

HELEN M. BLAU

Donald E. and Delia B. Baxter Foundation Professor

CURRICULUM VITAE

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Personal Data: Birthplace: London, England
Dual Citizenship: USA & United Kingdom
Languages: French and German

Education:

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| 1969 | B.A. | University of York, York, England |
| 1970 | M.A. | Harvard University, Cambridge, MA |
| 1975 | Ph.D. | Harvard University, Cambridge, MA |
| 2003 | Honorary Doctorate | University of Nijmegen, Holland |

Professional Experience:

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| 1975 - 1978: | Postdoctoral Fellow (with Charles Epstein), Division of Medical Genetics, Departments of Biochemistry and Biophysics, University of California, San Francisco, CA |
| 1978 - 1986: | Assistant Professor, Department of Pharmacology, Stanford University, Stanford, CA |
| 1986 - 1991: | Associate Professor, Department of Pharmacology, Stanford University, Stanford, CA |
| 1991 - 2002: | Professor, Department of Molecular Pharmacology, Stanford University, Stanford, CA |
| 1997 - 2002: | Chair, Department of Molecular Pharmacology, Stanford University, Stanford, CA |
| 1999 - present: | Donald E. and Delia B. Baxter Foundation Professor, Stanford University, Stanford, CA |
| 2002 – present: | Director, Baxter Laboratory for Stem Cell Biology, Department of Microbiology and Immunology & Institute for Stem Cell Biology and Regenerative Medicine, Stanford University, Stanford, CA |

Selected Honors and Awards:

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| 1978-1981 | Basil O'Connor Faculty Fellow |
| 1979-1980 | Mellon Foundation Faculty Fellow |
| 1981-1984 | William M. Hume Faculty Scholar |
| 1984-1989 | Research Career Development Award, National Institutes of Health |
| 1989-1991 | SmithKline and Beecham Junior Faculty Scholar Award |
| 1991 | Elected Fellow, American Association for the Advancement of Science (AAAS) |
| 1992 | Resident Scholar, Bellagio Study Center of Rockefeller Foundation, Lake Como, Italy |
| 1992 | Senior Career Recognition Award of WICB, American Society of Cell Biology |
| 1994-1995 | President, American Society for Developmental Biology |
| 1995-2005 | MERIT Award, National Institutes of Health |
| 1995 | Nobel Forum Lecture, Karolinska Institute, Stockholm, Sweden |

- 1995 Yvette Mayent-Rothschild Visiting Professor, Institut Curie and Institut Pasteur, Paris (5 months)
- 1995 Elected to Institute of Medicine, National Academy of Sciences
- 1996 Elected to American Academy of Arts and Sciences
- 1999 FASEB Excellence in Science Award
- 1999 Donald E. and Delia B. Baxter Endowed Professorship
- 2002-2004 President, International Society of Differentiation
- 2001 McKnight Technological Innovations for Neuroscience Award
- 2003 Honorary Doctorate, University of Nijmegen, Holland
- 2003 Rolf-Sammet-Fonds Visiting Professorship, University of Frankfurt
- 2003 400th Anniversary of the Pontifical Academy, the Vatican in Rome, Plenary talk on stem cells, Audience with Pope John Paul II
- 2004-2010 Elected to Harvard Board of Overseer's
- 2007-2015 Ellison Medical Foundation, Scientific Advisory Board Member
- 2011 & 2013 Yvette Mayent-Rothschild Visiting Professor, Institut Curie, Paris (3 months)
- 2011 AACR-Irving Weinstein Foundation Distinguished Lectureship and Award for Outstanding Innovations in Science
- 2011 50th Anniversary Symposium on Jacob and Monod's Operon Model, Invited Speaker, Institut Pasteur, Paris, France
- 2013 60th Anniversary Celebration of the Discovery of DNA (in honor of J.D. Watson), Invited Speaker, Cold Spring Harbor, NY
- 2013, 2014, 2015: International Symposium on Biomedical Imaging Cell Tracking Challenge Awards
- 2014 Thomas Hunt Morgan Lecturer Award, University of Kentucky
- 2015 Stanford OTL Outstanding Inventor Award
- 2015 Glenn Award for Research in Biological Mechanisms of Aging
- 2016 Elected to the National Academy of Sciences

