Hampton University. "Use of CRISPR to inducibly knock genes out of adipose tissues." March 11th, 2022 (virtual).

183) State Key Laboratory of Biotherapy/Collaborative Innovation Center of Biotherapy, West China Hospital, Sichuan University. "New approaches to study brown and bone marrow adipose tissues." March 23rd, 2022 (virtual).

184) ATLAS/ADIPOSIGN Meeting. “Lipolysis of bone marrow adipocytes is required to fuel bone and the marrow niche during energy deficits.” Odense Denmark. June 21, 2022 (virtual).

185) 7th International Meeting on Bone Marrow Adiposity, "Roles for bone marrow adipose tissue within the marrow niche.” Athens, Greece. September 28-30, 2022.

186) University of Edinburgh, Center for Cardiovascular Research. “Insights from an adipo-centric investigator: lipodystrophy, marrow fat, cool adaptation, and more...” Edinburgh, Scotland. November 3, 2022.

187) University of Southhampton, Endocrinology, Nutrition & Metabolism & Cardiovascular Seminar Series. “Insights from an adipo-centric investigator: Wnt signaling, bone marrow fat, lipodystrophy, and more...” Nov 8, 2022 (virtual).

188) Oxford University, “Insights from an adipo-centric investigator: Wnt signaling, bone marrow fat, lipodystrophy, and more...” Oxford, England. Nov 9, 2022.

189) IFMRS Herbert Fleish Workshop (Keynote address), "Roles for bone marrow adipose tissue within the marrow niche.” Brugge, Belgium, Nov. 20-23, 2022.

190) UK Association for the Study of Obesity, “Roles for lamin A/C in mouse and human lipodystrophies.” Dec 5, 2022 (virtual).

191) Rowett Institute, University of Aberdeen, “Insights from an adipo-centric investigator: Wnt signaling, bone marrow fat, lipodystrophy, and more...” Aberdeen, Scotland. Feb 7th, 2023.

192) ABC Seminar Series, University of Edinburgh, “Wnt signaling in adipose tissues.” Edinburgh, Scotland. March 7th, 2023.

193) European Calcified Tissue Society "Roles for bone marrow adipose tissue within the marrow niche”. Liverpool, UK. April 14-18, 2023.

194) University of Dundee. “Insights from an adipo-centric investigator: Bone marrow adipose, cool adaptation, lipodystrophy, and more...” Dundee, UK. May 3, 2023.

195) Université de Paris, Campus Saint-Germain-des-Près. “The importance of environment for animal physiology”. Paris, France. May 30th, 2023.

196) University of Edinburgh Cardiovascular Center Annual Symposium. “Insights from an adipose tissue physiologist.” COSLA Conference Center, Haymarket, Scotland. June 15, 2023.

197) Université de Lausanne. “Insights from an Adipo-centric investigator: Wnt signaling, cool adaptation, and more!” Lausanne, Switzerland. June 20, 2023.

198) de Duve Institute, Université Catholique de Louvain. “Insights of an adipo-centric investigator: bone marrow adipose tissue, cool adaptation of adipocytes, and more...” Louvain, Belgium. June 22, 2023.

199) BMAS Summer School. “Animal models with which to study bone marrow adipose tissue.” September 5-6, 2023.

200) The 5th Big Ten Academic Alliance Lipid Symposium. “Lipolysis of bone marrow adipocytes is required to fuel bone and the marrow niche during energy deficits.” Iowa City, IA. October 27, 2023.

Upcoming talks:
* CAU URISE/MARC 2022 -2023 Virtual Speaker Series. Dec 7th, 2023
*Ohio State University, Feb 16th, 2024 (Kirsty Townsend)
*ENDO2024, Boston MA June 1-4, 2024.

PUBLICATIONS (174 PubMed publications; h-index 79; total citations > 44,000; Google Scholar)

Orcid.org/0000-0001-6907-7960

Original Research Manuscripts

1. Johnston, L.J., A.J. Thulin, W.C. Weldon, **O.A. MacDougald,** and E.R. Miller. 1988. Carbadox-Pyrantel Tartrate Combination and Elevated Dietary Protein: Effects on Pig Performance and Body Composition. Nutrition Reports International. 38: 799 - 804.

2. **MacDougald,** O.A., A.J. Thulin, W.C. Weldon, J.J. Pestka, and R.L. Fogwell. 1990. Effects of Immunizing Swine Against Zearalenone on Height of Vaginal Epithelium and Urinary Excretion of Zearalenone. Journal of Animal Science. 68: 3713 - 3718.

3. **MacDougald, O.A.**, A.J. Thulin, and J.J. Pestka. 1990. Determination of Zearalenone and Related Metabolites in Porcine Urine by Modified Enzyme-Linked Immunosorbent Assay. Journal of the Association of Official Analytical Chemists. 73: 65 - 68.

4. Weldon, W.C., A.J. Thulin, **O.A. MacDougald,** L.J. Johnston, E.R. Miller, and H.A. Tucker. 1991. Effects of Elevated Energy and Protein during Late Gestation on Mammary Development in Gilts. Journal of Animal Science. 69: 194 - 200.

5. **MacDougald, O.A.** and D.B. Jump. 1991. Identification of Functional Cis-Acting Elements Within the Rat Liver S14 Promoter. Biochemical Journal. 280: 761 - 767.

6. **MacDougald, O.A.**, S.D. Clarke, and D.B. Jump. 1992. Tissue-Specificity of S14 and Fatty Acid Synthase In Vitro Transcription. Biochemical and Biophysical Research Communications. 182: 631 - 637.

7. **MacDougald, O.A.** and D.B. Jump. 1992. Localization of an Adipocyte-Specific Retinoic Acid Response Domain Controlling S14 Gene Transcription. Biochemical and Biophysical Research Communications. 188: 470 - 476.

8. Jump, D.B. and **O.A. MacDougald.** 1993. Hormonal Regulation of Gene Expression in Cultured Adipocytes. Journal of Animal Science. 71(Suppl. 2): 56-64.

