8/27/24

# Curriculum vitae

# SEAN J. MORRISON, PHD

## Current Appointment

Investigator, Howard Hughes Medical Institute
Director, Children's Research Institute
Mary McDermott Cook Chair in Pediatric Genetics
Kathryne and Gene Bishop Distinguished Chair in Pediatric Research
Professor, Department of Pediatrics
University of Texas Southwestern Medical Center

## Research Statement

We study the intrinsic and extrinsic mechanisms that regulate stem cell self-renewal (particularly in the hematopoietic system) and the role these mechanisms play in cancer (particularly leukemia and melanoma). Self-renewal is the process by which stem cells divide to make more stem cells, perpetuating stem cells throughout life to regenerate tissues. We discovered a series of key regulators that distinguish stem cell self-renewal from the proliferation of restricted progenitors in the same tissues. We also identified ways in which self-renewal mechanisms change with age, conferring temporal changes in stem cell properties that match the changing growth and regeneration demands of tissues. This may explain why the mechanisms that are competent to cause cancer also change with age. In terms of cell-extrinsic mechanisms, we identified the location and cellular composition of hematopoietic stem cell (HSC) niches in adult bone marrow and spleen, and discovered the Leptin Receptor$^+$ perivascular stromal cells that are the major source of factors required for HSC maintenance in the bone marrow. The LepR$^+$ cells also include the skeletal stem cells that are the major source of osteoblasts and adipocytes in adult bone marrow. We have shown that HSCs are metabolically distinct from restricted progenitors in vivo and depend upon metabolic regulation for epigenetic control and leukemia suppression. We discovered that distant metastasis by melanoma cells is limited by oxidative stress and that successfully metastasizing melanoma cells undergo reversible metabolic changes to cope with oxidative stress. We are exploring the ability of "pro-oxidant" therapies to exacerbate oxidative stress in cancer cells and inhibit cancer progression.

## Education and Training

1986 – 1991 BSc with Honors in Biology and Chemistry, Dalhousie University (Halifax, Canada)

1991 – 1996 PhD in Immunology, Stanford University (Stanford, CA), Advisor, Dr. Irving L. Weissman

1996 – 1999 Postdoctoral Scholar, California Inst. of Technology (Pasadena, CA), Advisor, Dr. David J. Anderson

## Professional Experience

1987 – 1990 President, Endogro Systems Inc., a company that developed technology for the agricultural use of plant growth-promoting fungi

1999 – 2004 Assistant Professor, Departments of Internal Medicine (Division of Molecular Medicine and Genetics) and Cell and Developmental Biology, University of Michigan.

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|---|---|
| 2000 – present | Investigator, Howard Hughes Medical Institute |
| 2004 – 2008 | Associate Professor, Departments of Internal Medicine (Division of Molecular Medicine and Genetics) and Cell and Developmental Biology; Research Associate Professor, Life Sciences Institute, University of Michigan. |
| 2005 – 2011 | Director, University of Michigan Center for Stem Cell Biology and Henry Sewall Professor in Medicine, University of Michigan |
| 2008 – 2011 | Professor, Departments of Internal Medicine (Division of Molecular Medicine and Genetics) and Cell and Developmental Biology; Research Professor, Life Sciences Institute, University of Michigan. |
| 2011 – present | Director, Children's Research Institute; Professor, Department of Pediatrics; Mary McDermott Cook Chair in Pediatric Genetics, Kathryne and Gene Bishop Distinguished Chair in Pediatric Research; UT Southwestern Medical Center |

**Honors and Awards**

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|---|---|
| 1986 | Young Canadians Award for Excellence in Science |
| 1986 | Waverly Award (for the top student in freshman calculus), Dalhousie University |
| 1987 | Dalhousie University McKenzie Trust Scholarship |
| 1988 | Dalhousie University Ross S. Smith and Alan Pollok Scholarships |
| 1990 | Dalhousie University Ross S. Smith Scholarship |
| 1991 | Natural Sciences and Engineering Research Council of Canada Research Award |
| 1991 | Dalhousie University Medal in Biology |
| 1991 | United Kingdom Commonwealth Scholarship, Oxford University (declined) |
| 1991 | Natural Sciences and Engineering Research Council 1967 Scholarship (declined) |
| 1991 – 1996 | Howard Hughes Medical Institute Predoctoral Fellowship |
| 1996 | Guenther Foundation Postdoctoral Fellowship |
| 1996 – 1998 | Natural Sciences and Engineering Research Council Postdoctoral Fellowship |
| 1997 – 1999 | American Cancer Society, California Division Junior Postdoctoral Fellowship |
| 1999 | American Cancer Society, California Division Senior Postdoctoral Fellowship |
| 2000 – 2003 | Searle Scholar |
| 2000 | Mental Illness Research Association Milestone Award |
| 2002 | Named to TR100 list: MIT Technology Review Magazine's list of 100 young innovators |
| 2003 | Wired Magazine Rave Award for Science |
| 2003 | Presidential Early Career Award for Scientists and Engineers, White House Office of Science and Technology Policy |
| 2004 | Dean's Award for Basic Science, University of Michigan Medical School |
| 2006 | Detroit News Michiganian of the Year |
| 2007 | Pfizer Young Michigan Biomedical Investigator of the Year Award |
| 2007 | McCulloch and Till Award, International Society for Hematology & Stem Cells |
| 2008 | American Association of Anatomists Harland Winfield Mossman Award |

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| 2018 | Elected member, National Academy of Medicine |
| 2020 | Elected member, National Academy of Sciences |
| 2020 | Excellence in Postdoctoral Mentoring Award, Postdoctoral Association at UTSW |
| 2022 | International Society for Stem Cell Research Public Service Award |
| 2022 | Univ. of Michigan Medical School Alumni Assoc. Distinguished Basic Science Award |
| 2023 | Elected associate member, European Molecular Biology Organization |
| 2024 | E. Donnall Thomas Lecture and Prize, The American Society of Hematology |

**Keynote and Named Lectures**

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|---|---|
| 2009 | American Assoc. for Cancer Research Special Conference on Metabolism and Cancer |
| 2009 | Keystone Symposium, Stem Cell Niche Interactions |
| 2010 | American Association for Cancer Research Annual Meeting |
| 2010 | World Stem Cell Summit |
| 2011 | Keystone Meeting on Stem Cells, Cancer, and Metastasis |
| 2012 | Roy M. Huffington Distinguished Lecture, Baylor Medical School |
| 2017 | Columbia Cancer Center Annual Symposium |
| 2017 | Malkin-Kraft Lecture, Northwestern University Cancer Center |
| 2018 | American Assoc. for Cancer Research Special Conference on Metabolism and Cancer |
| 2018 | Lubomir S. Hnilica Lecture, Frontiers in Biochemistry, Vanderbilt University |
| 2018 | Stanford Maternal and Child Health Research Inst. Inaugural Research Symposium |
| 2018 | American Society of Cell Biology Annual Meeting |
| 2019 | Scientist in Residence, University of Duisburg-Essen (Germany) |
| 2019 | Emily Frederick DiMaggio Lecture, Dana-Farber Cancer Institute |
| 2019 | The Enrico Mihich Lecture, 31st Pezcoller Symposium |
| 2020 | Philip Levine Memorial Lecture, Rockefeller University |
| 2021 | Ray Wu Prize Award Ceremony, Tongji University |
| 2021 | Ernest McCulloch Memorial Lecture, Int. Society for Stem Cell Research Ann. Meeting |
| 2021 | Torsten N. Wiesel Lecture, Hospital for Special Surgery, New York |
| 2022 | Canadian Association of Oral & Maxillofacial Surgeons Annual Conference |
| 2023 | William J. Larsen Distinguished Lecture, University of Cincinnati College of Medicine |
| 2023 | The International Heidelberg symposium on Stem Cells and Cancer, Germany |
| 2023 | VIB conference on Tumor Heterogeneity, Plasticity and Therapy, Belgium |
| 2023 | Kendall-Hench Lecture, Mayo Clinic |

**Editorial Boards**

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|---|---|
| 2003 – 2009 | Stem Cells |

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| 2006 – 2015 | Faculty of 1000, Section Head “Stem cells & Regeneration” |
| 2006 – 2023 | Cell Stem Cell |
| 2010 – present | Journal of Experimental Medicine |
| 2011 – present | EMBO Journal |
| 2011 – 2017 | Current Opinion in Cell Biology |
| 2012 – 2020 | Cancer Cell |
| 2012 – 2019 | eLife, Senior Editor |
| 2012 – present | EMBO Reports |
| 2012 – present | Stem Cell Reports |
| 2014 – present | Cancer Discovery |

**Scientific Advisory Boards**

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|---|---|
| 2007 - 2020 | Scientific Advisory Board, UCLA Broad Stem Cell Research Center |
| 2010 – 2011 | External Advisory Committee, National Heart Lung and Blood Institute Progenitor Cell Biology Consortium |
| 2011 | National Academy of Sciences panel to consider whether there should be a new taxonomy for disease |
| 2011 – present | Scientific Advisory Board, University of Washington Institute for Stem Cells and Regenerative Medicine |
| 2011 – 2013 | Morgridge Institute, University of Wisconsin |
| 2012 – 2013 | Common Fund External Consultant for the NIH Center for Regenerative Medicine |
| 2013 – 2015 | Scientific Advisory Board, California Institute for Regenerative Medicine |
| 2014 – 2015 | Chair, New York State Stem Cell Program (NYSTEM) External Review Panel |
| 2017 – present | Selection Committee, Paul Marks Prize for Cancer Research, Memorial Sloan Kettering Cancer Center |
| 2018 – present | FDA Cellular Tissue and Gene Therapies Advisory Committee |
| 2019 – present | AACR Princess Takamatsu Memorial Lectureship Committee |
| 2020 – present | Stanford Institute of Stem Cell Biology and Regenerative Medicine |
| 2020 | Member, National Cancer Institute (NCI) Advisory Board Working Group that evaluated the NCI Small Business Innovation Research Program |
| 2022 – present | Scientific Advisory Board, Columbia Stem Cell Initiative |
| 2022 – present | Scientific Advisory Board, Sloan Kettering Institute, Memorial Sloan Kettering |
| 2023 – present | External Advisory Board, Cedar-Sinai Guerin Children’s (Los Angeles, CA) |

**Meeting Organizer**

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|---|---|
| 2006 | American Society for Cell Biology Summer Meeting, Stem Cell Niches; Boston, MA |
| 2008 | Keystone Symposium, Tumor Suppressors and Stem Cell Biology, Vancouver |

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| 2009 – 2010 | International Society for Stem Cell Research Annual Meeting, Chair, Program Committee, San Francisco, CA |
| 2011 | Abcam Symposium, Therapeutic Approaches to Neurodegeneration, Barbados |
| 2013 | Keystone Symposium, Stem Cell Regulation in Homeostasis and Disease, Banff, Canada |
| 2018 | American Society for Cell Biology Doorstep Meeting (associated with the Annual Meeting), San Diego, CA |
| 2022 | American Association for Cancer Research Special Conference on Cancer Metastasis, Portland, Oregon |
| 2023 | Keystone Symposium, Metastasis, Vancouver, Canada |

**Grant Reviewer**

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|---|---|
| 2004 | National Institutes of Health: Neurogenesis and Cell Fate (NCF) Study Section |
| 2006 | California Institute for Regenerative Medicine ad hoc reviewer |
| 2007 – 2011 | Italian Association for Cancer Research (AIRC) |
| 2008 | National Institutes of Health: Hematopoiesis (HP) Study Section |
| 2009 | Damon Runyon Cancer Research Foundation Postdoctoral Fellowship Review Committee |
| 2009 – 2011 | Cancer Prevention and Research Institute of Texas, Basic Science Review Panel |
| 2010 | National Institutes of Health: Chair, Special Emphasis Panel ZAG1 ZIJ-2 |
| 2011 – 2013 | Chair, Howard Hughes Medical Institute International Predoctoral Fellowship selection committee |
| 2013 | National Inst. of Health: Center for Regenerative Medicine Therapeutic Challenge Program |
| 2015 | California Institute for Regenerative Medicine: Center for Excellence in Stem Cell Genomics |
| 2017 | National Institutes of Health: Pro/Anti-Geronic Factor RFA Study Section |
| 2017 | National Inst. of Health: ZRG1 EMNR-P Nutrient and Lipid Regulation Study Section |
| 2019 | National Cancer Institute: Biological Comparisons in Patient-Derived Models of Cancer (U01) Study Section |
| 2023 | Selection committee, Freeman-Hrabowski Scholars, Howard Hughes Medical Institute |

**UT Southwestern Institutional Committees**

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| 2011 – present | Children’s Research Institute Faculty Search Committees |
| 2015 – 2019 | Dean’s Advisory Committee |
| 2019 | Search Committee for the Provost and Dean of the Medical School |
| 2019 – present | Endowed Scholars Committee |
| 2020 – 2021 | Search Committee for the Chair of Cell Biology |
| 2020 | Chair, Basic Science Subcommittee, Six-year Strategic Plan |
| 2020 – present | Institutional Awards Nomination Committee |
| 2021 – 2022 | Search Committee for the Chair of Pediatrics |
| 2022 – 2023 | Search Committee for the Chair of Dermatology |

**Grant Support**

Ongoing

001823 (PI, Morrison) 09/01/00 – 01/31/29
Howard Hughes Medical Institute
Funding is not associated with a specific project

R01 DK118745 (PI, Morrison) 04/01/19 – 03/31/24
NIH – National Institutes of Health
"The Metabolic Regulation of Hematopoietic Stem Cell Function"
To determine whether ascorbate (vitamin C) depletion, which is common among people in Western countries, promotes hematopoietic regeneration or clonal hematopoiesis and to identify the mechanisms by which ascorbate regulates hematopoiesis.