Selected Honorary Lectureships (last 10 years):

- 2007 Plenary Session Chair and Speaker, Stem Cell Interactions with their Microenvironmental Niche, Keystone Symposium, Colorado
- Plenary Speaker, Gordon Research Conference on Myogenesis Conference, Il Ciocco, Italy
- Invited Speaker, Swiss Institute for Experimental Cancer Research in Lausanne, Switzerland
- Invited Speaker, Friedrich Miescher Institut Student Seminar in Basel, Switzerland
- Presidential Symposium Chair and Invited Speaker, Stem Cells & Aging, The Gerontological Society of America, San Francisco, CA
- Invited Speaker, Minisymposium: Stem Cell Niches, 47th Annual American Society of Cell Biology, Washington, D.C.
- Chair and Invited Speaker, Modeling Stem Cells, Abcam, Punta Cana, Dominican Republic
- 2008 Invited Speaker, Keystone Signaling Pathways in Cancer and Development Conference, Steamboat Springs, Colorado
- Keynote Speaker, 8th World Biomaterials Congress, Amsterdam, The Netherlands
- Co-Chair and Invited Speaker, Bio-Engineering: Artificial Scaffolds, International Society for Stem Cell Research, Philadelphia, Pennsylvania
- Co-Chair and Invited Speaker, EMBO Myogenesis Conference, Barcelona, Spain
- Chair and Invited Speaker, Stem Cells and Cancer, 5th International Heinrich F. C Behr Symposium, Heidelberg, Germany
- Invited Speaker, Langer Symposium, Materials Research Society Fall Meeting, Boston, MA
- Invited Speaker, Advanced Therapeutics Stem Cell Seminar, University of Massachusetts
- Invited Speaker, American Society for Cell Biology 48th Annual Meeting, San Francisco, CA

- 2009 Invited Speaker, Black Family Stem Cell Institute & Dept. of Regenerative & Developmental Biology, Mount Sinai School of Medicine, NY
Plenary Speaker, Frontiers in Myogenesis and Skeletal Muscle Satellite and Stem Cell Meeting, Columbia University, NY
Plenary Speaker, Keystone Symposium on Stem Cell Niche Interactions, Whistler, British Columbia
Invited Speaker, Telethon Institute of Genetics and Medicine, Naples, Italy
Keynote Speaker, University of California, Irvine Stem Cell Symposium
Plenary Speaker, NHLBI Symposium on Cardiovascular Regenerative Medicine, NIH
- 2010 Plenary Speaker, Keystone Symposium on Stem Cell Differentiation and Dedifferentiation, Keystone, CO
Invited Speaker, Cellular Homeostasis Lecture Series, University of Southern California
Invited Speaker, Ottawa Hospital Research Institute Seminar Series, University of Ottawa, Canada
Plenary Lecturer, Tissue Engineering International and Regenerative Medicine Society (TERMIS-EU), Galway, Ireland
Keynote Lecturer, Stem Cell: New Developments and Prospects, Institut de France Academie des Sciences (French Academy of Sciences), Paris, France
Invited Speaker, Karolinska Institute/Royal Swedish Academy of Sciences, Stockholm, Sweden
Plenary Speaker, Marcus Wallenberg Symposium: International AID Workshop, from Immune Diversification to Cancer, Stockholm, Sweden
Plenary Speaker, FASEB Summer Conference on Skeletal Muscle Satellite and Stem Cells, Carefree, AZ
Invited Speaker, 6th Heinrich F.C. Behr International Symposium and 3rd International Conference on Stem Cells and Cancer, Heidelberg, Germany
- 2011 Keynote Speaker, Chromatin, Replication and Chromosomal Stability Conference, Stockholm, Sweden
AACR Irving Weinstein Distinguished Lecturer and Innovations in Science Awardee
Plenary Speaker, 6th Annual Wisconsin Stem Cell Symposium, U. Wisconsin, Madison
Distinguished Speaker, Wistar Institute/University of Pennsylvania
Invited Speaker, Center of Regenerative Medicine, Harvard University
Invited Speaker, 50th Anniversary Symposium on Jacob and Monod's Operon Model, Institut Pasteur, Paris, France
Invited Speaker, Yale Stem Cell Center Seminar, Yale University
Plenary Speaker, 24th American Chemical Society Meeting, Anaheim, CA
Invited Speaker, Boston University Center for Regenerative Medicine Seminar Series
Plenary Speaker, 2nd EMBO Conference on The Molecular and Cellular Mechanisms Regulating Skeletal Muscle Development and Regeneration, Weisbaden, Germany
Plenary Speaker, 3rd Elise Kröner-Fresenius Symposium on Molecular Mechanisms of Stem Cell Aging, Reisenberg Castle, Germany
Keynote Speaker, Organisation for Economic Co-operation and Development (OECD) "Working Party for Biotechnology" International Forum, Paris, France
- 2012 Plenary Speaker, Institut de France Academie des Sciences, Paris, France
Plenary Speaker, NYSCF Annual Translational Stem Cell Research Conference, NY
Plenary Speaker, Till & McCulloch Meetings, Montreal, Canada
Invited Speaker, Frontiers in Myogenesis: Development, Function, and Repair of the Muscle Cell, NY
Plenary Speaker, Pontifical Academy of Sciences "New Developments in Stem Cell Research: induced Pluripotent Stem Cells and their possible Applications in Medicine" the Vatican, Rome
Distinguished Speaker, University of Washington "Visions of the Future" Seminar, Seattle, WA