9. Jump, D.B., S.D. Clarke, **O.A. MacDougald,** and A. Thelen. 1993. Polyunsaturated Fatty Acids Inhibit S14 Gene Transcription in Rat Liver and Cultured Hepatocytes. Proceedings of the National Academy of Sciences, USA. 90: 8454 - 8458.

10. Lin, F-T., **O. A. MacDougald,** A.M. Diehl, and M.D. Lane. 1993. A 30-kDa Alternative Translation Product of the CCAAT/Enhancer Binding Proteinα message: Transcriptional Activator lacking Antimitotic Activity. Proceedings of the National Academy of Sciences, USA. 90: 9606-9610.

11. Landschulz, K.T., D.B Jump, **O.A. MacDougald,** and M.D. Lane. 1994. Transcriptional Control of the Stearoyl-CoA Desaturase-1 Gene by Polyunsaturated Fatty Acids. Biochemical Biophysical Research Communications. 200: 763-768.

12. **MacDougald, O.A.**, P. Cornelius, F.-T. Lin, S.S. Chen, and M.D. Lane. 1994. Glucocorticoids Reciprocally Regulate Expression of the CCAAT/Enhancer-binding Protein α and δ Genes in 3T3-L1 Adipocytes and White Adipose Tissue. Journal of Biological Chemistry. 269: 19041-19047.

13. **MacDougald, O.A.**, P. Cornelius, and M.D. Lane. 1995. Insulin Regulates Transcription of the CCAAT/Enhancer Binding Protein (C/EBP) α, β and δ Genes in Fully-Differentiated 3T3-L1 Adipocytes. Journal of Biological Chemistry. 270: 647-654.

14. Potter, J.J., **O.A. MacDougald**, and E. Mezey. 1995. Regulation of Rat Alcohol Dehydrogenase by Cyclic AMP in Primary Hepatocyte Culture. Archives of Biochemistry and Biophysics. 321: 329-335.

15. **MacDougald, O.A.**, Hwang, C. Fan, H. and M.D. Lane. 1995. Regulated Expression of the *obese* Gene Product (Leptin) in White Adipose Tissue and 3T3-L1 Adipocytes. Proceedings of the National Academy of Sciences, USA. 92: 9034-9037.

16. Hwang, C.S., Mandrup, S., **MacDougald, O.A**., Geiman, D.E. and M.D. Lane. 1996. Transcriptional Activation of the *Obese* Gene by CCAAT/Enhancer Binding Protein α. Proceedings of the National Academy of Sciences. USA. 93: 873-877.

17. Mandrup, S., T. Loftus, **O.A. MacDougald,** F. Kuhajda, and M.D. Lane. 1997. Obese Gene Expression at *In Vivo* Levels by Fat Pads Derived from s.c. Implanted 3T3-F442A Preadipocytes. Proceedings of the National Academy of Sciences. U.S.A. 94: 4300-4305.

18. Hemati, N., S.E. Ross, R.L. Erickson, G.E. Groblewski, and **O.A. MacDougald.** 1997. Signaling Pathways through which Insulin regulates CCAAT/Enhancer Binding Protein α (C/EBPα) Phosphorylation and Gene Expression in 3T3-L1 Adipocytes: Correlation with GLUT4 Gene Expression. Journal of Biological Chemistry. 272: 25913-25919.

19. Hemati, N., R.L. Erickson, S.E. Ross, R. Liu, and **O.A. MacDougald**. 1998. Regulation of CCAAT/Enhancer Binding Protein α (C/EBPα) Gene Expression by Thiazolidinediones in 3T3-L1 Adipocytes. Biochemical Biophysical Research Communications. 244: 20-25.

20. Becker, D.J. and **O.A. MacDougald**. 1999. Transfection of 3T3-L1 Adipocytes by Gene Gun-Mediated Transfer. BioTechniques. 26: 660-668.

21. Liao, J., G. Piwien de Pilipuk, S.E. Ross, C. L. Hodge, L. Seally, **O.A. MacDougald**, and J. Schwartz. 1999. C/EBPβ Contributes to GH-Regulated Transcription of c-*Fos*. Journal of Biological Chemistry. 274: 31597-31604.

22. Ross, S.E., R.L. Erickson, N. Hemati, and **O.A. MacDougald**. 1999. Glycogen Synthase Kinase 3 is an Insulin-Regulated C/EBPα Kinase. Molecular and Cellular Biology 19: 8433-8441.

23. Hajra, A.K., A.K. Das, L.K. Larkins, N. Hemati, R.L. Erickson, and **O.A. MacDougald**. 2000. Induction of the Peroxisomal Glycerolipid-synthesizing Enzymes during Differentiation of 3T3-L1 Adipocytes: Role in Triacylglycerol Synthesis. Journal of Biological Chemistry. 275: 9441-9446.

24. Ross, S.E., N. Hemati, K.A. Longo, C. N. Bennett, P. Lucas, R.L. Erickson, and **O.A. MacDougald**. 2000. Inhibition of Adipogenesis by Wnt Signaling. Science 289: 950-953.

25. Erickson, R.L., N Hemati, S.E. Ross, and **O. A. MacDougald**. 2001. p300 Coactivates the Adipogenic Transcription Factor C/EBPα. Journal of Biological Chemistry. 276: 16348-16355.

26. Piwien-Pilipuk, G., D. van Mater, S.E. Ross, **O.A. MacDougald,** and J. Schwartz. 2001. Growth Hormone Regulates Phosphorylation and Function of C/EBPβ. Mediation of Growth Hormone-Promoted Dephosphorylation of C/EBPβ by Akt and Glycogen Synthase Kinase-3. Journal of Biological Chemistry. 276: 19664-19671.

27. Schaufele, F., J.F. Enwright, III, X. Wang, C. Teoh, R. Srihari, R. Erickson, **O.A. MacDougald,** and R.N. Day. 2001. CCAAT/enhancer binding protein α assembles essential cooperating factors in common subnuclear domains. Molecular Endocrinology 15: 1665-1676.