U01 CA228608 (PI, Morrison) 09/05/19 – 09/04/24
NCI – National Cancer Institute
"The Metabolic Regulation of Melanoma Metastasis"
The goal of this project is to compare patient-derived xenograft and patient-derived organoid assays to study the regulation of oxidative stress in melanoma cells.

U54CA268072 (Danuser) 09/24/2021 – 08/31/2026
NCI – National Cancer Institute
"Imaging mechanisms of metastatic tumor formation in situ"
The goal of this multi-PI project is to develop novel microscopes and assays that will allow us to image the earliest stages of metastasis, in patient-derived xenografts and in zebrafish embryos, to assess the mechanisms that determine the sites to which cancer cells are able to migrate and proliferate. The Morrison lab will collaborate with the other labs in this consortium to develop new microscopy methods for imaging metastasis in xenografted mice and test whether differences in lipid metabolism among melanomas from different patients cause differences in the sites to which melanomas metastasize.

Kleberg Foundation (Zon) 01/01/2021 – 12/31/2024
"New therapeutic strategies to modulate bone marrow inflammation in clonal hematopoiesis and leukemia"
The overall goal is to use genetics and chemical biology to study niche mechanisms that regulate inflammation in the context of clonal hematopoiesis and leukemia. The proposed studies will lead to a better understanding of the role of inflammation in leukemia development and could yield new therapeutic strategies to prevent leukemia by suppressing clonal dominance.

RP220492 (PI, Morrison) 03/01/2022 – 02/28/2025
Cancer Prevention and Research Institute of Texas
"Mechanisms of melanoma metastasis"
To determine whether metastasizing melanoma cells exhibit temporal changes in lipid metabolism, lipid ROS levels, or sensitivity to ferroptosis during disease progression.

**Memberships in Professional Societies**

1994 - present American Association for the Advancement of Science
1999 - present Society for Developmental Biology
2001 - present Society for Neuroscience
2002 - present International Society for Stem Cell Research
2004 - present American Society for Cell Biology
2007 - present International Society for Hematology and Stem Cells
2009 - present American Association for Cancer Research
2014 - present American Association for Anatomy
2018 - present New York Academy of Sciences
2018 - present National Academy of Medicine
2018 - present The Academy of Medicine, Engineering, and Science of Texas (TAMEST)
2019 - present The American Society of Hematology
2020 - present American Aging Association
2020 - present National Academy of Sciences
2023 - present European Molecular Biology Organization (EMBO)
2024 – present Metastasis Research Society

**Offices in Professional Societies**

American Society for Cell Biology
2004 – 2009 Public Policy Committee
2004 – 2005 Program Committee

International Society for Stem Cell Research
2002 – 2006 Membership Committee
2003 – 2006 Government Affairs Committee
2004 – 2012 Board of Directors
2006 – 2009 Treasurer, Member of the Executive Committee
2007 – 2016 Finance Committee
2010 – 2011 Chair, Program Committee for the Annual Meeting
2010 – 2016 Co-chair, Legislative and Education Committee
2013 – 2014 Vice-President
2014 – 2015 President-elect
2015 – 2016 President
2016 – 2017 Past-President
2017 – 2018 Board of Directors
2016 – present Chair, Public Policy Committee

National Academy of Sciences
2024 – present Chair, Section 41: Medical Genetics, Hematology and Oncology

**Teaching activities at UT Southwestern Medical Center**

| | | |
|---|---|---|
| 2012 | 02/17 | Cancer Biology I: Hallmarks of Cancer "Cancer Stem Cells" |
| | 04/18 | Experimental Approaches to Complex Genetic Diseases "Stem cells" |
| | 10/25 | BSCI 5212-01 – Experimental Approaches to Complex Diseases "Stem cells" |
| 2013 | 01/09 | Responsible Conduct of Research |
| | 02/11 | Cancer Biology I "Cancer Stem Cells" |
| | 04/10 | Cancer Biology II "Advanced Concepts in Cancer Biology" |
| 2014 | 02/07 | Cancer Biology I Hallmarks of Cancer "Cancer Stem Cells" |
| | 04/02 | Advances in Stem Cell Biology "Hematopoietic Stem Cells" |
| | 04/11 | Cancer Biology II "Cancer Stem Cells: Impact, Heterogeneity, and Uncertainty" |
| | 11/11 | Experimental Approaches to Complex Genetic Diseases "Stem Cells" |
| 2015 | 02/20 | Cancer Biology I "Cancer Stem Cells" |
| | 04/24 | Cancer Biology II "Cancer Stem Cells: Impact, Heterogeneity, and Uncertainty" |
| 2016 | 02/10 | Cancer Biology I "Cancer Stem Cells" |
| | 03/01 | Developmental Principles in Regenerative Science and Medicine "Blood Regeneration" |
| | 04/11 | Cancer Biology II "Cancer Stem Cells: Impact, Heterogeneity, and Uncertainty" |
| 2017 | 02/01 | Responsible Conduct of Research "Notebooks and Record Keeping" |
| | 02/08 | Cancer Biology I "Cancer Stem Cells" |
| | 02/28 | Developmental Principles in Regenerative Science and Medicine "Blood Regeneration" |
| | 03/17 | Cancer Biology II "Cancer Stem Cells: Impact, Heterogeneity, and Uncertainty" |
| | 10/04 | K12 Pediatric Scholars' Training Grant Career Development Session Lecture |
| | 10/18 | Responsible Conduct of Research "Rigor & Reproducibility" |
| 2018 | 02/09 | Cancer Biology I "Cancer Stem Cells" |
| | 03/22 | Developmental Principles in Regenerative Science and Medicine "Blood Regeneration" |
| | 04/27 | Cancer Biology II "Cancer Stem Cells: Impact, Heterogeneity, and Uncertainty" |
| | 11/14 | Responsible Conduct of Research "Rigor & Reproducibility" |
| 2019 | 02/08 | Cancer Biology I "Cancer Stem Cells" |
| | 03/14 | Developmental Principles in Regenerative Science and Medicine "Blood Regeneration" |
| | 08/13 | Medical Scientist Training Program Works in Progress Seminar |
| | 12/19 | Responsible Conduct of Research "Rigor & Reproducibility" |
| 2020 | 01/29 | Cancer Biology I "Cancer Stem Cells" |
| | 03/12 | Developmental Principles in Regenerative Science and Medicine "Blood Regeneration" |
| | 11/18 | Responsible Conduct of Research "Rigor & Reproducibility" |
| 2021 | 02/03 | Cancer Biology I "Hallmarks of Cancer and Cancer Stem Cells" |
| | 03/16 | Developmental Principles in Regenerative Science and Medicine "Blood Regeneration" |
| | 11/10 | Responsible Conduct of Research "Rigor & Reproducibility" |

2022 02/04 Cancer Biology I “Hallmarks of Cancer and Cancer Stem Cells”
03/22 Developmental Principles in Regenerative Science and Medicine “Blood Regeneration”
03/25 Seminar for UTSW graduate school candidates “Stem Cells and Cancer”
07/06 STARS Summer Seminar Series “Stem Cells and Cancer”
07/12 SURF/AMGEN Scientific Seminar Series “Stem Cells and Cancer”

2023 01/12 Responsible Conduct of Research
07/20 Medical Scientist Training Program Summer Science Seminar “Stem Cells & Cancer”
08/08 SURF/AMGEN Scientific Seminar Series “The hematopoietic stem cell niche”

2024 02/05 Cancer Biology I “Cancer Stem Cells”
02/07 Responsible Conduct of Research “Human Research”
03/28 Developmental Principles in Regenerative Science and Medicine “Hematopoietic regeneration”

**Intramural Seminars at UT Southwestern Medical Center**

2011 09/17 Medical Scientist Training Program “Stem cells and cancer”
10/25 Graduate Student Organization “Stem cells and cancer”

2012 01/31 Cell Biology Department “The hematopoietic stem cell niche”
02/29 Development Biology Department “The regulation of stem cell self-renewal”
05/09 University Lecture Series “The regulation of stem cell self-renewal”
09/07 Cancer Center Grand Rounds “The regulation of melanoma metastasis”

2013 01/07 Department of Physiology “Regulation of Stem Cell Self-Renewal”
04/09 President’s Research Council “Hijacked: How cancer cells commandeer stem cell mechanisms to fuel tumor growth”

2014 02/20 President’s Lecture “Understanding cancer through the lens of stem cell biology”
03/01 Big Ideas Lecture to incoming medical students “A failure to create policy based on facts is eroding science, health care, and American competitiveness”
05/08 O’Brien Kidney Center Symposium “The regulation of stem cell self-renewal”
10/11 Department of Pediatrics “Melanoma metastasis and therapy”

2015 04/22 Comprehensive Cancer Center “Treating cancer more effectively”
12/14 Angiogenesis seminar series “Bidirectional regulation between hematopoietic stem cells and their niche”

2016 04/13 Science Policy, Ethics and Communication Club seminar series “The intersection of science and public policy”
12/16 Mineral Metabolism Lecture “The maintenance of the adult skeleton”

2017 02/03 Endocrine Grand Rounds Series “The maintenance of the adult skeleton”

2018 01/04 Dermatology Grand Rounds “Melanoma metastasis"

01/10 Surgery Grand Rounds "Metabolic mechanisms of cancer initiation and progression"
11/19 Simmons Comprehensive Cancer Center Distinguished Lecture Series "Metabolic mechanisms of cancer initiation and progression"
03/01 Mineral Metabolism Research Conference "New mechanisms that regulate the maintenance of the adult skeleton"

2019 08/16 Development and Cancer Program Retreat "Melanoma metastasis"
11/04 Angiogenesis Seminar Series "Melanoma metastasis through lymphatics"
11/22 Texas Scottish Rite Hospital/UT Southwestern/Children's Medical Center Clinical Research Day "Skeletal stem cells and bone formation"

2020 08/12 Obstetrics and Gynecology Grand Rounds "How the niche regulates blood and bone-forming stem cells in the marrow"

2022 04/21 The Center for Regenerative Science and Medicine "Hematopoietic stem cell niche"
04/22 Pak Symposium on Mineral Metabolism "The formation of bone during adulthood"
2024 03/01 Center for Organogenesis Regeneration and Trauma Retreat "Neural regulation of bone marrow regeneration"