- Plenary Speaker, ISSCR and the Roddenberry Center for Stem Cell Biology “International Symposium on Cellular Reprogramming”, Gladstone Institute, San Francisco
Keynote Speaker, Lorentz Center Workshop, “Organs on Chips: Human Diseases Models” Leiden, Netherlands
EMBL Conference “Stem Cells in Cancer and Regenerative Medicine” Heidelberg, Germany
Invited Speaker, Public Lecture with Sir John Gurdon, introduced by Tim Hunt “Growing a human body part: exploring the frontiers of regenerative medicine” at the Royal Institution, London, England
- 2013 Invited Speaker, Gordon Conference on Myogenesis, Il Ciocco, Italy
Keynote Speaker, Third Annual Charles J. Epstein M.D. Lecture Series, Buck Institute for Research on Aging, Novato, CA
Plenary Speaker, “Stem Cells: From Hype to Hope?” University of Toronto Science Frontiers, Toronto, Canada
Invited Speaker, “60th Anniversary Celebration of the Discovery of DNA” (in honor of J.D. Watson), Cold Spring Harbor, NY
Keynote Lecture, Fifth Annual Meeting, Ben Gurion University of the Negev, Israel
Weizmann Institute of Science, Women Health Research Center Speaker, Rehovot, Israel
Plenary Speaker, Nuclear Reprogramming and Cancer Genome, Oxford, England
Invited Speaker, Biology Colloquium, MIT
Invited Speaker, CIRM Stem Cell Agency Board
- 2014 President’s Lecture at Sanford-Burnham Medical Research Institute, San Diego, CA
Thomas Hunt Morgan Lecturer, University of Kentucky
Invited Speaker, FASEB Skeletal Muscle, Satellite and Stem Cells, Steamboat Springs, CO
Invited Speaker, Ellison Colloquium on the Biology of Aging at the MBO, Woods Hole, MA
- 2015 “Project Prometheus” Mentor, Li Ka Shing Foundation and Chinese Ministry of Education
“Life Science & Technology” Workshop, Shantou University, China
Invited Speaker, Stem Cell Institute, University of Massachusetts, MA
Invited Speaker, Ernest Everett Just Symposium, University of South Carolina Medical School
Invited Speaker, VII Elise Kröner-Fresenius Symposium on Adult Stem Cells in Aging, Diseases and Cancer, The Ettore Majorana Foundation and Centre for Scientific Culture, Erice, Italy
Invited Speaker, Institute of Bioengineering, École Polytechnique Fédérale de Lausanne, Switzerland
Invited Speaker and Discussion Leader, Gordon Research Conference on Myogenesis, Renaissance Tuscany, Il Ciocco, Italy
Invited Speaker and Discussion Leader, Rejuvenation Biotechnology 2015, San Francisco, CA
- 2016 Invited Speaker, UCI Medical Scientist Training Program Distinguished Lecture Series, Irvine, CA
Invited Speaker, Batsheva de Rothschild Workshop on Skeletal and Cardiac Myogenesis, Rehovot, Israel
Invited Speaker, USC Emerging Innovations in Developmental and Stem Cell Biology, Keck School of Medicine, Los Angeles, CA
Invited Speaker, Plasticity of Cellular Identity, Fondation des Treilles, Les Arcs, France
Invited Speaker, UCSF Developmental and Stem Cell Biology Graduate Program Annual Symposium, San Francisco, CA
Invited Speaker, Society for Developmental Biology, Molecular Mechanisms Modulating Skeletal Muscle Development and Homeostasis in Health and Disease, Asilomar, CA
Invited Speaker, International Society for Stem Cell Research Annual Meeting, San Francisco, CA