28. Douglas, K.R., M.L. Brinkmeier, J.A. Kennell, P. Eswara, T.A. Harrison, A.I. Patrianakos, B.S. Sprecher, M.A. Potok, R.H. Lyons, Jr., **O.A. MacDougald**, and S.A. Camper. 2001. Identification of Members of the Wnt Signaling Pathway in the Embryonic Pituitary Gland. Mammalian Genome 12:

843-851.

29. You, Z., Z. Zhang, D. Saims, S. Chen, A.M. Brown, K.-L. Guan, **O.A. MacDougald**, G.Evans, J. Kitajewski, and C.-Y. Wang. 2002. Transcriptional Control of Apoptosis by Wnt Signaling: Induction of Cox-2 and WISP-1 to Suppress c-myc-mediated Apoptosis. Journal of Cell Biology 157: 429-440.

30. Piwien-Pilipuk, G., **O.A. MacDougald,** and J. Schwartz. 2002. Growth hormone regulates MAPK-dependent phosphorylation of C/EBPβ. Journal of Biological Chemistry 277: 44557-44565.

31. Ross, S.E., R.L. Erickson, I. Gerin, P.M. DeRose, L. Bajnok, K.A. Longo, D.E. Misek, R. Kuick, S.M. Hanash, K.B. Atkins, S. Mahle, H.I. Nebb, L. Madsen, K. Kristiansen, and **O.A. MacDougald.** 2002. Microarray analyses during adipogenesis: understanding the effects of Wnt-signaling on adipogenesis and the roles of LXRα in adipocyte metabolism. Molecular and Cellular Biology 22: 5989-5999.

32. Bennett, C.N., S.E. Ross, K.A. Longo, L. Bajnok, N. Hemati, K.W. Johnson, S.D. Harrison, and **O.A. MacDougald.** 2002. Regulation of Wnt signaling during adipogenesis. Journal of Biological Chemistry 277: 30998-31004.

33. Longo, K.A., J.A. Kennell, M.J. Ochocinska, S.E. Ross, W.S. Wright, and **O.A. MacDougald.** 2002. Wnt signaling protects 3T3-L1 preadipocytes from apoptosis through induction of insulin-like growth factors. Journal of Biological Chemistry 277: 38239-38244.

34. Bennett, C.N., C. Hodge, **O.A. MacDougald**, and J. Schwartz. 2003. Role of Wnt10b and C/EBPα in Spontaneous Adipogenesis of 243 Cells. Biochemical and Biophysical Research Communications 302: 12-16.

35. Kennell, J.A., E.E. O'Leary, B.M. Gummow, Gary D. Hammer, and **O.A. MacDougald**. 2003. TCF-4N, a novel isoform of mouse TCF-4, synergizes with β-catenin to coactivate C/EBPα and SF-1 transcription factors. Molecular and Cellular Biology 23: 5366-5375.

36. Ross, S.E., H.S. Radomska, F. Schaufele, P. Zhang, J.N. Winnay, L. Bajnok, W.S. Wright, D.G. Tenen and **O.A. MacDougald.** 2004. Phosphorylation of C/EBPα inhibits granulopoiesis. Molecular and Cellular Biology 24:675-686.

37. Longo, K.A., W.S. Wright, S. Kang, I. Gerin, S.-H. Chiang, P.C. Lucas, M.R. Opp, and **O.A. MacDougald**. 2004. Wnt10b Inhibits Development of White and Brown Adipose Tissues. Journal of Biological Chemistry. 279: 35503-35509.

38. Vertino, A.M., J.M. Taylor-Jones, K.A. Longo, E.D. Bearden, T.F. Lane, R.E. McGehee, Jr., **O.A. MacDougald**, and C.A. Peterson. 2005 Wnt10b deficiency promotes coexpression of myogenic and adipogenic programs in myoblasts. Molecular Biology of the Cell. 16: 2039-2048. PMCID: PMC1073681

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44. Xu, Y., Y.L. Zhou, W. Luo, Q.-S. Zhu, D. Levy, **O.A. MacDougald**, and M.L. Snead. 2006. NF-Y and CCAAT/Enhancer-binding protein α synergistically activate the mouse amelogenin gene. Journal of Biological Chemistry 281: 16090-16098.

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46. Qiao, L., **O.A. MacDougald**, and J. Shao. 2006. CCAAT/enhancer binding protein α mediates induction of hepatic phosphoenolpyruvate carboxykinase by p38 mitogen-activated protein kinase. Journal of Biological Chemistry 281: 24390-7.

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25. Bennett, C.N S.E. Ross, K.A Longo, J.A. Kennell, L. Bajnok, N. Hemati, D.E. Misek, S.M. Misek, and **O.A. MacDougald.** Characterization and Regulation of Wnt Signaling During Adipogenesis. Presented at the Keystone Symposia on "Molecular Control of Adipogenesis and Obesity, Keystone, CO. January 10-16, 2002.

26. **MacDougald, O.A.** 2002. Wnt Signaling in Regulation of Adipose Tissue Development. Presented at the Ninth International Congress on Obesity, Sao Paolo, Brazil, August 2002. International Journal of Obesity 26: S212.

27. Bennett, C.N., K.A. Longo, W.S. Wright, L.J. Suva, K.D. Hankenson, and **O.A. MacDougald**, Wnt Signaling Promotes Osteogenesis *In Vivo* and *In Vitro*, Presented at the 25th Annual American Society of Bone and Mineral Research Meeting Sept 19 – 23, 2003, Minneapolis, Minnesota.

28. Bennett, C.N., K.A. Longo, W.S. Wright, L.J. Suva, K.D. Hankenson, and **O.A. MacDougal**d, Wnt Signaling Inhibits Adipogenesis and Promotes Osteogenesis *In Vivo* and *In Vitro,* Presented at the Keystone Symposia on Molecular Control of Adipogenesis and Obesity, Banff, Alberta, March 4-10 2004.

29. Longo, K.A., W.S. Wright, C.N. Bennett, S. Kang, P.C. Lucas, M.R. Opp and **O.A. MacDougald**. Wnt10b Inhibits Adipose Tissue Development, Presented at the Keystone Symposia on Molecular Control of Adipogenesis and Obesity, Banff, Alberta, March 4-10 2004.