**Extramural Invited Presentations**

2000 04/08 Great Lakes Development Meeting, Toronto, Canada "Notch Activation instructs rapid glial differentiation by purified neural crest stem cells"
05/03 University of Toronto, Hospital for Sick Children, "The role of notch and neural crest stem cells in peripheral nervous system development"
05/10 Michigan Biotech Association, Ann Arbor, MI "Stem cell biology at the interface: science as an academic and entrepreneur"
06/10 Society for Developmental Biology Meeting, Boulder, CO "Transient notch activation initiates an irreversible switch from neurogenesis to gliogenesis by neural crest stem cells"
07/02 Developmental Neurobiology Gordon Conference, Newport, RI, "Notch and neural crest stem cells in peripheral nervous system development"
09/22 Fondation des Treilles, Tourtour, France, "Notch and neural crest stem cells in peripheral nervous system development"
11/06 University of Kentucky, Lexington, KY, "Notch and neural crest stem cells in peripheral nervous system development"
11/17 Foundation for Fighting Blindness, Bethesda, MD, "An in vivo analysis of neural crest stem cell developmental potential"
11/29 Osaka University, Osaka, Japan, "Neural crest stem cells: developmental potential and differentiation"
12/01 Center of Excellence International Symposium on Molecular Bases of Neuronal Development and Neurodegeneration, Nagoya, Japan, "The surprising roles of notch and neural crest stem cells in peripheral nervous system development"

2001 01/31 University of California at Los Angeles, CA, "Notch and neural crest stem cells in peripheral nervous system development"

02/13 Ernst Klenk Symposium, Cologne, Germany, "Neural crest stem cells and peripheral nervous system development"

02/14 National Institute for Medical Research (Mill Hill), London, UK, "Neural crest stem cells and peripheral nervous system development"

04/07 University of California at San Francisco Stem Cell Mini-symposium, San Francisco, CA, "Neural crest stem cells and PNS development"

04/22 The Sherman Lecture, West Bloomfield Jewish Community Center, West Bloomfield, MI "Stem cell biology and ethics"

05/23 National Neurofibromatosis Association. Aspen, CO, "Neural crest stem cells and peripheral nervous system development"

06/11 Neurotrophins Gordon Conference, Newport, RI, "Neural crest stem cells and peripheral nervous system development"

09/10 Howard Hughes Medical Institute Science Meeting, Chevy Chase, MD, "Neural crest stem cells and the generation of diversity"

10/06 Fourth International Symposium on Organogenesis, University of Michigan, Ann Arbor, MI, "Neural crest stem cells and the generation of diversity"

2002 01/25 University of California at Santa Cruz, CA, "Neural crest stem cells and the generation of diversity"

02/07 Case Western Reserve University, Cleveland, OH, "Neural crest stem cells and the generation of diversity"

02/22 Stem Cell Challenge Symposium, Vienna, Austria "Neural crest stem cells and the generation of neural diversity"

03/11 New York Academy of Medicine, Cell and Tissue Engineering Symposium, New York, NY, "Neural crest stem cells and peripheral nervous system development"

03/20 Engineering Tissue Growth International Conference, Pittsburgh, PA, "Neural crest stem cells and peripheral nervous system development"

04/24 Children's Hospital Medical Center, Cincinnati, OH, "Neural stem cells and the generation of diversity"

05/08 Department of Neurobiology, Stanford University, CA, "Neural stem cells and the generation of neural diversity"

05/14 Massachusetts General Hospital, Neuroscience Center, Charlestown, MA, "Neural crest stem cells and the generation of neural diversity"

06/03 Nobel Conference on Stem Cell Biology, Stockholm, Sweden, "Neural stem cells and the generation of neural diversity"

06/12 Midland Center for the Arts, Midland, MI, "An introduction to stem cell biology"

06/19 Indiana University, Indianapolis, IN, "Strategies for the generation of diversity in the nervous and hematopoietic systems"

09/19 Twelfth Biennial Meeting of the American Motility Society, Galveston, TX, "Critical steps in the development of the ENS and their regulation"

09/25 Central Society for Clinical Research, Chicago, IL, "Stem cell plasticity"

10/14 University of Pennsylvania, Philadelphia, PA, "Neural crest stem cells and the generation of diversity"

12/07 American Society for Hematology Annual Meeting, Philadelphia, PA, "Stem cells and the generation of spatial diversity"

2003 01/22 UC Los Angeles, CA, "The generation of diversity from stem cells"

02/06 Johns Hopkins University, Baltimore, MD, “The generation of diversity from stem cells”
02/12 Wayne State University, Detroit, MI, “The self-renewal and diversification of stem cells”
03/05 St. Jude’s Hospital, Memphis, TN, “The self-renewal and diversification of stem cells”
03/20 University of North Carolina, Chapel Hill, NC, “The diversification and self-renewal of neural stem cells”
04/22 University of Kentucky, Lexington, KY, “Age-related changes in stem cell properties”
05/14 Maine Medical Research Institute, Portland, ME “Self-renewal of neural crest stem cells”
05/18 American Gastroenterological Association Annual Meeting, Orlando, FL “Hirschsprung disease is caused by defects in neural crest stem cell function.”
06/09 International Society of Stem Cell Research Annual Meeting, Washington, DC, “Self-renewal of neural crest stem cells”
06/20 Cold Spring Harbor Developmental Neurobiology Course, Cold Spring Harbor, NY, “The self-renewal and differentiation of neural stem cells”
08/02 Mount Desert Island Stem Cell Symposium, Salisbury Cove, ME, “Neural stem cells and their plasticity potential”
09/10 Ottawa Health Research Institute, Ottawa, Ontario, Canada, “The molecular regulation of neural crest stem cell function”
09/25 Emerging Technologies Conference, MIT, Boston, MA, “Adult stem cells”
10/21 University of Utah, Salt Lake City, UT, “The self-renewal and differentiation of neural stem cells”
10/29 Washington University, Stem Cell Symposium, St. Louis, MO, “Stem cell self renewal”
11/17 Howard Hughes Medical Institute, Chevy Chase, MD, “Stem cell self renewal”
11/18 Howard Hughes Medical Institute-National Institutes of Health Research Scholars, Bethesda, MD, “The genetic regulation of stem cell function”
12/08 Sloan-Kettering Institute, New York, NY, “The genetic regulation of neural stem cells”
12/15 Vanderbilt University, Nashville, TN, “The regulation of neural stem cell migration and self-renewal”

2004 01/15 UC San Diego, CA, “The self-renewal and differentiation of neural stem cells”
02/24 University of Toronto Institute of Biomaterials and Biomedical Engineering, Distinguished Speakers in Bioengineering, Toronto, Ontario, Canada, “The genetic regulation of stem cell function”
03/03 UC San Francisco, CA, “The genetic regulation of stem cell function”
03/09 Moffitt Cancer Center and Research Institute, Tampa, FL, “The genetic regulation of stem cell function”
03/27 American Association for Cancer Research Annual Meeting, Orlando, FL, “The regulation of stem cell self-renewal”
04/01 Second Canadian Developmental Biology Symposium, Banff, Alberta, Canada, “The regulation of stem cell self-renewal”
04/15 NIH Organ Innervations Workshop, Bethesda, MD, “Neural stem cells in gut”
04/28 Association for Research in Vision and Ophthalmology (ARVO) 2004 Annual Meeting, Ft. Lauderdale, FL “Stem Cells in Biology and Medicine: An Overview”
05/20 Jackson Laboratory Seminar, Bar Harbor, ME, “The genetic regulation of stem cell function”
06/06 Midwest Developmental Biology Meeting, Kansas City, MO, “The genetic regulation of stem cell function”

06/08 McDonnell Foundation 2004 Annual Meeting, Palisades, NY, "The role of Bmi-1 in stem cell and cancer cell proliferation"

06/11 International Society for Stem Cell Research Annual Meeting, Boston, MA, "Adult stem cell self-renewal requires repression of senescence pathways by Bmi-1"

06/21 Tumor Stem Cell Mini-Symposium, Pittsburgh, PA, "Applying the principles of stem cell biology to cancer"

07/12 Federation for European Neuroscience Annual Meeting, Lisbon, Portugal, "The regulation of neural stem cell self-renewal"

07/16 University of Seville, Seville, Spain, "The genetic regulation of stem cell function"

08/17 Gordon Conference on Neural Development, Newport, RI, "The regulation of neural stem cell self-renewal"

08/18 Cold Spring Harbor Cancer Genetics & Tumor Suppressor Genes Meeting, Cold Spring Harbor, NY, "The regulation of neural stem cell self-renewal"

09/05 Cold Spring Harbor Mouse Molecular Genetics Meeting, Cold Spring Harbor, NY, "Determination of hematopoietic stem cell identity"

09/13 Howard Hughes Medical Institute Science Meeting, Chevy Chase, MD, "Determination of hematopoietic stem cell identity"

10/01 Columbia University, New York, NY, "Genetic regulation of stem cell function"

11/03 Novartis Institutes for BioMedical Research, Cambridge, MA, "Genetic regulation of stem cell function"

11/08 National Institute on Aging, Stem Cells and Aging Meeting, Bethesda, MD, "Stem cell self-renewal and senescence"

11/21 2004 Hanson Symposium, Adelaide, Australia, "The genetic regulation of stem cell function"

11/26 Walter & Eliza Hall Institute, Melbourne, Australia, "Distinguishing stem cells from progenitors"

12/09 American Society for Cell Biology Annual Meeting, Washington, DC, co-chaired Mini-symposium on Stem Cells and presented "Distinguishing stem cells from progenitors"

12/15 Weill Medical Center, Cornell University, New York, "The genetic regulation of stem cell function"

2005 01/13 Scripps Institute, San Diego, CA, "The regulation of stem cell self-renewal and aging"

01/19 Duke University, Durham, North Carolina, "The regulation of stem cell self-renewal and aging"

02/12 Keystone Symposium, Molecular Regulation of Stem Cell Function, Banff, Alberta, Canada, "The regulation of stem cell self-renewal and aging"

02/25 UC Los Angeles Symposium, Los Angeles, CA, "Applying the principle of stem cell biology to cancer"

03/03 Howard Hughes Medical Institute and CSIS Congressional Briefing on Stem Cells, Washington, DC, "Somatic stem cells"

03/17 Days of Molecular Medicine Meeting 2005, San Diego, CA, "Hematopoietic stem cell niches"

03/31 Dana-Farber Children's Hospital, Boston, MA, "The identification and regulation of stem cells"

04/06 MGH Cancer Center, Charlestown, MA "The identification, localization, and regulation of stem cells"

04/18 Chair of Symposium on Stem Cells and Cancer at the American Association for Cancer Research 96th Annual Meeting, Anaheim, CA, and presented “Pten regulates hematopoietic stem cell function and leukemogenesis”

04/28 Program Directors-General Clinical Research Centers Meeting, Washington, DC, “Stem cell research”

05/27 EMBO Workshop and Institute for Cancer Research and Treatment International Cancer Conference, Turin, Italy, “Stem cell self-renewal and cancer proliferation”

06/04 Cold Spring Harbor Symposium on Quantitative Biology, Cold Spring Harbor, NY, “Pten distinguishes the self-renewal of normal and leukemic stem cells”

06/24 International Society for Stem Cell Research Annual Meeting, San Francisco, CA, “Differential expression of SLAM family members distinguishes stem and progenitor cells in the hematopoietic system and reveals endothelial niches for stem cells”

07/28 Society for Developmental Biology, San Francisco, CA, “Differential expression of SLAM family members distinguishes stem and progenitor cells in the hematopoietic system and reveals endothelial niches for stem cells”

09/13 Howard Hughes Medical Institute Science Meeting, “Pten dependence distinguishes stem cell self-renewal from cancer cell proliferation”

10/04 National Cancer Research Institute Meeting, Birmingham, UK, “Pten dependence distinguishes stem cell self-renewal from cancer cell proliferation”

10/11 Tanenbaum Symposium, University of Toronto, Toronto, Canada, Pten dependence distinguishes stem cell self-renewal from cancer cell proliferation”

10/27 Keystone Symposium, Stem Cells, Senescence, and Cancer, Singapore, “Stem cell self-renewal”

11/10 International Workshop on Cancer Stem Cells, Milan Italy, “Pten dependence distinguishes stem cell self-renewal from cancer cell proliferation”

11/16 Society for Neuroscience, Washington, D.C., “Stem cell self-renewal versus cancer cell proliferation”

11/29 The Institute for Research in Immunology and Cancer, Montreal, Canada, “Pten dependence distinguishes stem cell self-renewal from cancer cell proliferation”

12/02 Harvard Stem Cell Institute, Boston, MA, “Pten dependence distinguishes stem cell self-renewal from cancer cell proliferation”

12/05 The Banbury Center, Cold Spring Harbor, NY, Pten dependence distinguishes stem cell self-renewal from cancer cell proliferation”