Keynote Speaker, EMBO Molecular and Cellular Basis of Regeneration and Tissue Repair,
Paestum, Italy

Organizer, National and International Meetings:

- 1990 Co-organizer with M. Karin, FASEB Meeting on Regulation of Tissue-Specific Gene Expression
- 1991 Co-organizer with A. Kelly, Keystone Symposium on Gene Expression in Neuromuscular Development
- 1995 President/Co-organizer with N. Rosenthal, 54th Annual Meeting of the American Society for Developmental Biology on Genes, Development and Cancer
- 1997 Co-organizer with J. Wilson, Keystone Symposium on Molecular and Cellular Biology of Gene Therapy
- 1999 Organizer, First Gene Therapy Symposium at Stanford on Gene Therapy: Prospects for the Next Decade
Co-Organizer, French Rhône-Poulenc Rohrer/Stanford Workshop on Gene Therapy
- 2001 Co-organizer with W. Mobley and A. Garber, First Interdisciplinary Aging Symposium at Stanford on Aging: Biology, Disease and Economics
- 2004 President/Organizer, 13th International Society of Differentiation Meeting, Hawaii
- 2006 Co-organizer with Z. Hall and C. Laurencian, Annual Meeting of the Institute of Medicine on Stem Cells and Tissue Engineering
- 2011 Co-organizer with N. Rosenthal, Gordon Conference on Myogenesis
- 2012 Co-organizer with J. Gurdon and S. Hennikoff, Company of Biologists Workshop on Epigenetic Memory, Wilton Park Stately Home, England

Selected Public Service and Advisory Activities:

- 1981-1982 Reproductive Outcome Research for Medfly Health Advisory Committee, State of California
- 1985-1986 Nominating Committee, American Society for Cell Biology
- 1987, 1988 NIH Molecular Cytology Study Section
- 1989 NICHD/NIH Five-Year Planning Committee, Genetics & Teratology Branch
- 1990, 2004 Program Committee, American Society for Cell Biology
- 1991-1992 Executive Committee, Basic Science Council, American Heart Association
- 1995 NIH (RAC) Oversight Committee of Gene Therapy (created by Harold Varmus)
- 1996 Chair, Nominating Committee, American Society for Biochemistry and Molecular Biology
- 1996-2000 National Advisory Council, National Institute on Aging, NIH
- 1997-2002 Initiator and Liaison, Stanford/Aventis Inc. \$5 Million Innovative Grant Agreement
- 1998-1999 Head, Task Force on Training, National Institute on Aging, NIH
- 1998-2002 Board of Directors, American Society of Gene Therapy
- 1999 American Society for Cell Biology, Joint Steering Committee on Public Policy
- 2000 Congressional Liaison Committee for Public Policy for the ASCB
- 2000 International Scientific Advisory Committee, 8th Meeting of the European Society of Gene Therapy (ESGT), Stockholm, Sweden on Gene Therapy
- 2000 Chair, American Society of Gene Therapy, Scientific Committee for 3rd Annual Meeting on Neuromuscular Disorders
- 2000-2001 IOM Vice Chair Membership Committee, Section 02, Institute of Medicine of the National Academy of Sciences
- 2001 Fellow, American Heart Association, Council on Basic Cardiovascular Sciences
- 2001, 2002 Membership Committee, American Academy of Arts and Sciences, Class II Biological Sciences, Section 2