30. Kang, S., L. Bajnok, J.B. Hansen, K. Kristiansen, and **O.A. MacDougald.** Roles of Wnt signaling in differentiation and metabolism of brown adipocytes. Presented at the Keystone Symposia on Molecular Control of Adipogenesis and Obesity, Banff, Alberta, March 4-10 2004.

31. Kennell, J.A., and **O.A. MacDougald.** Mechanisms Whereby Canonical and Non-Canonical Wnt Signaling Inhibit Adipogenesis. Presented at the Keystone Symposia on Molecular Control of Adipogenesis and Obesity, Banff, Alberta, March 4-10 2004.

32. **MacDougald, O.A.** Role of Wnt signaling in development of adipose tissues and bone. Presented at the NIDDK Cellular Niches Workshop. Bethesda MD, May 16-17, 2005.

33. **MacDougald, O.A.** Regulation of Osteoblastogenesis and Bone Mass by Wnt10b. European Calcified Tissue Society and the International Bone and Mineral Society. Geneva, Switzerland, June 2005.

34. Ma, Y. L., Q.Q Zeng, C.N Bennett, K. A Longo, W.S Wright, K. D Hankenson, **O. A. MacDougald,** and G. Krishnan. Overexpression of Wnt10b from the FABP4 Promoter in Mice Results in Increased Trabecular Bone Mass by Increasing Bone Formation and Mineralization. Presented at the 27th Annual Meeting of the American Society for Bone and Mineral Research, Nashville, TN, September 23-27, 2005.

35. Gerin, I., V.W. Dolinsky, J.G. Shackman, R.T. Kennedy, S.-H. Chiang, C.F. Burant, K.R. Steffensen, J.-Å. Gustafsson, and **O.A. MacDougald.** LXRβ is required for adipocyte growth, glucose homeostasis and β cell function. Presented at Annual Meeting for the American Diabetes Association in San Diego, CA. June 8, 2005.

36. **MacDougald, O.A.** LXRβ is required for adipocyte growth, glucose homeostasis and β cell function. Presented at "Symposium on PPAR and LXR Biology" in Odense, Denmark, July 1, 2005.

37. Gerin, I., V.W. Dolinsky, J.G. Shackman, R.T. Kennedy, S.-H. Chiang, C.F. Burant, K.R. Steffensen, J.-Å. Gustafsson, and **O.A. MacDougald.** LXRβ is required for adipocyte growth, glucose homeostasis and β cell function. Keystone Symposia on Adipogenesis, Obesity and Inflammation, Vancouver, British Columbia. Jan 12-26, 2006.

38. Kang, S., C.N. Bennett, and **O.A. MacDougald.** Wnt signaling regulates fate of mesenchymal precusor cells by suppressing PPARγ and C/EBPα. Keystone Symposia on Adipogenesis, Obesity and Inflammation, Vancouver, British Columbia. Jan 12-26, 2006.

39. **MacDougald, O.A.** Role of Wnt Signaling in Development of Adipose Tissues and Bone. Keystone Symposia on Adipogenesis, Obesity and Inflammation, Vancouver, British Columbia. Jan 12-26, 2006.

40. **MacDougald, O.A.** Overview of Obesity and Adipose Tissue Development. Presented at the 45th Annual Meeting of the Society of Toxicology, San Diego, CA. March 5 – 9, 2006.

41. Heindel, J.J., W. Slikker, **O. A. MacDougald,** M. Gillman, R. Newbold, E. Levin, and C. Jefcoate. Obesity: Developmental Origins and Environmental Influences. Presented at the 45th Annual Meeting of the Society of Toxicology, San Diego, CA. March 5 – 9, 2006.

42. Aslanidi, G., G. Philipsberg, V. Kroutov, K. Lamb, E. Kohlbrenner, M. Campbell-Thompson, G. Walter, P. Keller, K. Hankenson, **O.A. MacDougald**, and S. Zolotukhin. Ectopic expression of Wnt10b reduces fat deposition and improves peripheral insulin sensitivity in DIO rat model. Presented at the Obesity and Diabetes Keystone Symposia. Keystone CO, January 14-19, 2007.

43. Mori, H. K. Inoki, T. Ikenoue, D. Kwiatkowski, H. Munzberg, M.G. Myers, **O.A. MacDougald,** and K.-L. Guan. Critical roles of the TSC-mTOR pathway in appetite control and beta-cell function. Presented at the Keystone Symposium on Neuronal Mechanisms Controlling Food Intake, Glucose Metabolism, and Body Weight. Banff, Canada, Feb. 19-24, 2008.

44. Prestwich, T.C. K.M. Sousa, I. Gerin, W.S. Wright, and **O.A. MacDougald.** Regulation of Preadipocyte Recruitment and Adipocyte Growth by sFRP5. Presented at the Keystone Symposium on Molecular Control of Adipogenesis and Obesity. Banff, Canada, Feb. 19-24, 2008.

45. **MacDougald, O.A.** Regulation of Adipocyte Differentiation and Metabolism. Presented at the Keystone Symposium on Molecular Control of Adipogenesis and Obesity. Banff, Canada, Feb. 19-24, 2008.

46. Gerin, I., G.T. Bommer, K. M. Sousa, E.R. Fearon and **O.A. MacDougald**. Role of microRNAs in adipocyte differentiation and metabolism. Presented at the Keystone Symposium on Molecular Control of Adipogenesis and Obesity. Banff, Canada, Feb. 19-24, 2008.

47. Petrie, J.T., P, Keller, P. DeRose, I. Gerin, W.S. Wright, A. Rinnov, C.P. Fischer, B. Klarlund Pedersen, and **O.A. MacDougald**. Fat-specific protein 27 regulates triacylglycerol storage. Presented at the Keystone Symposium on Molecular Control of Adipogenesis and Obesity. Banff, Canada, Feb. 19-24, 2008.

48. Rajashekhar, R., W. Roell, D. Traktuev, S. Merfeld-Clauss, **O.A. MacDougald**, K. March, and M. Clauss. Adipogenesis of Adipose Stromal Cells is Reduced by Endothelial Cell Co-cultivation: Role for Wnt-signaling. Presented at the Experimental Biology Meeting in San Diego, CA. April 5-9, 2008.