12/14 University of North Carolina, Chapel Hill, NC, “Stem cell self renewal versus cancer cell proliferation”

2006 01/11 Oregon Health and Science University, Portland, OR, “Stem cell self-renewal versus cancer cell proliferation”

01/12 University of Oregon, Eugene, OR, “Stem cell self-renewal versus cancer cell proliferation”

01/24 Stanford University, Stanford, CA, “Stem cell self-renewal versus cancer cell proliferation”

02/03 European Society for Hematology/American Association for Cancer Research Conference, Cascais, Portugal, “Stem cell self-renewal versus cancer cell proliferation”

02/17 AAAS Annual Meeting, St. Louis, MO, “Adult stem cells”

03/06 International Conference on Cell Therapy and Regenerative Medicine, Madrid, Spain, "Pten dependence distinguishes stem cell self-renewal from cancer cell proliferation”

03/29 Development of the Enteric Nervous System: Cells, Signals and Genes Conference, New York, NY, "Neurogenesis in the adult gut"
04/18 Abramson Family Cancer Research Institute, University of Pennsylvania, Pittsburgh, PA, "Stem cell self-renewal versus cancer cell proliferation"
04/19 University of Wisconsin-Madison NIH Stem Cell Training Program, Madison, WI, "Neural stem cell aging"
04/27 University of Oklahoma, Oklahoma City, OK, "Stem cell self-renewal versus cancer cell proliferation"
04/30 National Institute on Aging, Stem Cells and Aging 2006 Annual Meeting, Potomac, MD, "Stem cell aging"
05/02 National Institutes of Health Stem Cell Seminar Series, Bethesda, MD, "Stem cell self-renewal versus cancer cell proliferation"
05/25 UT Southwestern, Dallas, TX, "Stem cell self-renewal versus cancer cell proliferation"
07/01 International Society for Stem Cell Research Annual Meeting, Toronto, Canada, "Stem cell aging"
07/16 American Society for Cell Biology, Summer Meeting, Boston, MA, "Hematopoietic stem cell niche"
09/12 Howard Hughes Medical Institute, Science Meeting, Chevy Chase, MD, "The regulation of stem cell aging"
09/18 Howard Hughes Medical Institute, Meeting of Predoctoral and Postdoctoral Research Fellows, Chevy Chase, MD, " Stem cell aging"
09/28 International Society for Experimental Hematology, Annual Meeting, Minneapolis, MN, "Hematopoietic stem cell niche"
09/30 Michigan State Medical Society, 10th Annual Conference on Bioethics, Traverse City, MI, "Embryonic stem cells"
10/09 Genomics Institute of the Novartis Research Foundation, San Diego, CA, " Stem cell self-renewal, cancer cell proliferation and aging"
10/17 Center for Advanced Biotechnology and Medicine Symposium, Piscataway, NJ, "Stem cell self-renewal, cancer cell proliferation and aging"
11/06 Cincinnati Children's Hospital, Cincinnati, OH, "Stem cell self-renewal, cancer cell proliferation and aging"
11/10 Stanford Regenerating Life Symposium, Stanford CA, "Stem cell aging"
12/07 Mount Sinai School of Medicine, New York, NY, "Identifying hematopoietic stem cells and their niche"
12/14 Keystone Symposium, Cancun, Mexico, "Identifying hematopoietic stem cells and their niche"

2007 02/01 INTACT 2007 Annual Meeting, Copenhagen, Denmark, "Stem cell self-renewal, cancer cell proliferation and aging"
02/16 UC Los Angeles Stem Cell Center Symposium, Los Angeles, CA "Stem cell self-renewal throughout life"
03/04 Keystone Symposium on Stem Cell Niches, Keystone, Colorado "The vascular niche for hematopoietic stem cells"
03/15 UC San Diego, San Diego, CA "Stem cell self-renewal throughout life"
03/20 USA-Japan Cooperative Cancer Workshop, Kauai, HI "Pten and leukemogenesis"
03/29 Children's Hospital Boston, Boston, MA" Stem cell self-renewal throughout life"
04/02 Pfizer, Ann Arbor, MI "Stem cell self-renewal throughout life"

04/24 The University of Washington, Seattle, WA "Stem cell self-renewal throughout life"
05/22 Days of Molecular Medicine, Boston, MA "Stem cell self-renewal throughout life"
05/24 University of Virginia, Charlottesville, VA "Stem cells in the nervous system and other tissues"
05/25 Robarts Regenerative Medicine Symposium, Toronto, ON "Stem cell self-renewal throughout life"
06/04 American Aging Association Conference, San Antonio, TX "Stem cell self-renewal, cancer cell proliferation and aging"
06/11 Children's Tumor Foundation NF Conference, Park City, UT "Stem cell self-renewal throughout life"
06/19 International Society for Stem Cell Research Annual Meeting, Cairns, Australia "Sox17 dependence distinguishes the transcriptional regulation of fetal from adult hematopoietic stem cells"
07/15 Aspen Cancer Conference, Aspen CO "Stem cell self-renewal, cancer cell proliferation and aging"
09/28 International Society for Hematology, Hamburg, Germany "Hematopoietic stem cell maintenance throughout life"
10/03 IRB Barcelona Biomed Conference, Barcelona, Spain "Neural crest stem cells, neurofibromatosis and MPNST"
10/05 CNIO (Spanish National Cancer Research Centre), Madrid, Spain "Stem cell self-renewal and cancer"
10/08 Merck-Cancer Stem Cell Symposium, Rome, Italy "Stem cell self-renewal, cancer cell proliferation and aging"
10/16 New York Stem Cell Foundation, Fall Conference, New York, NY "Stem cell self-renewal"
10/17 Silverstein Lecture, Northwestern University, Chicago, IL "Stem cell biology at the interface of science and politics"
11/07 UC San Francisco, San Francisco, CA "Stem cell self-renewal"
11/09 Canadian Stem Cell Network 7th Annual Scientific Meeting, Toronto, Canada "Stem cell self-renewal"

2008 01/10 Southern California Stem Cell Consortium, Burnham Institute, San Diego, CA "Stem cells and cancer"
01/14 University of Toronto Program in Immunology, Toronto, Canada "Stem cells and cancer"
02/14 American Association for Cancer Research Meeting on Cancer and Stem Cells, Los Angeles, CA "Stem cells and cancer"
02/27 Keystone Symposium on Tumor Suppressors and Stem Cell Biology, Vancouver, Canada "Stem cell self-renewal versus cancer cell proliferation"
03/28 Keystone Symposium on Signaling Pathways in Cancer and Development, Steamboat Springs, CO "Stem cells and cancer"
04/08 American Association of Anatomists, Annual Meeting 2008, San Diego, CA H.W. Mossman Award Lecture in Developmental Biology. "The regulation of stem cell self-renewal"
04/15 University of Pennsylvania, Immunology Colloquium Seminar, Philadelphia, PA "The regulation of stem cell self-renewal"

04/16 University of Wisconsin, Third Annual Wisconsin Stem Cell Symposium, Madison, WI "Loss of Nf1 transiently promotes self-renewal but not tumorigenesis by neural crest stem cells"

04/25 University of North Carolina, Chapel Hill, NC "The regulation of stem cell self-renewal"

05/06 Massachusetts Institute of Technology, Cambridge, MA The regulation of stem cell self-renewal"

05/22 Chicago Transduction Symposium, Northwestern University, Chicago, IL "The regulation of stem cell self-renewal"

05/23 UC San Francisco, San Francisco, CA "Stem cell self-renewal versus cancer cell proliferation"

06/10 Dana Farber Cancer Institute, Seminars in Oncology, Boston, MA "The regulation of stem cell self-renewal"

06/12 International Society for Stem Cell Research Annual Meeting, Philadelphia, PA "The regulation of stem cell self-renewal"

07/23 Weissman Lab Symposium 2008, Hamilton, MT "The regulation of stem cell self-renewal"

09/08 Howard Hughes Medical Institute Science Meeting, Chevy Chase, MD, "How frequent are tumorigenic human cancer cells?

09/16 Van Andel Research Institute, Grand Rapids, MI "Stem cell self-renewal"

09/26 Nobel Conference on Stem Cells, Stockholm, Sweden, "Stem cell self-renewal throughout life"

10/03 Keystone Symposia, Stem Cells, Cancer and Aging, Singapore, "Stem cells, aging and cancer"

10/15 Foundation Singer-Polignac, Paris, France, "Cancer Stem Cells"

11/10 Columbia University, New York, NY, "Stem cell self-renewal"

11/18 UC Los Angeles Department of Pharmacology, Los Angeles, CA, "Stem cell self-renewal"

12/12 Merck Research Labs, Cambridge MA, "Cancer stem cells and self-renewal"

2009 01/15 American Association for Cancer Research, Mouse Models of Cancer, San Francisco, CA, "What percentage of human cancer cells are tumorigenic?"

01/28 Keystone Symposium, Emerging Tumor Suppressors, Taos, NM, "Hmga2 increases the self-renewal of fetal and young adult stem cells"

02/24 CNIO (Spanish National Cancer Research Centre), Cancer Conference, Madrid, Spain, "Tumorigenic potential is a common attribute of human melanoma cells, rather than a property of rare melanoma stem cells"

03/17 National Institute of Aging, Baltimore, MD "The regulation of stem cell aging"

03/27 USA-Japan Cooperative Cancer Workshop, Kona, HI "A forward genetic screen for regulators of hematopoietic and leukemic stem cell self-renewal"

04/06 University of Iowa, Neuroscience Seminar, Iowa City, IA, "Stem cell self-renewal"

04/14 University of Pennsylvania, Institute for Regenerative Medicine, Philadelphia, PA "The regulation of stem cell renewal"

04/17 Boston University School of Medicine, Stem Cell Symposium, Boston, MA, "Stem cell self-renewal versus cancer cell proliferation"

04/21 Keystone Symposium, Stem Cell Niche Interactions, Whistler, British Columbia, Canada, Keynote Address "Hematopoietic stem cell self-renewal"

05/11 Carnegie Institution, Baltimore, MD, "The regulation of stem cell self-renewal"

05/23 University of Ulm, Symposium on Molecular Mechanisms of Adult Stem Cell Aging, Reisensburg, Germany, "The regulation of stem cell aging"
06/02 Harvard Stem Cell Institute, Brookline, MA, "Stem cell self-renewal"
06/11 Pezcoller Symposium, Trento, Italy, "Cancer stem cells?"
06/18 Massachusetts Institute of Technology, Boston, MA, "Cancer stem cells?"
07/25 Society for Developmental Biology Annual Meeting, San Francisco, CA, "A forward genetic screen for stem cell self-renewal genes"
08/03 International Union of Biochemistry and Molecular Biology International Congress, Shanghai, China, "A forward genetic screen for self-renewal genes"
09/14 Howard Hughes Medical Institute, Science Meeting, Chevy Chase, MD, "A forward genetic screen for stem cell self-renewal genes"
09/17 Keynote Speaker, Wayne State University Graduate Student Research Day, Detroit, MI, "The regulation of stem cell self-renewal"
09/22 Cold Spring Harbor Symposium on Stem Cell Biology, Cold Spring Harbor, NY, "A transposon mutagenesis suppressor screen for self-renewal genes"
11/01 Society for Melanoma Research Annual Meeting, Boston, MA, "Tumorigenic cells are common in melanoma and lack obvious hierarchical organization"
12/04 American Society for Cell Biology Annual Meeting, San Diego, CA, "Some cancers follow a stem cell model and some don't"
12/14 American Association for Cancer Research Special Meeting on Brain Tumors, San Diego, CA, "Tumorigenic cells are common in some cancers"

2010 01/05 Columbia University, New York, NY, "The regulation of stem cell self-renewal"
01/28 Harvard University, Boston, MA, "The regulation of stem cell self-renewal"
02/03 Keystone Symposium, Tahoe City, CA, "A transposon mutagenesis suppressor screen for genes that regulate stem cell maintenance"
02/10 UC San Diego, San Diego, CA, "Some cancers follow a stem cell model, and some don't"
02/09 Pfizer, La Jolla, CA, "The cancer stem cell model describes some cancers but not others"
02/11 Salk Institute, La Jolla, CA, "Heterogeneity among cancer cells: stem cells or clonal evolution"
02/24 UC Berkeley, Berkeley, CA, "The regulation of stem cell self-renewal"
03/09 Foundation IPSEN, Beriloche, Argentina, "Some cancers follow a stem cell model, while other cancers have common tumorigenic cells with little or no hierarchical organization"
03/19 UC San Francisco, San Francisco, CA, "Some cancers follow a stem cell model, and some don't"
03/30 Wayne State University, Detroit, MI, "Some cancers follow a stem cell model, and some don't"
04/08 Cold Spring Harbor Asia, Suzhou, China, "The regulation of stem cell self-renewal"
04/18 New York University, New York, NY, "The regulation of stem cell self-renewal"
04/20 American Association for Cancer Research Annual Meeting 2010, Washington, D.C., Plenary Talk "Some cancers follow a stem cell model, while other cancers have common tumorigenic cells with little or no hierarchical organization"
04/27 Tri-Institutional Stem Cell Initiative, New York, NY, "Stem cells and cancer"
05/19 Princeton University, Princeton, NJ, "The regulation of stem cell self-renewal"

08/23 Jackson Laboratory, Short Course on Experimental Models, Bar Harbor, ME "Cancer stem cells?"