- 2001-2003 Scientific Planning Committee Member, Conseil Stratégique de l'Association Française contre les Myopathies (AFM)
- 2002-2003 IOM Chair, Membership Committee, Section 02, Institute of Medicine of the National Academy of Sciences
- 2002-2004 American Society for Cell Biology Council
- 2003 Education Subcommittee, International Society for Stem Cell Research (ISSCR)
- 2004 IOM Membership Committee, Institute of Medicine (IOM) of the National Academy of Sciences
- 2004 IOM Working Group on Physical and Basic Biomedical Sciences, Reorganization of sections, Institute of Medicine (IOM) of the National Academy of Sciences
- 2004-2009 IOM Council Member, Institute of Medicine of the National Academy of Sciences
- 2005 IOM Council Nominating Committee, Institute of Medicine (IOM) of the National Academy of Sciences
- 2007 Fulbright Senior Specialist, Institut Pasteur, Paris
- 2008-present Scientific Advisory Board, NemaLine Myopathy Foundation
- 2009-2010 NIH Peer Review Advisory Committee (PRAC)
- 2010-2012 Helmsley Trust, Scientific Advisory Board Member
- 2011 Fulbright Senior Specialist, Institut Curie, Paris
- 2011-2017 Pew Scholars Advisory Committee
- 2013 Pontifical Academy of Sciences Workshop on "New Developments in Stem Cell Research" (April 16-17, 2013)
- 2013-present Child Health Research Institute at Stanford
- 2015-2019 American Academy of Arts and Sciences Council

Patents Issued:

Date Filed

- 1998: Novel system for detection of protein-protein interactions in mammalian cells, U.S. Patent No. 6,342,345 - Stanford Docket S96-125 (issued 1/29/02)
- 2001: Detection of molecular interactions by reporter subunit complementation, U.S. Patent No. 7,223,537 - Stanford Docket S96-125 (issued 5/29/07).
- 2002: Detection of protein modification, U.S. Patent No. 8,148,110 - Stanford Docket S02-123 (issued 4/3/12).
- 2005: Detection of protein translocation by beta-galactosidase reporter fragment complementation, U.S. Patent No. 8,586,294 - Stanford Docket S03-048 (issued 11/19/13).
- 2005: Sequential reporter enzyme luminescence (srl) methods and compositions for practicing the same, U.S. Patent No. 7,582,417 – Stanford Docket S05-056 (issued 9/1/09).
- 2006: GPCR functional assay: Detection of sub-cellular compartment localization of a molecule using a reduced affinity enzyme complementation reporter system, US Patent No. 8,426,138 (issued 4/23/13) – Stanford Docket S06-318 (France, Germany, Sweden, UK and Switzerland Patents 2099925 issued 2/13/13).
- 2007: Detection of molecular interactions using a reduced affinity enzyme complementation reporter system, U.S. Patent No. 8,541,175 – Stanford Docket S07-028 (issued 9/24/2013) – US 11/717,579 & AU, EP, India, CA, Japan and China filings 3/12/07.
- 2009: Methods of inducing tissue regeneration, U.S. Patent No. 8,852,579 – Stanford Docket S09-306 (issued 10/7/14).
- 2011: Biological sensor for protein interactions, U.S. Patent No. 8,679,832 (issued 3/25/14) – Stanford Docket S03-048 (France, Germany, UK and Switzerland Patents 05751854.0 issued 9/26/13).

Selected Consulting to Biotechnology and Pharmaceutical Companies:

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| ABI/Applied Biosystems | Arteriocyte |
| ALZA | Aventis |

Cell Genesis
Didimi
DiscoverRx
Eli Lilly
Gencell
Merck

Novartis
Rigel
Rhone Poulenc Rohrer
Somatix/Hanna
Transkaryotics
Tropix

Editorial Boards:

1987-1994 The Journal of Cell Biology
1987-2000 Experimental Cell Research
1990-1994 Neuromuscular Disorders
1991-1994 Molecular and Cellular Biology
1992-1995 Molecular and Cellular Differentiation
1995-1998 Developmental Biology, consulting editor
1994-2001 Journal of Molecular Medicine
1995-2002 Advisory Board, Biochimica et Biophysica Acta Reviews on Cancer
2000-2004 Molecular Therapy
2000-2006 Molecular Interventions
1988-2002 Somatic Cell and Molecular Genetics
1994-present Genes to Cells (Senior Editor)
1994-present Molecular Medicine Today/Trends in Molecular Medicine
2005-present FASEB Journal (Associate Editor)
2005-present Differentiation (Senior Editor)
2010-present Integrative Biology (iBiology)
2011-present Frontiers in Molecular and Cellular Oncology (Review Board)
2011-present Current Opinion in Genetics and Development
2013-present Stem Cell Reports
2015-present Nature Partner Journal Regenerative Medicine (Associate Editor)

Professional Societies:

American Association for the Advancement of Science
American Heart Association
American Society for Biochemistry and Molecular Biology
American Society for Cell Biology
American Society for Developmental Biology
American Society of Gene Therapy
American Society of Human Genetics
Federation of American Societies for Experimental Biology
International Society of Differentiation (Member, Board of Directors)
International Society for Stem Cell Research
Materials Research Society
Society for Neuroscience
American Association for Cancer Research

Teaching:

Harvard University

1969-74: Teaching Fellow, Harvard University: courses in “Introductory Biology,” “Cell Biology,” “Human Genetics”
1972-74: Resident Tutor in Biology, Adams House, Harvard University

1973-74: “Human Genetics” (undergraduate level seminar course taught by HMB at Harvard University)

Stanford University

- 1978-2001: Pharmacology 201, 202: “Pharmacology for Medical Students” (taught by entire Pharmacology Department faculty; lectures by HMB on anticancer agents, anticoagulants, pharmacogenetics, teratogenesis, gout, chemical contraception, and gene therapy)
- 1980 Spring: Pharmacology 203: “Pharmacology for Medical Students” (course coordinator)
- 1980-present: Guest lecturer in Department of Biology: on “Regulatory Biochemistry in Higher Eukaryotes” (248) and on “Organismal Development” (108); in Department of Genetics: on “Human Genetics” (202) and “Somatic Cell Genetics” (212); in Department of Cell Biology: on “Cell Motility” (225); in Department of Molecular and Cellular Physiology: on “Pathophysiology” (206); in Cancer Biology Program: on “Signal Transduction Pathways in Development and Cancer” (251) and “Gene Regulation and Cell Differentiation” (252); and in the Human Biology Program: on “Human Biology”
- 1981 Winter: Pharmacology 209: “Developmental Biology: Genetic and Environmental Influences” (graduate level course directed by HMB)
- 1983-2014 Advisor and Associate Program Director, T32 Developmental and Neonatal Biology Training Program
- 1984, 87, 90: Pharmacology 231: “Regulation of Gene Expression During Differentiation and Development” (graduate level course directed by HMB)
- 1994, 95, Spring: Pharmacology 240: Course and Seminar Series on “Drug Discovery”, Stanford University (graduate level course, lecture by HMB on gene therapy)
- 1998, 2000-01, Spring: Pharmacology 231: Course and Seminar Series on “Stem Cells and Gene Therapy” (graduate level course co-directed by HMB and Garry Nolan)
- 2000 Spring Pharmacology 241: Course and Seminar Series on “Gene Therapy for Diseases of Aging” (graduate level course co-directed by HMB, Ellen Porzig and Garry Nolan)
- 2001 Winter: Bio 2: Sophomore Lecture Series (faculty members lecture to undergraduates to inform them about careers in sciences and areas of research)
- 2003 Spring: Microbiology & Immunology 231: Course and Seminar Series on “Stem Cells and Gene Therapy” (graduate level course co-directed by HMB and Garry Nolan)
- 2004 Winter Microbiology & Immunology 210: “Pathogenesis of Bacteria, Viruses and Eukaryotic Parasites” (taught by Microbiology and Immunology Department faculty; lecture by HMB on retroviruses in gene therapy)
- 2005-present Co-organizer, ReMS (Regenerative Medicine and Stem Cells @Stanford) Seminar Series: interdisciplinary seminar and discussion course to create a forum for Stanford students and researchers to learn about what is going on in regenerative medicine. Speakers alternate between internationally acclaimed outside experts in the field of regenerative medicine and stem cell biology and professors and trainees at Stanford.