49. Xu, B., W.-H.Yang, I. Gerin, G.D. Hammer, **O.A. MacDougald** and R.J. Koenig. DAX1 and Steroid Receptor RNA Activator (SRA) Function as Transcriptional Coactivators for Steroidogenic Factor 1. Presented at the Endocrine Society Meetings, San Francisco, CA. June 15-18, 2008.

50. **MacDougald, O.A.** Role of Wnt signaling in adipose tissues and bone. National Institute of Diabetes & Digestive & Kidney Diseases' (NIDDK) Workshop on: The Establishment, Maintenance, and Turnover of Fat Depots. May 21-22, 2008.

51 **MacDougald, O.A.** Role of Wnt signaling in adipose tissues and bone. 2nd International Conference on Osteoimmunology: Interactions of the Immune and Skeletal Systems. Rhodes Greece, June 8 -13, 2008.

52. Xu, B., I. Gerin, **O.A. MacDougald,** and R.J. Koenig. Steroid Receptor RNA Activator, SRA, Promotes Adipocyte Differentiation and Insulin-sensitivity. American Diabetes Association Annual Meeting, New Orleans, June 5-9, 2009.

53. Sousa, K. M., H. Mori, T.C. Prestwich, and **O.A. MacDougald**. Regulation of adipocyte differentiation and metabolism by Wnt signaling. ASBMR meeting on Bone Fat and Brain Connections. Washington DC. April 27 – 28, 2009.

54. Herron, T.J., R.P. O'Connell, X. Lin, J. Mertens, W.P. Cawthorn, **O.A. MacDougald,** and J.M.B. Anumonwo. Modulatory effects of adipocyte-conditioned media on calcium homeostasis in isolated cardiac ventricular myocytes. 49th Annual ASCB meeting, San Diego, CA. December 5-9, 2009.

55. **MacDougald, O.A.** Regulation of adipocyte differentiation and metabolism by Wnt signaling. Presented at the Keystone Symposia on Adipose Tissue Biology (J3), January 24-19, 2010. Keystone Colorado.

56. Sousa, K.S., A. M. Clark, W. Cawthorn, A. Salhadar, R.T. Kennedy, and **O.A. MacDougald.** Effects of Wnts on adipocyte metabolism. Presented at the Keystone Symposia on Adipose Tissue Biology (J3), January 24-19, 2010. Keystone Colorado.

57. **MacDougald, O.A.** Regulation of adipocyte differentiation and metabolism by Wnt signaling. Presented at the 92nd Annual Meeting of the Endocrine Society, June 19 - 22, 2010. San Diego California.

58. **MacDougald, O.A.** Role of Wnt Signaling in Adipocyte Differentiation and Metabolism. Presented at the 34th Steenbock Symposium *The Metabolism of Lipids: Implications in Human Disease*. Madison, WI. May 22-25, 2011.

59. Rahman, S., Y. Lu, P.J. Czernik, C.J. Rosen, **O.A. MacDougald**, S. Enerback, B. Lecka-Czernik. Adipocyte-specific Expression of FoxC2 Increases Bone Mass through Up-regulation of Wnt10b Expression and Increase in Energy Production in Marrow Adipocytes. Presented at the Annual Meeting of the ASBMR, San Diego, CA. September 16-20. 2011.

60. Liu, S., R. Xu, I. Gerin, W.P. Cawthorn, **O.A. MacDougald,** A.R. Saltiel, R.J. Koenig, and B. Xu. SRA/SRAP regulates adipocyte differentiation and insulin sensitivity through insulin receptor signaling. Presented at the Annual Meeting of the Endocrine Society, Houston, TX. June 23-26, 2012.

61. Ge, C., W.P. Cawthorn, Y. Li, G. Zhao, J. Westendorf, **O.A. MacDougald,** and R.T. Franceschi. Reciprocal control of osteogenic and adipogenic lineages by ERK/MAP kinase signaling and transcription factor phosphorylation. Presented at Advances in Mineral Metabolism. Snowmass, CO. April 9-13, 2012.

62. Simon, B.R., N. Hemati, H. Mori, A.J. Bree, B. Learman, E.L.Scheller, Y. Yao, B, and **O.A. MacDougald.** Sweet Taste Receptors Regulate Adipocyte Differentiation and Metabolism.

Presented at the American Diabetes Meeting Scientific Sessions, Philadelphia, PA. June 8-12, 2012.

63. Scheller, E., W. Cawthorn, B. Learman, H. Mori, B. Simon, A. Bree, Y. Yao, **O. MacDougald.** Increase marrow adipose tissue enhances serum adiponectin in states of calorie restriction. Presented at AAOMP. Minneapolis, MN. June 23-27, 2012.

64. Simon, B.R., S.D. Parlee, N. Hemati, H. Mori, A.J. Bree, B. Learman, E.L.Scheller, Y. Yao, W.P. Cawthorn, B. Tyrberg, and **O.A. MacDougald.** Sweet Taste Receptors Regulate Adipocyte Differentiation and Metabolism. Presented at the Benzon Symposium (No. 58) Adipose Tissue in Health and Disease. Copenhagen, Denmark. August 27-30, 2012.

65. Cawthorn, W.P., E.L. Scheller, B.S. Learman, D.T. Broome, S.S. Soliman, J.L. DelProposto, C.N. Lumeng, K.A. Gallagher, J.D. Miller, V. Krishnan, P.K. Fazeli, A. Klibanski, M. C. Horowitz, C.J. Rosen and **O.A. MacDougald.** Bone marrow adipose tissue as a source of serum adiponectin: the 'adiponectin paradox'explained? Presented at the 95th Annual Meeting of the Endocrine Society. San Francisco, CA. June 15-18, 2013.

66. Parlee. S., B.R. Simon, E.L. Scheller, E.L. Alejandro, B.S. Learman, V. Krishnan, E. Bernal-Mizrachi, and **O.A. MacDougald.** Effects of neonatal saccharin exposure on body composition and glucose metabolism in adult mice. Presented at the 95th Annual Meeting of the Endocrine Society. San Francisco, CA. June 15-18, 2013.