10/04 2010 World Stem Cell Summit, Detroit, MI Keynote Scientific Presentation, "Melanoma"

10/05 Novartis Cancer Retreat, Keynote Speaker, Atlanta, GA "Cancer stem cells?"

11/07 Howard Hughes Medical Institute, Science Meeting, Chevy Chase, MD, "The metabolic regulation of stem cells by Lkb1"

11/16 Sloan Kettering, New York, NY "The metabolic regulation of stem cells by Lkb1"

12/01 University of Chicago, Chicago, IL "Cancer stem cells?"

12/04 Leukemia and Lymphoma Society Symposium, Orlando, FL "The hematopoietic stem cell niche"

2011 02/02 Keystone Meeting on Stem Cells, Santa Fe, New Mexico "Developmental changes in PI-3kinase pathway signaling influence stem cells and leukemia"

02/09 Broad Center for Stem Cell Research Opening Symposium, UCSF, San Francisco "Reprogramming of adult stem cells to have fetal characteristics

02/16 ABCAM Conference on Neurodegeneration and Stem Cells, Nassau, Bahamas "Bmi-1 regulates neurological function throughout adult life"

02/21 UT Health Sciences Center San Antonio, Texas "Stem cell self-renewal throughout adult life"

03/10 Keystone Meeting on Stem Cells, Cancer, and Metastasis, Keynote Address "Tumorigenesis and metastasis in melanoma"

03/30 Keystone Meeting on Hematopoiesis, Big Sky Montana, "Regulation of temporal identity in stem cells."

04/02 American Association for Cancer Research Annual Meeting, Orlando, Florida, Workshop on Metastasis and tumor dormancy, "Melanoma tumorigenesis"

04/04 American Association for Cancer Research Annual Meeting, Orlando, Florida, Forum on Cancer Stem Cells, "Malignant peripheral nerve sheath tumors"

04/05 American Association for Cancer Research Annual Meeting, Orlando, Florida, Plenary session on Stem cell self-renewal mechanisms, "Temporal changes in stem cell self-renewal mechanisms"

04/28 Cold Spring Harbor Laboratory meeting on Cancer Biology, "Tumorigenic cell frequency"

04/29 National Institutes of Health meeting for grantees studying the hematopoietic stem cell niche, Bethesda, MD, "The hematopoietic stem cell niche"

05/05 Howard Hughes Medical Institute Science Meeting, Janelia Farm, "The hematopoietic stem cell niche"

05/10 University of Utah, Salt Lake City, "Intrinsic and extrinsic mechanisms that regulate hematopoietic stem cell function"

06/17 International Society for Stem Cell Research Annual Meeting, Toronto CA "The hematopoietic stem cell niche"

06/27 Gordon Conference on Cell Growth and Proliferation, Biddeford, Maine "Temporal changes in stem cell self-renewal mechanisms"

07/11 Aspen Cancer Conference, Aspen, CO, "Melanoma growth, metastasis, and genetic change"

08/04 Ellison Foundation Annual Meeting, Woods Hole, MA, "Bmi-1, stem cell aging, and neurological function"

09/14 Center for Cancer Systems Biology Series, Stanford, CA "Stem cell self-renewal and cancer cell proliferation"

09/16 American Association for Cancer Research Conference on Frontiers in Basic Cancer Research, San Francisco, CA "Plasticity of melanoma cells"

09/20 Cold Spring Harbor Laboratory meeting on Stem Cell Biology, Cold Spring Harbor, NY "Hematopoietic stem cell niches"

10/20 St. Jude's Biomedical Symposium, Memphis, TN "Neural stem cell self-renewal"

11/01 Frontiers in Cancer Science 2011, Singapore "Developmental changes in PI-3kinase pathway regulation lead to changes in hematopoietic stem cell self-renewal and leukemogenesis"

11/17 Cambridge Research Institute, Cambridge, UK "The intrinsic and extrinsic regulation of stem cell self-renewal"

2012 01/05 UCLA, Los Angeles, CA "The hematopoietic stem cell niche"

01/25 Stanford University, Stanford, CA "The hematopoietic stem cell niche"

02/20 Peking University, Beijing, China "The hematopoietic stem cell niche"

02/21 National Institute of Biological Sciences, Beijing, China "The hematopoietic stem cell niche"

03/09 Nobel Forum, Frontiers in Cancer Research and Therapy, Karolinska Institute, Stockholm, Sweden "Melanoma growth and metastasis"

03/21 University of Wisconsin, Madison, WI "The hematopoietic stem cell niche"

04/03 American Association for Cancer Research Annual Meeting, Baynard Clarkson Symposium "Ras, stem cells, clonal expansion, and leukemia"

04/05 Keystone Symposium, Breckenridge, CO "Pten, stem cells, and leukemogenesis"

04/11 Roy M. Huffington Distinguished Lecture, Huffington Center on Aging, Baylor Medical School, Houston, TX "Regulation of stem cell aging"

04/30 Weizmann Institute of Science, Rehovot, Israel "The hematopoietic stem cell niche"

05/06 Meeting of NHLBI Stem Cell Niche RFA recipients, National Institutes of Health, Bethesda, MD "The hematopoietic stem cell niche"

05/15 University of Nebraska, Omaha, NE "The cancer stem cell model?"

07/10 Cambridge University, Cambridge, UK "The hematopoietic stem cell niche"

09/12 Baker Institute, Houston, TX "Creating stem cell policy at the interface of science and politics"

09/13 Rice University/MD Anderson, Houston, TX "Stem cell self-renewal and leukemogensis"

10/01 Geoffrey Beene Symposium-Sloan-Kettering, New York, NY "Stem cell self-renewal and leukemogenesis"

10/16 Yale University, New Haven, CT "The hematopoietic stem cell niche"

11/05 Abcam Conference at The Salk Institute, La Jolla, CA "Proteostasis and stem cell function"

12/04 USC Norris Comprehensive Cancer Center, Los Angeles, CA "Melanoma, tumorigenesis and metastasis"

2013 01/15 Keystone Symposium on Hematopoiesis, Steamboat Springs, CO "Hematopoietic stem cell niche"

02/23 American Association for Cancer Research, Maui, Hawaii "Human melanoma metastasis in NSG mice correlates with clinical outcome in patients"

02/26 Keystone Symposium on Stem Cells in Homeostasis and Disease, Banff, Alberta, Canada "Hematopoietic stem cells and lymphoid progenitors occupy distinct niches in the bone marrow"
03/18 Genentech, San Francisco, CA "Stem cell self-renewal and cancer"
03/25 America-Japan Leukemia Meeting, Maui, Hawaii "HSC self-renewal and pre-leukemic expansion"
04/08 American Association for Cancer Research Annual Meeting, Washington, DC "Stem cells in cancer"
04/22 University of Pennsylvania, Philadelphia, PA "Stem cell self-renewal and cancer"
05/16 MD Anderson, Houston, TX "Stem cell self-renewal and cancer"
05/20 Meeting of NHLBI Blood Stem Cell Niche RFA recipients, National Institutes of Health, Bethesda, MD "Genetic analysis of stem cell maintenance in vivo"
07/22 Hebrew University, Stem Cells and Regenerative Biology Summer School "Strengths and weaknesses of the cancer stem cell model"
07/23 Hebrew University, Stem Cells and Regenerative Biology Summer School "Stem cells and leukemia"
08/02 Key Symposium 10: Taming the Cancer Cell, Stockholm, Sweden "Stem cell self-renewal and pre-leukemic clonal expansion"
09/16 International Society for Stem Cell Research Regional Forum, Florence, Italy "Stem cells: lost in translation"
09/27 University of Michigan Comprehensive Cancer Center Annual Research Fall Symposium "Stem cells and leukemogenesis"
10/10 Howard Hughes Medical Institute Science Meeting, Janelia Farm, Virginia, "Stem cells: lost in translation"
10/17 Nathan Shock Center Conference on Aging, Stem Cells and Aging, UT Health Science Center, San Antonio, TX "The regulation of stem cell aging"
10/29 Nature – Spanish National Cancer Research Centre (CNIO), Madrid, Spain "Human melanoma heterogeneity and metastasis"
11/15 Harvard University/Massachusetts General Hospital Center for Regenerative Medicine 10th Anniversary Symposium, Boston MA "Stem cell self-renewal & leukemogeneis"
11/18 McMaster University, Hamilton, Ontario, Canada "Hematopoietic stem cell niche"
11/19 Ontario Stem Cell Initiative, University of Toronto, Ontario "Stem cell self-renewal & leukemogenesis"
11/21 Cold Spring Harbor Laboratory, New York, NY "Stem cell self-renewal and leukemogenesis"
12/12 Lecture Series and Graduate Student Course in Stem Cell Biology, Rockefeller University, New York, NY "Hematopoietic stem cell niche"

2014 01/16 Keystone Symposium on Aging, Steamboat Springs, CO "Hematopoietic stem cells require a highly regulated rate of protein synthesis"
01/30 Agensys, Los Angeles, CA "Melanoma tumorigenesis and metastasis"
02/04 Keystone Symposium on Stem Cells and Cancer, Banff, Alberta "Hematopoietic stem cells require a highly regulated rate of protein synthesis"
02/12 Peter MacCallum Cancer Centre, Melbourne, Australia "Stem cell self-renewal and leukemogenesis"
02/15 Lorne Cancer Conference, Lorne, Australia "Hematopoietic stem cell self-renewal and leukemogenesis"

03/05 MD Anderson Experimental Therapeutics Seminar, Houston, TX "Melanoma tumorigenesis and metastasis"

03/26 Cold Spring Harbor Laboratory, Cold Spring Harbor, NY "Hematopoietic stem cells require a highly regulated protein synthesis rate"

04/07 American Association for Cancer Research Annual Meeting, San Diego, CA, Bayard Clarkson Symposium "Stem cell self-renewal and cancer"

04/08 Lawrence Berkeley National Laboratory, Life Sciences Division, Berkeley, CA "Melanoma tumorigenesis and metastasis"

04/09 UC San Francisco, Biomedical Sciences Seminar, San Francisco, CA "The hematopoietic stem cell niche"

05/05 Oregon Health and Science University, School of Medicine, Portland, OR "Melanoma tumorigenesis and metastasis"

05/14 University of Michigan, Life Sciences Institute Annual Symposium, Ann Arbor, MI "The regulation of stem cell self-renewal"

05/16 Washington University Neurofibromatosis Center, St. Louis, MO "Regulation of stem cells by Ras signaling"

05/22 University of Colorado, Cancer Biology Graduate Program, Denver, CO "Stem cell self-renewal and cancer cell proliferation"

05/30 Nature Conference, Genomics and Stem Cell Based Therapies, Guangzhou, China "The hematopoietic stem cell niche"

06/06 Weill Cornell Medical College, Ansary Stem Cell Institute 10th Anniversary Symposium, New York, NY "The regulation of stem cell self-renewal"

07/15 Cambridge University MRC Laboratory of Molecular Biology, Cambridge, UK "Hematopoietic stem cell niche"

08/22 International Society for Experimental Hematology Annual Scientific Meeting, Montreal, Canada "Cancer, stem cells, and melanoma"

10/2 Cold Spring Harbor Laboratory meeting on Aging, Cold Spring Harbor, NY "Proteostasis in somatic stem cells"

