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Research Interests

Professor Hoskin's research interests include the anti-cancer and anti-inflammatory potential of iron chelating agents, antimicrobial peptides, and phytochemicals found in common spices, fruits, and vegetables; and the manipulation of T cell signal transduction using natural source compounds and other novel agents for cancer control. His work is geared towards developing new treatments for breast cancer and other common cancers.

Qualifications

Bachelor of Science, McGill University
Doctor of Science, McGill University

Research outputs

Malone A, Clark RF, Hoskin DW, Power Coombs MR. **Regulation of macrophage-associated inflammatory responses by species-specific lactoferricin peptides.** *Frontiers in Bioscience - Landmark*. 2022 Feb;27(2):043. doi: 10.31083/j.fbl2702043

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Greenshields AL, Power Coombs MR, Fernando W, Holbein BE, Hoskin DW. **DIBI, a novel 3-hydroxypyridin-4-one chelator iron-binding polymer, inhibits breast cancer cell growth and functions as a chemosensitizer by promoting S-phase DNA damage.** BioMetals. 2019 Dec 1;32(6):909-921. doi: 10.1007/s10534-019-00222-3

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Projects

Automatic CO2 incubator with IR sensor

Hoskin, D. W. (PI)
Natural Sciences and Engineering Research Council of Canada
1/1/05 → ...

Benchtop refrigerated centrifuge with rotor

Hoskin, D. W. (PI)
Natural Sciences and Engineering Research Council of Canada
1/1/04 → ...

Benchtop ultracentrifuge for molecular cell biology

Duncan, R. (PI), McMaster, C. C. (CoPI), Rohde, J. R. (CoPI), Karten, B. (CoPI) & Hoskin, D. W. (CoPI)
Natural Sciences and Engineering Research Council of Canada
1/1/11 → ...

Funding for the purchase of a gamma irradiator for studies related to cancer, immunology, and neurobiology research

Lee, P. W. K. (PI), Duncan, R. (CoPI), Hoskin, D. W. (CoPI), Johnston, B. B. (CoPI), Lee, T. D. G. (CoPI), Marignani, P. A. (CoPI), Marshall, J. S. (CoPI), Robertson, G. S. (CoPI), Robertson, H. A. (CoPI) & Sinal, C. J. (CoPI)
Institute of Cancer Research
4/1/06 → 3/31/07

Impact of TRPV6 ligation on colonic epithelial cell-dendritic cell crosstalk during induction of an innate immune response

Hoskin, D. W. (PI)
Natural Sciences and Engineering Research Council of Canada
1/1/15 → ...

Mechanism of positive and negative regulatory signaling by CD2 during mouse T lymphocyte activation

Hoskin, D. W. (PI)
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1/1/04 → ...

Microplate reader, software, and printer

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Natural Sciences and Engineering Research Council of Canada
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Modulation of regulatory T- cell function by histamine and IL-6

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Modulation of regulatory T- cell function by histamine and IL-6

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Modulation of regulatory T- cell function by histamine and IL-6

Hoskin, D. W. (PI)

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1/1/14 → ...

Modulation of regulatory T- cell function by histamine and IL-6

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Natural Sciences and Engineering Research Council of Canada

1/1/15 → ...

Modulation of regulatory T- cell function by histamine and IL-6

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1/1/11 → ...

Multi-user fluorescence microscope for live cell imaging

Duncan, R. (PI), Garduño, R. A. (CoPI), Rohde, J. R. (CoPI), Stadnyk, A. W. (CoPI), McMaster, C. C. (CoPI), Karten, B. (CoPI), McCormick, C. (CoPI), Hoskin, D. W. (CoPI) & Krueger, S. R. (CoPI)

Natural Sciences and Engineering Research Council of Canada

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Shared equipment for counting and sizing of cell populations

Anini, Y. Y. (CoPI), Cowley, E. A. (CoPI), Hoskin, D. W. (CoPI) & Blay, J. (PI)

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1/1/08 → ...

Studies of cellular immunity in the antiphospholipid syndrome

Hanly, J. G. J. (PI) & Hoskin, D. W. (CoPI)

Institute of Musculoskeletal Health and Arthritis

4/1/98 → 9/30/01

Studies of iron uptake and regulation in animal cells and affects of novel iron chelators

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The effect of novel iron chelators on iron-related Wnt signaling in animal cells

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Thy-1: a T cell molecule with novel T cell receptor-like and costimulatory signaling properties

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Thy-1: a T cell molecule with novel T cell receptor-like and costimulatory signaling properties

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Thy-1: a T cell molecule with novel T cell receptor-like and costimulatory signaling properties

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Thy-1: a T cell molecule with novel T cell receptor-like and costimulatory signaling properties

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Thy-1: a T cell molecule with novel T cell receptor-like and costimulatory signaling properties

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Thy-1 signaling in Th2, Th17, and T regulatory cell induction

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Treatment of intestinal inflammation with piperine, a dietary phytochemical with immune-modulating activity

Hoskin, D. W. (PI) & Liwski, R. S. (CoPI)

Institute of Nutrition, Metabolism and Diabetes

10/1/08 → 9/30/11

Zeiss inverted microscope

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