BIOGRAPHICAL SKETCH

NAME: Hood, David A.

POSITION TITLE: Professor, School of Kinesiology and Health Science, Muscle Health research Centre, York University

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	Completion Date MM/YYYY	FIELD OF STUDY
Queen's University, Kingston, Ontario	BA-BPHE	1979	Physical & Health Education
Dalhousie University, Halifax, NS	M.Sc.	1981	Physical Education
State University of New York, Syracuse, NY	Ph.D.	1986	Physiology
University of Konstanz, Konstanz, Germany	Postdoc	1988	Biology

A. Personal Statement

I am a former 3-term (21 years) NSERC Tier I Canada Research Chair in Cell Physiology, and I am the Founder of the Muscle Health Research Centre, the leading centre in Canada for the study of muscle health and disease. I have published >200 peer reviewed articles and am recognized internationally for our work on mitochondrial biogenesis and turnover. I have given 160 presentations both nationally and internationally, and I have directly supervised >200 trainees at the graduate, undergraduate and post-doctoral levels. I have been the recipient of numerous awards, including the Canadian Society for Exercise Physiology (CSEP) Honour Award (2010) and the Michel Sarrazin award from the Canadian Physiological Society (2025). In the last 5 years we have accrued more than $2M in research funding.

B. Positions and Honors

Positions and Employment

1988-92 Assistant Professor, School of Physical Education, Department of Kinesiology & Health Science, and Department of Biology, Faculty of Graduate Studies, York University
1992-98 Associate Professor, School of Physical Education, Department of Kinesiology & Health Science, and Department of Biology, Faculty of Graduate Studies, York University
1994-95 Visiting Scholar, Department of Cell and Molecular Biology, Northwestern University
1999- Professor, School of Kinesiology & Health Science, and Department of Biology, Faculty of Graduate Studies, York University
2008-23 Director, Muscle Health Research Centre, Faculty of Health, York University

Honors

1981-86 SUNY Health Science Center at Syracuse, Pre-Doctoral Fellowship
1986-87 Muscular Dystrophy Association of America Post-Doctoral Fellowship
1987-88 Alexander von Humboldt Post-Doctoral Fellowship
1987 Medical Research Council of Canada Post-Doctoral Fellowship (awarded, not accepted)
1987 Muscular Dystrophy Association of Canada Post-Doctoral Fellowship (awarded, not accepted)
1989 New Investigator Award, American College of Sports Medicine
1992 Elected Fellow of the American College of Sports Medicine
1999 Faculty of Pure and Applied Science, Excellence in Teaching Award, York University
2003 NSERC Tier I Canada Research Chair in Cell Physiology
2006 Gollnick Lecturer, American College of Sports Medicine meeting
2007 Faculty of Graduate Studies Teaching Award, York University
2009 Faculty of Health, Established Career Research Award, York University

2010 NSERC Tier I Canada Research Chair in Cell Physiology
2010 Canadian Society for Exercise Physiology (CSEP) Honour Award
2012 Elected Fellow of the Canadian Academy of Health Sciences (CAHS)
2013 Distinguished Visiting Professor, Heart & Stroke / Richard Lewar Centre of Excellence in Cardiovascular Research
2013 Peter A. Rechnitzer Lecturer, Centre for Physical Activity and Aging, Western University
2013 Faculty of Health Teaching Award (Established Career)
2014 Adam Barsky Lectureship on Mitochondrial Diseases, Hospital for Sick Children, Toronto
2015 Canadian Society for Exercise Physiology (CSEP) John R. Sutton Lecturer
2017 NSERC Tier I Canada Research Chair in Cell Physiology (2nd renewal)
2019 Canadian Association for Graduate Studies (CAGS) Award for Outstanding Graduate Mentorship (Top 5 National Finalist)
2024 ScholarGPS: Highly Ranked Scholars are the most productive (number of publications) authors whose works are of profound impact (citations) and of utmost quality (h-index) from 2017-22. *https://scholargps.com/highly-ranked-scholars*
Rank: #6 in the field of "Skeletal Muscle", lifetime out of 104,790 scholars ranked
Rank # 1 in the field of "Mitochondrial biogenesis", lifetime out of 6,897 scholars ranked
2025 Canadian Physiological Society Michel Sarrazin Award