10/8 Cincinnati Children's Hospital, Cincinnati, OH "The Hematopoietic stem cell niche"

10/17 European Molecular Biology Organization Conference, Stem Cells and Epigenetics in Cancer, Hong Kong, China "Distant metastasis by melanoma cells depends upon reversible metabolic changes to cope with oxidative stress"

11/04 University of Ottawa, Department of Cellular and Molecular Medicine Trainee Seminar Series, Ottawa, Canada "The regulation of stem cell self-renewal"

11/14 Duke Cancer Institute Annual Scientific Retreat, Raleigh, NC "Melanoma heterogeneity and disease progression"

12/4 Beth Israel Deaconess Medical Center Distinguished Lecture Seminar, Boston, MA "Novel mechanisms of melanoma progression and treatment"

12/9 Cell Symposia, Stem Cell Energetics, Berkeley, CA "Reversible metabolic changes in human melanoma cells enable distant metastasis in vivo"

2015 02/25 Keystone Symposia, Hematopoiesis, Keystone, CO "Hematopoietic stem and progenitor cells regulate niche regeneration by secreting angiopoietin-1"

03/16 US/Japan Meeting on Malignant Hematopoiesis, Waikoloa, HI "Deep-imaging of stem cells in hematopoietic tissues and digital reconstruction of their microenvironment"

03/27 Acute Leukemia Forum, San Francisco, CA "Microenvironment and stem cells in acute leukemia"

04/07 New York University School of Medicine Stem Cell Biology Seminar Series, New York, NY "The regulation of stem cell self-renewal"

04/15 Duke University School of Medicine Cancer Biology Seminar Series, Raleigh, NC "The hematopoietic stem cell niche"

05/06 Howard Hughes Medical Institute Science Meeting, Janelia Farm, Virginia "The regulation of melanoma metastasis"

08/07 Salk Mechanisms and Models of Cancer Symposium, La Jolla, CA "Mechanisms of melanoma metastasis"

09/08 University of Southern California Broad Center for Regenerative Medicine Seminar Series, Pasadena, CA "The hematopoietic stem cell niche"

09/18 Summit on Melanoma, Pasadena, CA "Mechanisms of melanoma metastasis"

10/04 Southwest Regional Society for Developmental Biology, Dallas, TX "The hematopoietic stem cell niche"

10/08 Seattle Children's Research Institute, Seattle, WA "The hematopoietic stem cell niche"

10/09 American Society for Bone and Mineral Research Annual Meeting, Seattle, WA "Skeletal stem cells in adult bone marrow"

10/30 Sanford-Burnham Prebys Medical Discovery Institute Annual Symposium, La Jolla, CA "The regulation of adult osteogenesis"

11/14 Cedars-Sinai Medical Center Symposium, Los Angeles, CA "The hematopoietic stem cell niche"

11/17 Bayer Symposia on Hematopoiesis, San Francisco, CA "The hematopoietic stem cell niche"

11/20 Society for Melanoma Research Congress, San Francisco, CA "The regulation of melanoma metastasis"

11/30 American Association for Cancer Research Developmental Biology & Cancer Meeting, Boston, MA "Oxidative stress inhibits distant metastasis by human melanoma cells"

2016 02/11 Stem Cell Research and Regenerative Medicine 2016 Conference, San Antonio, TX "Stem cell niches in the bone marrow"

02/22 University of Pennsylvania Institute for Regenerative Medicine Seminar Series, Philadelphia, PA "Adult niches for hematopoiesis and osteogenesis"

02/24 Columbia University Microbiology and Immunology Seminar Series, New York, NY "The niche for hematopoiesis and osteogenesis in the bone marrow"

03/07 Keystone Conference on Stem Cells and Cancer, Breckenridge, CO Keynote Address "Melanoma metastasis and therapy"

03/14 Memorial Sloan Kettering Cancer Center, Cancer as an Evolving and Systemic Disease, New York, NY "The regulation of melanoma metastasis"

03/22 University of Oklahoma, Oklahoma City, OK "Stem cell niches for hematopoiesis and osteogenesis"

04/04 European Molecular Biology Organization EMBL Symposium on Tumor Microenvironment and Signaling, Heidelberg, Germany, Keynote address "Oxidative stress inhibits distant metastasis by human melanoma cells"

04/07 German Cancer Institute Distinguished Lecturer Seminar Series, Heidelberg, Germany "The niche for hematopoiesis and osteogenesis in the bone marrow"

05/03 Keystone Conference, Epigenetic and Metabolic Regulation of Aging, Sante Fe, NM "Clec11A is necessary for the maintenance of the adult skeleton"

05/11 New York State Stem Cell Meeting, New York, NY, Keynote address "Niches for hematopoietic and osteogenic stem cells"

05/24 Copenhagen Biosciences Conference, Copenhagen, Denmark "Niches for hematopoietic and osteogenic stem cells in the bone marrow"

05/26 Lund University Stem Cell Center, Lund, Sweden "Niches for hematopoietic and osteogenic stem cells in the bone marrow"

06/02 Cold Spring Harbor Laboratory Symposium on Quantitative Biology, Cold Spring Harbor, NY "Metabolic regulation of stem cell frequency and tumor suppression"

06/03 Vanderbilt University Symposium on Cell Dynamics, Nashville, TN "Osteogenic and hematopoietic niches"

07/11 European Association for Cancer Research Annual Meeting, Manchester, UK "Recent progress in in vivo reprogramming"

08/27 International Society for Experimental Hematology Annual Meeting, San Diego, CA "Bone marrow adipocytes promote hematopoietic regeneration"

09/12 Fourth Annual German Stem Cell Network Conference, Hannover, Germany, "Stem niches in the bone marrow"

09/14 Biomedicum Helsinki, Helsinki, Finland "Metabolic mechanisms of cancer initiation and progression"

09/16 Wihuri Research Institute, Turku, Finland "Stem niches in the bone marrow"

09/30 University of Michigan Comprehensive Cancer Center Annual Research Symposium "Metabolic control of cancer initiation and metastasis" Ann Arbor, MI

10/05 University of Calgary Developmental Biology and Genetics Seminar, Calgary, Alberta "Stem cell niches in the bone marrow"

10/06 MD Anderson Symposium on Cancer Research, Houston, TX "Mechanisms of melanoma metastasis"

10/28 American Association of Cancer Research Special Conference on Translational Control of Cancer, San Francisco, CA "Protein synthesis in stem cells"

11/02 Beth Israel Deaconess Medical Center Annual Cancer Symposium, Boston, MA "Metabolic regulation of stem cell function and tumor suppression"

11/04 Beckman Symposium on Stem Cells and Regenerative Medicine, City of Hope, Duarte CA "Niches for stem cells in the bone marrow"

11/11 Yale Stem Cell Center, Yale University, New Haven, CT "Stem cell niches in the bone marrow"

12/03 American Society for Cell Biology Annual Meeting, San Francisco, CA "Stem cells and cancer"

2017 01/17 Stanford Cancer Biology Seminar Series, Stanford, CA "Metabolic regulation of stem cells and cancer"

02/12 Gordon Research Conference (Stem Cells & Cancer), Lucca, Italy "Metabolic mechanisms regulating cancer initiation"

02/24 US-Japan Hematologic Symposium, Waikoloa, Hawaii "Metabolic regulation of leukemogenesis"

03/10 UC San Diego Division of Regenerative Medicine Third Annual Symposium, San Diego, CA "Stem cell niches in the bone marrow"

03/23 Fox Chase Cancer Center Distinguished Lecturer Seminar, Philadelphia, PA "Metabolic mechanisms of cancer initiation and progression"

03/30 Dana Farber Cancer Institute BMT/HM Grand Rounds, Boston, MA "The hematopoietic stem cell niche"

03/31 Harvard Stem Cell Institute Cancer Program Symposium, Boston, MA "Metabolic regulation of cancer initiation and progression"

04/10 Columbia Cancer Center Annual Symposium, Keynote Speaker, New York, NY "Metabolic regulation of cancer initiation and progression"

04/11 Banbury Center Meeting "Better Cancer Therapy from Redox Biology", Cold Spring Harbor, NY. "Distant metastasis requires cancer cells to adapt to oxidative stress"

04/29 Texas Dermatological Society Annual Spring Meeting, James N. Gilliam Memorial Lecturer, Dallas, TX "Antioxidants and melanoma progression"

05/02 Northwestern University Distinguished Annual Cancer Center Malkin-Kraft Lecture, Chicago, IL "Metabolic Mechanisms of Cancer Initiation and Progression"

05/22 University of Oxford Weatherall Institute of Molecular Medicine Seminar Series, Oxford, UK "Stem cell niches in the bone marrow"

05/25 EMBO Conference: Advances in Stem Cells and Regenerative Medicine, Heidelberg, Germany "Metabolic regulation of stem cells in vivo"

06/12 Third Annual Center for Skeletal Research Symposium, Harvard University, Boston, MA "New mechanisms that regulate adult skeleton maintenance"

06/15 International Society for Stem Cell Research 2017 Annual Meeting, Boston, MA "The metabolic regulation of stem cell function and leukemogenesis"

07/13 International Society on Thrombosis and Hemostasis 2017 Congress, Berlin, Germany, Sol Sherry lecture "Bone Marrow Niches"

09/15 Huntsman Cancer Institute Symposium: Frontiers in Cancer Prevention, Research and Therapy, Salt Lake City, UT "Metabolic mechanisms of cancer initiation and progression"

09/28 Rockefeller University Stem Cell Lecture, New York, NY "The hematopoietic stem cell niche"

09/29 Columbia University Stem Cell Initiative, New York, NY "The hematopoietic stem cell niche"

11/16 National Institutes of Health, Bethesda, MD "Stem Cell Aging"

11/20 Moffitt Cancer Center, Tampa FL "The Metabolic Regulation of Cancer Initiation and Progression"

2018 01/17 Texas Scottish Rite Hospital for Children, Dallas, TX "Skeletal stem cells and new osteogenic mechanisms"

01/24 Memorial Sloan Kettering President's Research Seminar Series, New York, NY "Metabolic mechanisms of cancer initiation and progression"

02/14 Howard Hughes Medical Institute Science Meeting, Janelia Farm, Virginia "Metabolic regulation of stem cell function"

02/21 ASBMT/CIBMTR (Bone Marrow Transplant) Tandem Meeting, Salt Lake City, UT "The hematopoietic stem cell niche"

03/02 University of British Columbia Biomedical Research Center Seminar Series, Vancouver, Canada "The microenvironment for stem cells in bone marrow"

04/02 Texas A&M College of Dentistry Research Day, Dallas, TX "The hematopoietic stem cell niche"

04/10 MD Anderson Cancer Center Science to Medicine Seminar Series, Houston, TX "The metabolic regulation of cancer initiation and metastasis"

04/14 American Association for Cancer Research Annual Meeting, Chicago, IL “Epigenetic regulation of stem cells and leukemia suppression by vitamin C”

04/20 St. Jude Danny Thomas Lecture Series, Memphis, TN “Metabolic mechanisms of cancer initiation and progression”

05/03 UCLA Stem Cell Seminar Series, Los Angeles, CA “The hematopoietic stem cell niche”

05/11 Princeton University Lewis-Sigler Symposium, Princeton, NJ “Metabolic regulation of melanoma metastasis”

05/14 University of Toronto Charles Gould Easton Seminar Series, Toronto, Canada “The niche for hematopoietic stem cells”

05/24 New York Academy of Sciences Cancer Metabolism and Signaling Symposium, New York, NY “The metabolic regulation of cancer progression”

06/14 Keystone Symposium, Novel Aspects of Bone Biology, Snowbird, UT “The maintenance of the adult skeleton”

07/01 The European Association for Cancer Research Annual Meeting, Amsterdam, the Netherlands “The metabolic regulation of cancer progression”

07/19 Gordon Research Conference, Endothelial Cell Phenotypes in Health and Disease, Lucca, Italy “Endothelial cells and the niche for stem cells versus restricted progenitors”

07/27 HuaCell BioMed Future Conference, From Gene Translation to Translational Medicine, Beijing, China “The maintenance and regeneration of blood-forming stem cells”

08/18 Cold Spring Harbor Laboratory Meeting on Mechanisms and Models of Cancer, Cold Spring Harbor, NY “Lactate exchange promotes oxidative stress resistance and melanoma metastasis”