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| 2010 | Guest lecturer in BioE361/MatSci381: “Biomaterials in Regenerative Medicine” (advanced seminar-level graduate course); ChemE Faculty Research Talks: (first year graduate seminar course); Immunology 185: “Brain and Immune System (graduate science writing panel lecture course); USC Pathology 575: “Cellular Homeostasis” (graduate/ medical student lecture series at University of Southern California) |
| 2011 | Guest lecturer in Path/Dev Bio296: “Dedifferentiation and Regeneration in Limbs (graduate/medical student course) |
| 2012 Winter | Guest lecturer in ENGR 50M: “Introductions to Materials Science, Biomaterials Emphasis” (undergraduate course) |
| 2015 Spring | Guest lecturer in Bio109B: “The Human Genome and Disease: Genetic Diversity and Personalize Medicine” (graduate level course) |
| Ongoing/Current | T32 Advisory Board Membership: Stanford Cancer Imaging Training Program (SCIT), Training Grant in Medical Genetics, Stanford Molecular Imaging Scholars Program (SMIS), Pediatric Nonmalignant Hematology and Stem Cell Biology Training Grant, Mechanobiology Training Grant, Tumor Biology Training Grant, M&I (Molecular Basis of Host Parasite Interaction) Training Grant |

Trainees: +30 graduate students and +60 postdoctoral trainees mentored, the vast majority going on to positions in Academia and Biotech.

Publications:

Papers published in refereed scientific journals (>25% in *Cell*, *Science* or *Nature*)

1. Blau, H.M. and Kafatos, F.C. (1978) Secretory kinetics in the follicular cells of silkmoths during eggshell formation. *J. Cell Biology* 78:131-151.
2. Blau, H.M. and Kafatos, F.C. (1979) Morphogenesis of the silkmoth chorion: Patterns of distribution and insolubilization of the structural proteins. *Devel. Biology* 72:211-225.
3. Blau, H.M. and Epstein, C.J. (1979) Manipulation of myogenesis *in vitro*: Reversible inhibition by DMSO. *Cell* 17:95-108.
4. Blau, H. M. and Webster, C. (1981) Isolation and characterization of human muscle cells. *Proc. Natl. Acad. Sci. USA* 78:5623-5627.
5. Blau, H.M., Chiu, C.-P. and Webster, C. (1983) Cytoplasmic activation of human nuclear genes in stable heterokaryons. *Cell* 32:1171-1180.
6. Blau, H.M., Kaplan, I., Tao, T.W. and Kriss, J.P. (1983) Thyroglobulin-independent, cell-mediated cytotoxicity of human eye muscle cells in tissue culture by lymphocytes of a patient with Graves' Ophthalmopathy. *Life Sci.* 32:45-53.
7. Blau, H.M., Webster, C., Chiu, C.-P., Guttman, S. and Chandler, F. (1983) Differentiation properties of pure populations of human dystrophic muscle cells. *Exp. Cell Res.* 144:495-503.