67. Liu, S., H. Miao, L. Sheng, T.L. Saunders, **O.A. MacDougald,** R.J. Koenig and B. Xu. The SRA gene knockout protects against diet-induced obesity and improves glucose tolerance. Presented at the 95th Annual Meeting of the Endocrine Society. San Francisco, CA. June 15-18, 2013.

67. Simon, B.R., S.D. Parlee, N. Hemati, H. Mori, A.J. Bree, B. Learman, W.P. Cawthorn, E.L. Scheller, V. Krishnan, B. Tyrberg, and **O.A. MacDougald.** Sweet Taste Receptors Regulate Adipocyte Differentiation and Metabolism. Presented at the 33rd Blankenese Conference. Nutrient Sensing: From Brain to Gut. Hamburg-Blankenese, Germany. May 25-29, 2013.

68. Doucette, C.L., E.L. Scheller, **O.A. MacDougald,** M.C. Horowitz and C.J. Rosen. Differential effects of calorie restriction on the skeleton implicate marrow adipose tissue as an independent adipose tissue depot. Presented at the Annual Meeting of the American Society for the Advancement of Bone and Mineral Research. Baltimore, MD. Oct 4-7, 2013.

69. Scheller, E., W. Cawthorn, B. Learman, H. Mori, B. Simon, S. Parlee, X. Ning, J. Miller, K. Gallagher, P. Fazeli, C. Rosen, M. Horowitz, A. Klibanski, and **O. MacDougald.** The Metabolic Nature of Marrow Fat: insulin signaling, CREB phosphorylation, and the 'adiponectin paradox.' Presented at the Annual Meeting of the American Society for the Advancement of Bone and Mineral Research. Baltimore, MD. Oct 4-7, 2013.

70. Parlee, S.D., B.R. Simon, X.Ning, C. Weisheit, and **O.A. MacDougald**. Quinine induces C/EBPβ, C/EBPα, PPARγ, and adipogenesis in 3T3-L1 preadipocytes. Presented at the Annual Meeting of the Endocrine Society, San Diego, CA. March 5-8, 2015.

71. Alejandro, E.U., M. Gianchandani, B. Gregg, S.D. Parlee, **O.A. MacDougald** and E. Bernal-Mizrachi. Maternal low-protein diet during the last week of pregnancy alters specific microRNAs contributing to insulin resistance and β-cell dysfunction in offspring. Presented at the Annual Meeting of the Endocrine Society, San Diego, CA. March 5-8, 2015.

72. Parlee, S.D., B.R. Simon, X. Ning, C. Weisheit, and **O.A. MacDougald.** Quinine enhances adipogenesis in murine preadipocytes. Presented at the Canadian Society for Pharmacology and Experimental Therapeutics, Toronto, Canada, June 7-10, 2015.

73. **MacDougald, O.A.** Development, endocrine functions, and metabolism of marrow adipose tissues. Presented at Metabolic Signaling and Disease: From Cell to Organism. Cold Spring Harbor, August 11-15, 2015

74. Scheller, E.L., W.P. Cawthorn, B.S. Learman, B. Wu, L. Andersen, H.A. Pham, S. Khandaker, A. Burr, S.D. Parlee, B.R. Simon, H. Mori, A.J. Bree, B. Schell, and **O.A. MacDougald.** Bone marrow adipocytes selectively resist lipolysis in response to fasting and β-adrenergic stimulation. Presented at the ASBMR Annual Meeting, Seattle, WA. October 9-12, 2015.

75. Learman, B.S., T. Walji, S. Khandaker, K. Moller, B. Schell, C.S Craft, **O.A. MacDougald**, and E.L Scheller. Leptin-induced loss of marrow adipose tissue is mediated by sympathetic and sensory neurotransmission. Presented at the ASBMR Annual Meeting. Atlanta, GA. September 16 – 19, 2016.

76. Learman, B.S., T. Walji, S. Khandaker, K. Moller, B. Schell, C.S Craft, **O.A. MacDougald**, and E.L Scheller. Leptin-induced loss of marrow adipose tissue is mediated by sympathetic and sensory neurotransmission. Presented at the Second International Meeting on Bone Marrow Adiposity, Rotterdam, Netherlands, August 25 - 26, 2016.

77. Corsa, C.A.S., H. Mori, T.M. Barnes, R.A. Koza, and **O.A. MacDougald**. Investigating the role of SFRP5 and Wnt signaling in adipocyte metabolism. Presented at the Cold Spring Harbor Laboratories: Mechanisms of Metabolic Signaling, May 16 – 20, 2017.

78. Li, Z., J. Hardij, B.S. Learman, C.R. Hutch, S.S. Evers, K.-S. Kim, S.M. Choi, C. Griffin, K. Singer, D.A. Sandoval, R.J. Seeley, and **O.A. MacDougald**. Bone mass and marrow adipose loss after vertical sleeve gastrectomy surgery in mice is inversely correlated with splenomegaly Presented at the Cold Spring Harbor Laboratories: Mechanisms of Metabolic Signaling, May 16 – 20, 2017.

79. Bagchi, D.P., H. Mori, and **O.A. MacDougald.** Investigating the role of β-catenin and Wntless in adipocyte development and metabolic function. Presented at the Cold Spring Harbor Laboratories: Mechanisms of Metabolic Signaling, May 16 – 20, 2017.

80. **MacDougald, O.A.** Development, Metabolism and Endocrine Functions of Marrow Adipose Tissue. Presented at the Neurobiology of Obesity Symposium, Aberdeen Scotland, Aug 16-18, 2017.

81. **MacDougald, O.A.** Development, Metabolism and Endocrine Functions of Marrow Adipose Tissue. Presented at the 39th Annual Molecular and Cellular Biology Graduate Student Symposium, Baylor College of Medicine, Houston, TX August 21 -22, 2017.