09/12 Harvard Stem Cells and Regenerative Medicine Seminar Series, Cambridge, MA “Bone marrow niches and maintenance of the adult skeleton”

09/26 Frankfurt Cancer Conference, Frankfurt, Germany “The metabolic regulation of cancer progression”

09/28 American Association for Cancer Research Special Conference on Metabolism and Cancer, Keynote Speaker, New York, NY “The metabolic regulation of cancer progression”

10/10 Korea Advanced Institute of Science & Technology Vascular Research Center Basic Science Symposium, Seoul, South Korea “Perivascular niches in the bone marrow”

10/26 Cold Spring Harbor Laboratory Meeting on Nutrient Signaling, Cold Spring Harbor, NY “Lactate exchange promotes oxidative stress resistance and melanoma metastasis”

11/02 Vanderbilt University Lubomir S. Hnilica Lecture in the Frontiers in Biochemistry Seminar Series, Nashville, TN “Metabolic mechanisms regulating cancer progression”

11/16 Inaugural Research Symposium of the Stanford Maternal and Child Health Research Institute, Keynote Address, Palo Alto, CA “Stem cell niches in the bone marrow”

12/01 American Society of Hematology Annual Meeting, San Diego, CA, “The regulation of hematopoietic stem cells and erythropoiesis”

12/08 American Society for Cell Biology/European Molecular Biology Organization Meeting, Keynote Address, San Diego, CA “Niches for stem cells in bone marrow”

2019 01/28 German Cancer Consortium (DKTK) WTZ/DKTK – Symposium on Plasticity and Cancer, Essen, Germany, “The metabolic regulation of cancer progression”

01/29 Scientist in Residence, University of Duisburg-Essen, Essen Germany, “Stem cells, cancer and metabolism”

01/31 Charles Rodolphe Brupbacher Symposium, Zurich, Switzerland, “Lactate exchange promotes oxidative stress resistance and melanoma metastasis”

02/20 US/Japan Hematologic Malignancies Symposium, Maui, HI “Niche and metabolic regulation of hematopoietic stem cells”

03/08 Case Comprehensive Cancer Center Seminar Series, Cleveland, OH “Metabolic regulation of melanoma metastasis”

03/19 Dana-Faber Seminars in Oncology Emily Frederick DiMaggio Lecture, Boston, MA “Metabolic mechanisms that regulate melanoma metastasis”

03/26 Stem Cells and Cancer Gordon Research Conference, Ventura, CA “Metabolic heterogeneity among melanoma cells confers differences in metastatic potential”

04/02 Massachusetts Institute of Technology Biology Colloquium, Boston, MA “Niche and metabolic regulation of stem cells in the bone marrow”

04/05 University of Chicago Cancer Biology Seminar Series, Chicago, IL “Hematopoietic stem cell niche”

04/16 Lady Davis Institute Distinguished Lecture Series, Montreal, Canada “The metabolic regulation of stem cells and cancer”

04/18 University of Michigan Graduate Course Lecture on Stem Cells and Regeneration, Ann Arbor, MI “Hematopoietic stem cell maintenance and leukemia development”

05/09 Dana Farber Cancer Institute BMT/HM Grand Rounds, Boston, MA “The hematopoietic stem cell niche”

05/31 American Aging Association Annual Meeting, San Francisco, CA “Osteolectin/α11 integrin signaling: a new mechanism for the maintenance of the aging skeleton”

06/10 Children’s Hospital of Philadelphia at University Pennsylvania Normal & Malignant Hematopoiesis Seminar Series, Philadelphia, PA “Niche and metabolic regulation of hematopoietic stem cells”

06/17 Pezcoller Symposium, Enrico Mihich Lecture, Trento, Italy “The metabolic regulation of cancer progression”

08/23 International Society for Experimental Hematology Annual Conference, Brisbane, Australia “The identification of a peri-arteriolar niche for lymphoid progenitors and osteogenic progenitors in the bone marrow”

09/10 The Origin of Cancer Key Symposium, Stockholm, Sweden “Melanoma metastasis through lymph”

09/27 Cold Spring Harbor Laboratory Meeting on the Biology of Cancer: Microenvironment and Metastasis Conference, Cold Spring Harbor, NY “The metabolic regulation of melanoma metastasis”

10/21 Stanford Special Symposium Honoring Irving Weissman, Palo Alto, CA “The hematopoietic stem cell niche”

11/08 National Cancer Institute U01 Patient-Derived Models of Cancer PI Annual Meeting, San Francisco, CA “Metabolic regulation of melanoma metastasis”

11/15 University of Washington Institute for Stem Cell and Regenerative Medicine, Seattle, WA “Niches for stem cells and progenitors in bone marrow”

11/21 Rockefeller University Stem Cell Lecture Series, New York, NY “The hematopoietic stem cell niche”

11/22 Society for Melanoma Research Congress, Salt Lake City, UT “Melanoma metastasis through lymph”

2020 01/14 UC San Francisco Jonah Platt Stem Cell Seminar Lecture Series, San Francisco, CA "The hematopoietic stem cell niche"

02/24 Fred Hutchinson Cancer Research Center Perspectives in Science Seminar, Seattle, WA "The niche for hematopoietic stem cells"

04/23 Massachusetts General Hospital stem cell niche interest group, virtual seminar "The hematopoietic stem cell niche"

09/14 American Society for Bone and Mineral Research Aging Working Group, virtual seminar "New mechanisms that influence the maintenance of the adult skeleton"

09/25 Rockefeller University Philip Levine Memorial Lecture, virtual seminar "How the niche regulates blood and bone-forming stem cells in the marrow"

10/08 UC Los Angeles Broad Center for Regenerative Medicine and Stem Cell Research, virtual seminar "New mechanisms by which the niche protects stem cells"

10/16 AACR Special Conference in Epigenetics and Metabolism, virtual meeting "Lymph protects metastasizing melanoma cells from ferroptosis"

10/27 National Cancer Institute Age-Dependent Changes in Cancer Biology, Keynote, virtual meeting "Melanoma metastasis to lymph nodes; mechanisms and contributing factors"

10/30 VIB-KU Leuven Center for Cancer Biology, virtual talk "Melanoma metastasis"

11/05 National Cancer Institute U01 Patient-Derived Models of Cancer Consortium Annual Meeting, virtual meeting "Lymph Protects Metastasizing Melanoma Cells from Ferroptosis"

11/11 Howard Hughes Medical Institute Science Meeting in Cell and Developmental Biology, virtual meeting "Why Do Cancer Cells Tend to Metastasize First to Lymph Nodes?"

12/18 University of Iowa Holden Comprehensive Cancer Center Grand Rounds, virtual meeting "The regulation of melanoma metastasis"

2021 01/15 Harvard Stem Cell Institute, virtual seminar "How niches sustain stem cells: going beyond growth factors"

03/02 Frontiers in Blood, Cancer and Development: Systems to Medicine, virtual meeting "Niche biology: Beyond growth factors"

03/09 University of Pennsylvania Institute for Regenerative Medicine Symposium on Hematopoietic Stem Cells, virtual meeting "Stem cell niche regulation: beyond growth factors"

04/12 American Association for Cancer Research Annual Meeting Bayard D. Clarkson Symposium on Stem Cells, Leukemia, and the Niche, virtual meeting "Distinct niches for hematopoietic stem cells and progenitors in the bone marrow"

04/14 American Association for Cancer Research Annual Meeting Forum Panelist, virtual meeting "Are There Cancer Stem Cells?"

04/21 Keystone eSymposia on Hematopoiesis, virtual symposium "Niche biology: beyond growth factors"

05/03 Universidad Anahuac Querétaro, virtual seminar "Melanoma metastasis"

05/07 Washington University Musculoskeletal Research Center, Keynote address, virtual symposium, "Skeletal stem cells and niche biology in bone marrow"

05/25 Ludwig Cancer Research Seminar, virtual meeting "The regulation of melanoma metastasis"

06/04 Tongji University Ray Wu Prize Award Ceremony, Keynote address, virtual meeting, "Niches: beyond growth factors"

06/13 European Hematology Association 2021 Congress, virtual meeting “Why do cancer cells metastasize first to lymph nodes?”

06/22 International Society for Stem Cell Research Annual Meeting, Ernest McCulloch Memorial Lecture, virtual meeting “Niche biology: Beyond growth factors”

09/23 National Institutes of Health Patient Derived Models of Cancer Consortium virtual meeting, “Why do many cancer cells tend to metastasize first to lymph nodes?”

10/29 Weill Cornell Medicine/Special Surgery Annual Alumni Association Meeting, virtual meeting, “Skeletal Stem Cell Regeneration”

11/05 MD Anderson Leading Edge of Cancer Research Symposium, virtual meeting, “The regulation of metastasis”

11/15 Till & McCulloch Annual Meeting (Virtual), “Niches beyond growth factors"

11/16 Columbia University Institute for Cancer Genetics (Virtual) Seminar, “The metabolic regulation of melanoma metastasis”

11/30 Hallmarks of Skin Cancer (Virtual) Conference, “Layered and redundant mechanisms to protect from oxidative stress during metastasis

12/2 Rockefeller University Stem Cell Biology (Virtual) Lecture Series, “Hematopoietic stem cell niche”

12/3 Forbeck Meeting, Denver, CO “Layered and redundant mechanisms to protect against oxidative stress during metastasis”

12/16 University of Nebraska Medical Center Eppley Cancer Institute, virtual seminar, “The regulation of melanoma metastasis”

2022 02/18 Dana Farber/Brigham and Women's Cancer Center Melanoma Lecture Series, virtual seminar, "The Metabolic Regulation of Melanoma Metastasis"

03/09 Albert Einstein College of Medicine Cellular and Molecular Biology and Genetics Training Program, virtual seminar “The hematopoietic stem cell niche: beyond growth factors”

03/14 University of Hong Kong, virtual seminar “Stem cell niche biology: beyond growth factors”

03/22 Arthritis Web Seminar Series, Schroeder Arthritis Institute, virtual seminar “The formation and maintenance of the adult skeleton”

03/25 Vall d’Hebron Institute of Oncology, virtual seminar “The regulation of melanoma metastasis”

04/01 Netherlands Cancer Institute (NKI), virtual seminar “The regulation of melanoma metastasis”

04/12 Stanford University Immunology Seminar Series, Stanford, CA “The hematopoietic stem cell niche: beyond growth factors”

05/05 Pontifical Academy of Sciences Workshop on Stem Cells and their Promise for Regenerative Medicine, Vatican, Rome “Hematopoietic stem cell niche”

05/13 Fusion Conference on Metabolism in Health and Disease, Cancun, Mexico “Melanoma metastasis”

06/20 Cold Spring Harbor Mouse Course, Cold Spring Harbor, NY “The hematopoietic stem cell niche”

06/28 Cancer Research UK Manchester Institute, virtual seminar “Melanoma cells have layered and redundant mechanisms to protect them from oxidative stress during metastasis”

07/18 Canadian Association of Oral & Maxillofacial Surgeons Annual Conference, Reykjavik, Iceland “Stem Cells and the Formation and Maintenance of Bone”

08/05 University of Nebraska Department of Biochemistry and Molecular Biology Annual Research Symposium, Omaha, Nebraska “Stem cell niches aren’t just for growth factors anymore”

08/19 Tsinghua University Institute for Immunology and Sun Yat-sen Medical School Department of Immunology and Microbiology Joint Symposium on Immunology, virtual seminar “Melanoma metastasis”

09/09 American Society for Bone and Mineral Research Annual Meeting, Austin, Texas “Mechanosensation in skeletal progenitors”

11/01 Dana Farber/Harvard Cancer Center Connect: Science Seminar Series, virtual seminar “Stem cell niches aren’t just growth factors anymore”

11/10 Unifying FOP and Traumatic Heterotopic Ossification. Science + Families = A Cure, Dallas, Texas “The Maintenance and Formation of Bone”

11/11 Korean Society for Bone and Mineral Research, virtual seminar “The formation and maintenance of the adult skeleton”

11/15 American Association for Cancer Research, Special Conference on Cancer Metastasis, Portland, OR “Melanoma cells have layered and redundant mechanisms to protect them from oxidative stress during metastasis”