8. Gunning, P., Ponte, P., Okayama, H., Engel, J., Blau, H.M. and Kedes, L. (1983) Isolation and characterization of full-length cDNA clones for human alpha-, beta-, and gamma-actin mRNAs: Skeletal but not cytoplasmic actins have an amino terminal cysteine that is subsequently removed. *Mol. Cell. Biology* 3:787-795.
9. Blau, H.M., Webster, C. and Pavlath, G.K. (1983) Defective myoblasts identified in Duchenne muscular dystrophy. *Proc. Natl. Acad. Sci. USA* 80:4856-4860.
10. Ponte, P., Gunning, P., Blau, H.M. and Kedes, L. (1983) Human actin genes are single copy for α -skeletal and α -cardiac actin but multicopy for β - and γ -cytoskeletal genes: 3' untranslated regions are isotype specific, but are conserved in evolution. *Mol. Cell. Biology* 3:1783-1791.
11. Gunning, P., Ponte, P., Blau, H.M. and Kedes, L. (1983) Alpha-skeletal and alpha-cardiac actin genes are co-expressed in adult human skeletal muscle and heart. *Mol. Cell. Biology* 3:1985-1995.
12. Chiu, C.P. and Blau, H.M. (1984) Reprogramming cell differentiation in the absence of DNA synthesis. *Cell* 37:879-887.
13. Bains, W., Ponte, P., Blau, H. and Kedes, L. (1984) Cardiac actin is the major actin gene product in skeletal muscle cell differentiation *in vitro*. *Mol. Cell. Biology* 4:1449-1453.
14. Chiu, C.P. and Blau, H.M. (1985) 5-Azacytidine permits gene activation in a previously non-inducible cell type. *Cell* 40:417-424.
15. Blau, H.M., Pavlath, G.K., Hardeman, E.C., Chiu, C.-P., Silberstein, L., Webster, S.G., Miller, S.C. and Webster, C. (1985) Plasticity of the differentiated state. *Science* 230:758-766.
16. Pavlath, G.K. and Blau, H.M. (1986) Expression of muscle genes in heterokaryons depends on gene dosage. *J. Cell Biology* 102:124-130.
17. Minty, A.J., Blau, H.M. and Kedes, L. (1986) Two-level regulation of cardiac actin gene transcription: Muscle-specific modulating factors can accumulate before gene activation. *Mol. Cell. Biology* 6:2137-2148.
18. Webster, C., Filippi, G., Rinaldi, A., Mastropaolo, C., Tondi, M., Siniscalco, M. and Blau, H.M. (1986) The myoblast defect identified in Duchenne muscular dystrophy is not a primary expression of the DMD mutation: Clonal analysis of myoblasts from double heterozygotes for two X-linked loci: DMD and G6PD. *Human Genetics* 74:74-80.
19. Kaplan, I.D. and Blau, H.M. (1986) Metabolic properties of human acetylcholine receptors can be characterized on cultured human muscle. *Exp. Cell Res.* 166:379-390.
20. Costa, E.M., Blau, H.M. and Feldman, D. (1986) 1,25 dihydroxyvitamin D₃ receptors and hormonal responses in cloned human skeletal muscle cells. *Endocrinology* 119:2214-2220.
21. Silberstein, L., Webster, S.G., Travis, M. and Blau, H.M. (1986) Developmental progression of myosin gene expression in cultured muscle cells. *Cell* 46:1075-1081.

22. Shimizu, M., Webster, C., Morgan, D.O., Blau, H.M. and Roth, R.A. (1986) Insulin and insulin-like growth factor receptors and responses in cultured human muscle cells. *Amer. J. Physiol.* **251**:E611-E615.
23. Hardeman, E., Chiu, C.-P., Minty, A. and Blau, H.M. (1986) The pattern of actin expression in human fibroblast x mouse muscle heterokaryons suggests that human muscle regulatory factors are produced. *Cell* **47**:123-130.
24. Gunning, P., Hardeman, E., Wade, R., Ponte, P., Bains, W., Blau, H.M. and Kedes, L.(1987) Differential patterns of transcript accumulation during human myogenesis. *Mol. Cell. Biology* **7**:4100-4114.
25. Soileau, L.C., Silberstein, L., Blau, H.M. and Thompson, W.J. (1987) Reinnervation of muscle fiber types in the newborn rat soleus. *J. Neurosci.* **7**:4176-4194.
26. Webster, C., Pavlath, G.K., Parks, D.R., Walsh, F.S. and Blau, H.M. (1988) Isolation of human myoblasts with the fluorescence-activated cell sorter. *Exp. Cell Res.* **174**:252-265.
27. Miller, S.C., Pavlath, G.K., Blakely, B.T. and Blau, H.M. (1988) Muscle cell components dictate hepatocyte gene expression and the distribution of the Golgi apparatus in heterokaryons. *Genes Dev.* **2**:330-340.
28. Webster, C., Silberstein, L., Hays, A.P. and Blau, H.M. (1988) Fast muscle fibers are preferentially affected in Duchenne muscular dystrophy. *Cell* **52**:503-513.
29. Hardeman, E.C., Minty, A., Benton-Vosman, P., Kedes, L. and Blau, H.M. (1988) *In vivo* system for characterizing clonal variation and tissue-specific gene regulatory factors based on function. *J. Cell Biology* **106**:1027-1034.
30. Blau, H.M. (1988) Hierarchies of regulatory genes may specify mammalian development. *Cell* **53**:673-674.
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