82. Li, Z., J. Hardij, B.S. Learman, C.R. Hutch, S.S. Evers, K.-S. Kim, S.M. Choi, C. Griffin, K. Singer, D.A. Sandoval, R.J. Seeley, and **O.A. MacDougald**. Bone mass and marrow adipose loss after vertical sleeve gastrectomy surgery in mice. Presented at the Keystone Symposia on

Molecular and Cellular Biology: Organ Crosstalk in Obesity and NAFLD. January 21 – 25, 2018. Keystone CO.

83. Bagchi, D.P., H. Mori, and **O.A. MacDougald.** Investigating the role of β-catenin and Wntless in adipocyte development and metabolic function. Presented at the Keystone Symposia on Molecular and Cellular Biology: Organ Crosstalk in Obesity and NAFLD. January 21 – 25, 2018. Keystone CO.

84. Li, Z., H. Mori, K.T. Lewis, and **O. A. MacDougald.** Development, regulation, metabolism and function of bone marrow adipose tissues. Presented at the 16th European Congress of Toxicologic Pathology. Adipose Tissue and Central Nervous System Toxicity in Metabolic Disease. Copenhagen, Denmark. September 11 – 14, 2018.

85. Suchacki, K., A. Tavares, D. Mattiucci, M. Sinton, C. Alcaide, D. Said, A. Poloni, S. Cinti, G. MacPherson, A. Amin, E. Scheller, **O. A. MacDougald,** R. Stimson, N. Morton, W. Cawthorn. Bone marrow adipose tissue is molecularly and functionally distinct to white and brown adipose tissue. Presented at the 4th Annual Meeting on Bone Marrow Adiposity. Lille, France. August 29 – 31, 2018.

86. Suchacki, K., A. Tavares, D. Mattiucci, M. Sinton, C. Alcaide, D. Said, A. Poloni, S. Cinti, G. MacPherson, A. Amin, E. Scheller, **O. A. MacDougald,** R. Stimson, N. Morton, W. Cawthorn. Bone marrow adipose tissue: A functionally distinct adipose depot. Presented at the 44th Adipose Tissue Discussion Group, Edinburgh, December 7th, 2018.

87. Pearson, G., C. Corsa, S. Soleimanpour, and **O.A. MacDougald.** Parkin is dispensable in pancreatic beta-cells and adipocytes for metabolic homeostasis. Presented at the 79th Annual Meeting of the American Diabetes Association. San Francisco CA June 7-11, 2019.

88. Suchacki, K.J., A.A.S. Tavares, D. Mattiucci, E.L. Scheller, G. Papanastasiou, C. Gray, M.C. Sinton, L.E. Ramage, W.A. McDougald, A. Lovdel, R.J. Sulston, B.J. Thomas, B.M. Nicholson, A.J. Drake, C.J. Alcaide-Corral, D. Said, A. Poloni, S. Cinti, G. MacPherson, A.K. Amin, M.R. Dweck, J.P. Andrews, M.C. Williams, R.J. Wallace, **O.A. MacDougald,** N.M. Morton, R.H. Stimson, and W.P. Cawthorn. Bone marrow adipose tissue is a unique adipose subtype with distinct roles in systemic glucose homeostasis. Presented at the 5th International Meeting on Bone Marrow Adiposity, Odense, Denmark, August 21-23, 2019.

89. Lewis, K.T., L. Belanger, Z. Li, R.L. Schill, and **O.A. MacDougald.** Bone Marrow Adipocytes Arise Predominantly from Adiponectin-Expressing Precursors During Caloric-Restriction Induced Bone Marrow Adipose Tissue Expansion. Presented at BMA2020, September 2020.

90. Schill, R.L., Z. Li[1], J. Visser, K.T. Lewis, C.A. Corsa, D.P. Bagchi, S.M. Romanelli, H. Mori, J. Hardij, and **O.A. MacDougald.** Determining the Role of the Glucocorticoid Receptor on Bone Marrow Adipose Tissue Expansion During Calorie Restriction. Presented at BMA2020, September 2020.

91. Li, Z., J. Hardij, D.P. Bagchi, E. Bowers, K. Granger, C.A. Corsa, H. Mori, K.T. Lewis, R.L. Schill, S.M. Romanelli, K. Singer, C.J. Rosen, and **O.A. MacDougald.** Cellular interactions in the bone marrow niche evaluated with a bone marrow adipocyte-specific knockout mouse model. Presented at BMA2020, September 2020.

92. **MacDougald, O.A.** On the physiology of bone marrow adipocytes. Presented at BMA2020, September 2020.

93. Bagchi, D.P. and **O.A. MacDougald.** On the role of Wnt signaling in mature adipocytes. Presented at the ATLAS Annual Meeting, Odense Denmark. October 21 – 22, 2020.

94. Foss de Freitas, M.C., A.J. Eldin, B. Akinci, C. Corsa, and **O.A. MacDougald.** Body composition and bone mineral differences according to LMNA genotype in familial partial lipodystrophy type 2. Presented at ENDO2021. March 20-23, 2021.

95. Li, Z., and **O.A. MacDougald.** 2020. Cellular interactions in the bone marrow niche evaluated with a bone marrow adipocyte-specific knockout mouse model. Presented at the International Meeting on GH/IGF: actions in the shadow of COVID19. Pituitary: https://doi.org/10.1007/s11102-020-01100-9.

96. Bozadjieva-Kramer, N., J.H. Shin, Z. Li, A. Myronovych, S. Kernodle, **O.A. MacDougald,** R. Kohli, R.J. Seeley. Intestinal-derived FGF15 is essential for bile acid but not glucose metabolism under standard and western diets. Presented at the Keystone Symposium on Inter Organ Crosstalk in Non-Alcoholic Steatohepatitis (NASH), Keystone, CO. Feb 6-9, 2022.

97. Foss de Freitas, M.C., A. Neidert, R. Schill, J. Maung, Dr. Rosenberg, **O.A. MacDougald,** and E.A. Oral. Demonstration of progressive beta-cell failure in familial partial lipodystrophy. Presented at ENDO2022. June 11-14, 2022, Atlanta GA.

98. Schill, R.L., J.N. Maung, M.C. Foss Frietas, E.A. Oral, and **O.A. MacDougald.** Determining the Mechanism of Adipose Tissue Loss in Familial Partial Lipodystrophy Type 2 (FPLD2). Presented at U-M Rare Disease Day. February 25-26, 2022.