12/08 Southern California Rheum Talk Seminar Series, virtual seminar “The formation and repair of bone during adulthood”

12/14 Howard Hughes Medical Institute Science Meeting, Chevy Chase, MD “The regulation of bone marrow innervation and regeneration”

2023 02/08 Keystone Symposium on Stem Cells and Organoids, Keystone, CO “The regulation of bone marrow innervation and regeneration”

02/22 US/Japan Hematologic Symposium, Kohala, HI “Neural regulation of the hematopoietic stem cell niche”

03/07 Mount Sinai Seminar Series, New York, NY “The Maintenance of the Skeleton”

03/08 Massachusetts General Hospital Center for Cancer Research Seminar Series, Boston, MA “The hematopoietic stem cell niche”

03/21 Kansas University Cancer Center Seminar Series, Kansas City, KS “New mechanisms that regulate hematopoiesis and osteogenesis in the bone marrow”

04/04 Harvard Medical School, Cell Biology Department Seminar Series, Cambridge, MA “The hematopoietic stem cell niche”

04/17 American Association for Cancer Research Annual Meeting, Orlando, FL “The bone marrow niche for stem cells and metastasis”

04/27 University of Cincinnati College of Medicine, William J. Larsen Distinguished Lecture Series, Cincinnati, OH “Stem cells, hematopoiesis, osteogenesis, and cancer in the bone marrow”

5/08 Keystone Symposium on Metastasis, Vancouver, Canada “Regulation of metastasis by lipid metabolism”

5/18 Gordon Research Conference on Stem Cells and Cancer, Lucca, Italy “Lipid metabolism in stem cells and cancer cells”

5/31 Cold Spring Harbor Laboratory Symposium on Quantitative Biology, Cold Spring Harbor, NY “Leptin receptor+ cells promote bone marrow innervation and regeneration by synthesizing nerve growth factor”

6/30 China Medical University (Taiwan) Academician Forum Series, virtual seminar “Niches for hematopoiesis and osteogenesis in the bone marrow”

7/24 Orthopaedic Research Society, International Musculoskeletal Biology Workshop, Zermatt, UT “Stem Cells and Maintenance of the Adult Skeleton”

9/11 Heidelberg Symposium on Stem Cells and Cancer, Heidelberg, Germany “Cell-intrinsic and cell extrinsic mechanisms regulating stem cell self-renewal

9/22 Biology of Cancer Meeting, Cold Spring Harbor Laboratory, NY “Therapeutic implications of the hematopoietic stem cell niche”

10/3 VIB Conference on Tumor Heterogeneity, Plasticity and Therapy, Leuven Belgium “Therapeutic implications of the hematopoietic stem cell niche”

10/27 European Molecular Biology Organization Members Meeting, Heidelberg, Germany “Harnessing the hematopoietic stem cell niche for better transplant outcomes”

10/30 The Tumor Landscape: Translating Mechanism to Therapy (TTL23) Conference, New York, NY “Therapeutic implications of the hematopoietic stem cell niche”

11/9 Stem Cell Biology Lecture at The Rockefeller University, New York, NY “Niche regulation of hematopoiesis and osteogenesis in the bone marrow”

11/14 Mayo Clinic Kendall-Hench Lecture in Endocrinology and Metabolism, Rochester, MN “Niche regulation of hematopoiesis and osteogenesis in the bone marrow”

12/11 French Society for Stem Cell Research – Cancer Stem Cell Joint Webinar, “Niches for hematopoiesis and osteogenesis in the bone marrow”

12/14 Michigan Postdoctoral Pioneer Program Symposium, Ann Arbor, MI “Niches for hematopoietic stem cells and osteogenesis in the bone marrow”

2024 1/11 The Regenerative Medicine Institute Seminar Series at Cedars-Sinai, Los Angeles, CA “Niches for Hematopoiesis and Osteogenesis in the Bone Marrow”

1/26 The Musculoskeletal Institute at the University of Connecticut Health Seminar Series, virtual seminar “The maintenance of the adult skeleton”

3/08 Hematopoietic Stem Cell & Myelodysplastic Syndromes Symposium, MD Anderson, Houston, TX “The hematopoietic stem cell niche: implications for bone marrow transplantation and regeneration”

4/25 University College London Department of Cell and Development Biology, virtual seminar “The hematopoietic stem cell niche: implications for bone marrow transplantation and regeneration”

5/20 University of Michigan Saltiel Life Sciences Symposium, Ann Arbor, MI “The hematopoietic stem cell niche: Implications for bone marrow transplantation and regeneration”

5/24 University of Helsinki, Science Day, Helsinki, Finland “The hematopoietic stem cell niche: Implications for Clinical Transplantation”

5/29 Columbia University Stem Cell Initiative Symposium, New York, NY “The hematopoietic stem cell niche: Implications for bone marrow transplantation and regeneration”

6/25 Metastasis Research Society Annual Meeting, London, United Kingdom “The Metabolic Regulation of Metastasis”

**Issued Patents**

1. M. Csete, **S.J. Morrison**, B. Wold, D.J. Anderson. Low Oxygen Culturing of Neural Crest Stem Cells and Methods of Use, US Patent number 6,759,242 B1, Date of patent 07/06/2004

2. M.F. Clarke, **S. J. Morrison**, M. Wicha, and M. Al-Hajj. Isolation and Use of Solid Tumor Stem Cells, US Patent number 6,984,522 Date of patent 01/10/2006

3. M.F. Clarke, **S. J. Morrison**, M. Wicha, and M. Al-Hajj. Isolation and Use of Solid Tumor Stem Cells, US Patent number 7,115,360 B2, Date of patent 10/03/2006

4. O.H. Yilmaz, M.J. Kiel, **S.J. Morrison**, T. Iwashita. Hematopoietic Stem Cell Identification and Isolation, US Patent number 7,510,877 B2, Date of patent 03/31/2009

5. M.F. Clarke, **S. J. Morrison**, M. Wicha, and M. Al-Hajj. Isolation and Use of Solid Tumor Stem Cells, US Patent number 7,113,710 B2, Date of patent 05/11/2010

6. M.F. Clarke, **S. J. Morrison**, M. Wicha, and M. Al-Hajj. Isolation and Use of Solid Tumor Stem Cells, US Patent number 7,850,961 B2, Date of patent 12/14/2010

7. O.H. Yilmaz, M.J. Kiel, **S.J. Morrison**, T. Iwashita. Hematopoietic Stem Cell Identification and Isolation, US Patent number 7,919,316 B2, Date of patent 04/05/2011

8. **S.J. Morrison** and E. Kruger. Postnatal gut neural crest stem cells, US Patent number 8,043,853, Date of patent 10/25/2011

9. M.F. Clarke, **S.J. Morrison**, M. Wicha, and M. Al-Hajj. Isolation and Use of Solid Tumor Stem Cells, US Patent number 8,357,491 B2, Date of patent 01/22/2013

10. O.H. Yilmaz, M.J. Kiel, **S.J. Morrison**, T. Iwashita. Hematopoietic Stem Cell Identification and Isolation, US Patent number 8,383,404, Date of patent 02/26/2013

11. **S.J. Morrison**, J.K. Mich. Identification and Isolation of Neural Stem Cells and Neurosphere Initiating Cells, US Patent application number 15/308,671, Filing date 11/03/2016

12. M.F. Clarke, **S.J. Morrison**, M.S. Wicha, M. Al-Hajj. Isolation and use of solid tumor stem cells., US Patent number 9,492,538, Date of patent 11/15/2016

13. **S.J. Morrison**, E. Piskounova, and U. Eskiocak. Combination treatments for melanoma, US Patent number 9,561,245, Date of patent 02/07/2017

14. **S.J. Morrison** and U. Eskiocak. Treatment for melanoma, US Patent number 9,572,828, Date of patent 02/21/2017

15. **S.J. Morrison** and R. Yue. CLEC11a is a Bone Growth Agent, US Patent number 11,285,190, Date of patent 03/29/2022

16. **S.J. Morrison** and R. Yue. CLEC11a is a Bone Growth Agent, US Patent number 16,864,872, Date of patent 09/20/2023

**Bibliography**

Peer-Reviewed Publications


1. Morrison, S.J., P.A. Nicholl, and P.R. Hicklenton. 1993. VA Mycorrhizal inoculation of landscape trees and shrubs growing under high fertility conditions. **Journal of Environmental Horticulture** 11:64-71.

2. Morrison, S.J., E. Lagasse, and I.L. Weissman. 1994. Demonstration that $Thy^{lo}$ subsets of mouse bone marrow that express high levels of lineage markers are not significant hematopoietic progenitors. **Blood** 83:3480-3490. PMID 7515713

3. Morrison, S.J. and I.L. Weissman. 1994. The long-term repopulating subset of hematopoietic stem cells is deterministic and isolatable by phenotype. **Immunity** 1:661-673. PMID 7541305

4. Morrison, S.J., H.D. Hemmati, A.M. Wandycz, and I.L. Weissman. 1995. The purification and characterization of fetal liver hematopoietic stem cells. **Proceedings of the National Academy of Sciences USA** 92:10302-10306. PMID 7479772

5. Morrison, S.J., K.R. Prowse, P. Ho, and I.L. Weissman. 1996. Telomerase activity in hematopoietic cells is associated with self-renewal potential. **Immunity** 5:207-216. PMID 8808676

6. Morrison, S.J., A.M. Wandycz, K. Akashi, A. Globerson, and I.L. Weissman. 1996. The aging of hematopoietic stem cells. **Nature Medicine** 2:1011-1016. PMID 8782459

7. Morrison, S.J.*, D.E. Wright*, and I.L. Weissman. 1997. Cyclophosphamide/granulocyte colony-stimulating factor induces hematopoietic stem cells to proliferate prior to mobilization. **Proceedings of the National Academy of Sciences USA** 94:1908-1913. *These authors contributed equally. PMID 9050878

8. Morrison, S.J., A.M. Wandycz, H.D. Hemmati, D.E. Wright, and I.L. Weissman. 1997. Identification of a lineage of multipotent hematopoietic progenitors. **Development** 124:1929-1939. PMID 9169840

9. Morrison, S.J., N.M. Shah, and D.J. Anderson. 1997. Regulatory mechanisms in stem cell biology. **Cell** 88:287-298. PMID 9039255

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11. Morrison, S.J., P.M. White, C. Zock, and D.J. Anderson. 1999. Prospective identification, isolation by flow cytometry and in vivo self-renewal of multipotent mammalian neural crest stem cells. **Cell** 96:737-749. PMID 10089888

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13. Morrison, S.J., S.E. Perez, Z. Qiao, J.M. Verdi, C. Hicks, G. Weinmaster, and D.J. Anderson. 2000. Transient Notch activation causes an irreversible switch from neurogenesis to gliogenesis by neural crest stem cells. **Cell** 101:499-510. PMID 10850492

14. Morrison, S.J., M. Csete, A.K. Groves, W. Melega, B. Wold, and D.J. Anderson. 2000. Culture in reduced levels of oxygen promotes clonogenic sympathoadrenal differentiation by isolated neural crest stem cells. **Journal of Neuroscience** 20:7370-7376. PMID 11007895

15. White, P.M., S.J. Morrison, K. Orimoto, C.J. Kubu, J.M. Verdi, and D.J. Anderson. 2001. Neural crest stem cells undergo cell-intrinsic developmental changes in sensitivity to instructive differentiation signals. **Neuron** 29: 57-71. PMID 11182081

16. Reya, T*, S.J. Morrison*, M.F. Clarke, and I.L. Weissman. 2001. Stem cells, cancer, and cancer stem cells. **Nature** 414:105-111. * These authors contributed equally. PMID 11689955

17. Morrison, S.J., D. Qian, L. Jerabek, B. Thiel, I. Park, P.S. Ford, M.J. Kiel, N.J. Schork, I.L. Weissman, and M.F. Clark. 2002. A genetic determinant that specifically regulates the frequency of hematopoietic stem cells. **Journal of Immunology** 168:635-642. PMID 11777956

18. Kubu, C., K. Orimoto, S.J. Morrison, G. Weinmaster, D.J. Anderson, and J.M. Verdi. 2002. Developmental changes in Notch 1 and Numb expression mediated by local cell – cell interactions underlie progressively increasing Delta sensitivity in neural crest stem cells. **Developmental Biology** 244:199-214. PMID 11900468

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