C. Publications (Most Recent 15)

200. Champsi, S. and D.A. Hood. Sulforaphane mimics contractile activity-induced mitochondrial adaptations in skeletal muscle myotubes. Am. J. Physiol. Cell Physiol. (in press), 2025.
199. Khemraj, P. A. Kuznyetsova and D.A. Hood. Skeletal muscle inflammasome activation in response to aging, denervation and exercise training. J. Appl. Physiol. (in press) 2025.
198. Moradi, N., A. Kuznyetsova, V. Sanfrancesco, S. Champsi and D.A. Hood. Focus on the forgotten organelle: regulation of lysosomes in skeletal muscle. Exer. Sport Sci. Rev. (in press), 2024.
197. Khemraj, P., A. Kuznyetsova and D.A. Hood. Adaptations in mitochondrial quality control and interactions with innate immune signaling within skeletal muscle. J. Sport Health Sci. (in press), 2025.
196. Moradi, N., V.C Sanfrancesco, S. Champsi and D.A. Hood. Regulation of lysosomes in skeletal muscle during exercise, disuse and aging. Free Radical Biology & Medicine (in press, 2024).
195. Moradi, N., S. Champsi and D.A. Hood. Sulforaphane, Urolithin A, and ZLN005 induce time-dependent alterations in antioxidant capacity, mitophagy, and mitochondrial biogenesis in muscle cells. Sports Medicine and Health Science. 7:16-27, 2025.
194. Sanfrancesco, V.C. and D.A. Hood. Acute contractile activity induces the activation of the mitochondrial integrated stress response and the transcription factor ATF4. J. Appl. Physiol. (in press, 2024)
193. Oliveira A.N., J.M. Memme, J. Wong and D.A. Hood. Dimorphic effect of TFE3 in determining mitochondrial and lysosomal content in muscle following denervation. Skeletal Muscle, Apr 20;14(1):7. doi: 10.1186/s13395-024-00339-1, 2024.
192. Gorman R.A., S. Yakobov, N. Polidovitch, R. Debi, V.C. Sanfrancesco, D.A. Hood, R. Lakin, and P.H. Backx. The effects of daily dose of intense exercise on cardiac responses and atrial fibrillation. J. Physiol. (London) 602:569-596, 2024.
191. Wong, J., A. N. Oliveira, P. Khemraj and D.A. Hood. The role of TFE3 in mediating skeletal muscle mitochondrial adaptations to exercise training. J. Appl.. Physiol. 136: 262-273, 2024.
190. Bhattacharya, D., M.B. Slavin and D.A. Hood. Muscle mitochondrial transplantation can rescue and maintain cellular homeostasis. Am. J. Physiol. Cell Physiol. doi: 10.1152/ajpcell.00212.2023 (APS Select Award winning paper in AJP Cell, Oct. 2023).
189. Slavin, M.B., P. Khemraj, and D.A. Hood. Exercise, mitochondrial dysfunction and inflammasomes in skeletal muscle. Biomedical J. doi: 10.1016/j.bj.2023.100636, 2023.
188. Oliveira A.N., Y. Tamura, J.M. Memme, and D.A. Hood. Role of TFEB and TFE3 in mediating lysosomal and mitochondrial adaptations to contractile activity in muscle cells. Mitochondrial Commun. 1:73-87, 2023.
187. Memme J.M., V.C. Sanfrancesco, and D.A. Hood. ATF4 regulates mitochondrial content, morphology, and function in skeletal muscle cells. Am. J. Physiol. Cell Physiol. 325:C224-C242, 2023.
186. Yan, Z., and D.A. Hood. Hot topics in muscle metabolism and adaptation. Sport. Med. Health Sci. 5: 1, 2023.