ULLA M. HANSEN

Professor, Department of Biology
Boston University, 5 Cummington Mall, Boston, MA 02215, USA
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CURRENT RESEARCH FOCUS AREAS:

Molecular pathways that regulate key mammalian cell cycle transitions and translation of this knowledge to treatment of cancer. In particular, regulation of multiple cell cycle transitions by the transcription factor LSF; LSF-mediated oncogenesis; and development of novel chemotherapeutics for treatment of hepatocellular carcinoma and other LSF-mediated cancers.

EDUCATION

1974 A.B. Oberlin College (Chemistry)
1980 Ph.D. Harvard University (Biochemistry and Molecular Biology)

POSTDOCTORAL TRAINING

1980-1982 Postdoctoral Fellow (Biology), Massachusetts Institute of Technology

ACADEMIC APPOINTMENTS

1983-1988 Assistant Professor of Pathology, Harvard Medical School
1988-1990 Assistant Professor of Microbiology and Molecular Genetics, Harvard Medical School
1991-1997 Associate Professor of Microbiology and Molecular Genetics, Harvard Medical School
1998-present Professor, Department of Biology, Boston University
1998-present Faculty member, Graduate Program of Molecular Biology, Biochemistry, and Cell Biology (MCBB), Boston University
1998-present Faculty member, Program in Bioinformatics, Boston University
2004-2006 Visiting Professor, Department of Medicine, Tufts Medical School
2007-2011 Associate Chair, Department of Biology, Boston University
2008-present Director and Professor (joint programmatic appt), Graduate Program of Molecular Biology, Biochemistry, and Cell Biology (MCBB), Boston Univ.
2015- present Professor, Program of Biochemistry and Molecular Biology (joint programmatic appointment), Boston University [BA and BA/MA-degree granting program]
2015- present Professor, Nanotechnology Innovation Center, Boston University
2016-present Member, BU-BMC Cancer Center, Boston University
2016-present Affiliated Faculty Member, BU-CMD (Center for Molecular Discovery)

OTHER PROFESSIONAL POSITIONS

1983-1991 Chief, Laboratory of Eukaryotic Transcription, Dana-Farber Cancer Institute
1991-1997 Principal Investigator, Division of Molecular Genetics, Dana-Farber Cancer Institute
1983-1997 Member, Committee on Virology, Harvard Medical School
1992-1995 Consultant, Sandoz Pharmaceuticals Corporation
1998-2000 Consultant; Marshall, O'Toole, Gerstein, Murray & Borun, Attorneys at Law

AWARDS AND HONORS

1973	Phi Beta Kappa, Oberlin College
1974	Harry Nichols Holmes Award for excellence in chemistry, Oberlin College Chemistry Department
1975-1978	Predoctoral Fellowship, Camille and Henry Dreyfus Foundation, Inc.
1978-1980	NIH Predoctoral Trainee
1980-1982	Postdoctoral Fellowship, Jane Coffin Childs Memorial Fund for Medical Research
1984-1986	Basil O'Connor Starter Scholar, March of Dimes Birth Defects Foundation
1986-1988	Junior Faculty Research Award, American Cancer Society, Inc.
1992-1997	Faculty Research Award, American Cancer Society, Inc.
2004-2006	Ruth L. Kirschstein Senior Fellowship Award, NIH
2007	Honorary Inductee, Phi Beta Kappa, Boston University

PUBLICATIONS (total of 69 published)

Mescher MF, **Hansen UM**, Strominger JL. (1976) Formation of lipid-linked sugar compounds in *Halobacterium salinarium*: Presumed intermediates in glycoprotein synthesis. J Biol Chem. 251:7289-7294.

Hansen UM, McClure WR. (1979) A noncycling activity assay for the sigma subunit of *Escherichia coli* RNA polymerase. J Biol Chem. 254:5713-5717.

Hansen UM, McClure WR. (1980) Role of the sigma subunit of *Escherichia coli* RNA polymerase in initiation. I. Characterization of core enzyme open complexes. J Biol Chem. 255:9556-9563.

Hansen UM, McClure WR. (1980) Role of the sigma subunit of *Escherichia coli* RNA polymerase in initiation. II. Release of sigma from ternary complexes. J Biol Chem. 255:9564-9570.

Hansen UM. (1980) Mechanism of action of the sigma subunit of *Escherichia coli* RNA polymerase. Ph.D. Thesis, Harvard University.

Cepko CL, **Hansen UM**, Handa H, Sharp PA. (1981) Sequential transcription-translation of SV40 using mammalian cell extracts. Mol Cell Biol. 1:919-931.

Hansen UM, Tenen DG, Livingston DM, Sharp PA. (1981) T antigen repression of SV40 early transcription from overlapping promoters. Cell 27:603-612.

Hansen UM, Sharp PA. (1983) Sequences controlling *in vitro* transcription of SV40 promoters. EMBO J. 2:2293-2303.

Hansen UM, Sharp PA. (1984) Transcription by RNA polymerase II. Comprehensive Virology 19:65-97.