99. Faulkner, L., K. Lewis, T. Meek, A. Mercer, **O.A. MacDougald.** D.P. Olson. Central Regulation of Peripheral Fat Mass by $Nos1^{PVH}$ Neurons. Presented at the 82nd Annual Meeting of the American Diabetes Association. New Orleans, LA, June 3-7, 2022.

100. Zhang, X., K.L Magee, A. Majumdar, J.M Brazill, B.S Learman, **O.A MacDougald,** E.L Scheller. Neural Contributions to Leptin-mediated Bone Marrow Adipocyte Catabolism. Presented at ASBMR, Austin TX, September 9 - 12, 2022.

101. Li, Z., D.P. Bagchi, J. Zhu, E. Bowers, H. Yu, J. Hardij, H. Mori, K. Granger, J. Skjaerlund, G. Mandair, K. Singer, K.D. Hankenson, C.J. Rosen, and **O.A. MacDougald.** Constitutive bone marrow adipocytes suppress local bone formation. Presented at the 7th International Meeting on Bone Marrow Adiposity. Athens, Greece. September 28 - 30, 2022.

102. Maung, J.N., R.L. Schill, C.A.S. Corsa, C.M. Walsh, E.A. Oral, and **O.A. MacDougald.** Mechanisms of adipocyte loss in mouse models of familial partial lipodystrophy 2. Presented at the ATLAS and ADIPOSIGN annual meetings, June 21 - 23, 2022. Odense, Denmark.

103. Schill, R.L., J.N. Maung, M.C. Foss Freitas, A. Nishii, J. Bonoris, C.A.S. Corsa, C. Walsh, K.T. Lewis, E.A. Oral, and **O.A. MacDougald.** Gene Expression Analysis in Familial Partial Lipodystrophy Type 2 (FPLD2). Presented at the ATLAS and ADIPOSIGN annual meetings, June 21 - 23, 2022. Odense, Denmark.

104. Li, Z., E. Bowers, J. Zhu, H. Yu, J. Hardij, D.P. Bagchi, H. Mori, K.T. Lewis, K. Granger, R.L. Schill, S.M. Romanelli, S. Abrishami, K.D. Hankenson, K. Singer, C.J. Rosen, and **O.A. MacDougald.** Lipolysis of bone marrow adipocytes is required to fuel bone and the marrow niche during energy deficits. Presented at the ATLAS and ADIPOSIGN annual meetings, June 21 - 23, 2022. Odense, Denmark.

105. Bozadjieva-Kramer, N, J.H. Shin, Z. Li, N. Miller, **O.A. MacDougald,** R. Kohli, C.F. Burant, A.E. Rothberg, and R.J. Seeley, 2022. FGF15/19 alters the enterohepatic metabolism in response to rapid weight loss leading to muscle and bone loss. Presented at the Keystone Symposium entitled Interconnection between the gut, brain and microbiome for metabolic disease. Beaver Run Resort, CO. October 7 – 10, 2022.

106. Costa, S., L. Li, Z. Li, **O.A. MacDougald**, M.C. Horowitz and C.J. Rosen. 2023. Bone Marrow Adipose Tissue: A Unique Compensatory Depot for Substrate Utilization During Short and Long-term Calorie Restriction. Presented at the Keystone Symposium entitled "Adipose tissue: energizing good fat." Keystone, CO. January 15 – 19, 2023.

107. Lewis, K.T., L.R. Oles, and **O.A. MacDougald.** Tracing the fate of adipocytes during bone marrow adipose tissue involution. Presented at Adipose Biology: Metabolic Buffering in an Obesogenic World. Edinburgh, Scotland. March 23-24, 2023.

108. Maung, J.N., R.L. Schill, C.A.S. Corsa, C.M Walsh, E.A. Oral, and **O.A. MacDougald.** Mechanisms of adipocyte loss in mouse models of familial partial lipodystrophy 2. Presented at Adipose Biology: Metabolic Buffering in an Obesogenic World. Edinburgh, Scotland. March 23-24, 2023.

109. Hariri, H., H. Mori, and **O.A. MacDougald.** Mechanisms of thermogenic adaptation in white adipose tissues. Presented at Adipose Biology: Metabolic Buffering in an Obesogenic World. Edinburgh, Scotland. March 23-24, 2023.

110. Schill, R.L., Z. Li, J. Visser, K.T. Lewis, C.A.S. Corsa, D.P. Bagchi, S.M. Romanelli, and **O.A. MacDougald.** Roles for glucocorticoid receptor in bone marrow adipose tissue physiology. Presented at Adipose Biology: Metabolic Buffering in an Obesogenic World. Edinburgh, Scotland. March 23-24, 2023.

111. Uranga, R.M., C. Crewe, and **O.A. MacDougald.** Network of intercellular Wnt signaling within adipose tissue involved in delivery of β-catenin mRNA by secreted extracellular vesicles. Presented at Adipose Biology: Metabolic Buffering in an Obesogenic World. Edinburgh, Scotland. March 23-24, 2023.

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113. Zhang, X., A. Majumdar, B. Kleiboeker, K.L Magee, B.S Learman, S.A Thomas, I.J Lodhi, **O.A MacDougald,** and E.L Scheller. Catecholamine-independent neural pathways drive the rapid catabolism of metabolically inert fat. Presented at ENDO2023. Chicago, IL. June 15-18, 2023.

114. Klinggaard, E.G., B. Maniyadath, F.B. Fuglsang, L.M. Oussoren, K. Lewis, J.R. Brewer, **O.A. MacDougald,** and S. Mandrup. Adipose Tissue Plasticity at Single-Cell Resolution

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115. Zhang, X., A. Majumdar, B. Kleiboeker, K.L Magee, B.S Learman, S.A Thomas, I.J Lodhi, **O.A MacDougald,** and E.L Scheller. Catecholamine-independent neural pathways drive the rapid catabolism of metabolically inert fat. Presented at Cell Symposia: Molecular mechanisms and integrative physiology of obesity. Shanghai, China. October 13-15, 2023.