Tenen DG, Haines LL, **Hansen UM**, Martin RG, Livingston DM. (1985) Formation of a cruciform structure at the SV40 replication origin abolishes T antigen binding to the origin *in vitro*. J Virol. 56:292-297.

Patarca R, Heath C, Goldenberg GJ, Rosen CA, Sodroski JG, Haseltine WA, **Hansen UM**. (1987) Transcription directed by the HIV long terminal repeat *in vitro*. AIDS Research and Human Retroviruses. 3:41-55.

Kim CH, Heath C, Bertuch A, **Hansen U**. (1987) Specific stimulation of simian virus 40 late transcription *in vitro* by a cellular factor binding the simian virus 40 21-base-pair repeat promoter element. Proc Natl Acad Sci USA. 84:6025-6029.

Brown M, Figge J, **Hansen U**, Wright C, Jeang K-T, Khoury G, Livingston DM, Roberts TM. (1987) *lac* repressor can regulate transcription from a hybrid SV40 early promoter containing a *lac* operator in animal cells. Cell 49:603-612.

Chalifour LE, Wirak DO, **Hansen U**, Wassarman PM, DePamphilis ML. (1987) *Cis*- and *trans*-acting sequences required for expression of simian virus 40 genes in mouse oocytes. Genes Dev. 1:1096-1106.

Huang H-C, Sundseth R, **Hansen U**. (1990) Transcription factor LSF binds two variant bipartite sites within the SV40 late promoter. Genes Dev. 4:287-298.

Licht JD, Grossel MJ, Figge J, **Hansen U**. (1990) *Drosophila Krüppel* protein is a transcriptional repressor. Nature 346:76-79.

Sundseth R, **Hansen U**. (1990) A systematic approach to the study of RNA polymerase II mediated transcription *in vitro*. DNA and Protein Engineering Tech. 2:57-64.

Casaz P, Sundseth R, **Hansen U**. (1991) Trans-activation of the Simian Virus 40 late promoter by large T antigen requires binding sites for the cellular transcription factor TEF-1. J Virol. 65:6535-6543.

Sundseth R, **Hansen U**. (1992) Activation of RNA polymerase II transcription by the specific DNA-binding protein LSF: Increased rate of binding of the basal promoter factor TFIIB. J Biol Chem. 267:7845-7855.

Batson SC, Sundseth R, Heath CV, Samuels M, **Hansen U**. (1992) *In vitro* initiation of transcription by RNA polymerase II on *in vivo*-assembled chromatin templates. Mol Cell Biol. 12:1639-1651.

Batson SC, Rimsky S, Sundseth R, **Hansen U**. (1993) Association of nucleosome-free regions and basal transcription factors with *in vivo*-assembled chromatin templates active *in vitro*. Nucl Acids Res. 21:3459-3468.

Licht JD, Ro M, English M, Grossel M, **Hansen U**. (1993) Selective repression of transcriptional activators at a distance by the *Drosophila Krüppel* protein. Proc Natl Acad Sci USA. 90:11361-11365.

DeFranco C, Ro M, Grossel M, **Hansen UM**, Wagner JA, Licht JD. (1993) NGF1A (EGR1) contains transcription activating domains in both the amino terminal and carboxyl terminal regions of the protein. Bioch Biophys Res Comm. 194:425-431.

Licht JD, Hanna-Rose W, Reddy JC, English MA, Ro M, Grossel M, Shaknovich R, **Hansen U**. (1994) Mapping and mutagenesis of the amino-terminal transcriptional repression domain of the *Drosophila Krüppel* protein. Mol Cell Biol. 14:4057-4066.

Shirra MK, Zhu Q, Huang H-C, Pallas D, **Hansen U**. (1994) One exon of the human LSF gene includes conserved regions involved in novel DNA-binding and dimerization motifs. Mol Cell Biol. 14:5076-5087.

Ding H-F, Rimsky S, Batson SC, Bustin M, **Hansen U**. (1994) Stimulation of RNA polymerase II elongation by chromosomal protein HMG-14. Science 265:796-799.

Casaz P, Rice PW, Cole CN, **Hansen U**. (1995) A TEF-1 independent mechanism for activation of the SV40 late promoter by mutant SV40 large T antigens. J Virol. 69:3501-3509.

Hansen U. (1996) Mechanisms of Eukaryotic Transcription: Surfaces, Complexes, and Contexts. Meeting Review: Cold Spring Harbor Cancer Cells Meeting (Aug. 30 – Sept. 3, 1995). BBA Reviews on Cancer. 1287:59-62.

Hanna-Rose W, **Hansen U**. (1996) Active repression mechanisms of eukaryotic repressors. Trends Genet. 12:229-234.

Volker JL, Rameh LE, Zhu Q, DeCaprio J, **Hansen U**. (1997) Mitogenic stimulation of resting T cells causes rapid phosphorylation of the transcription factor LSF and increased DNA-binding activity. Genes Dev. 11:1435-1446.

Hanna-Rose W, Licht JD, **Hansen U**. (1997) Two evolutionarily conserved repression domains in the *Drosophila Krüppel* protein differ in activator specificity. Mol Cell Biol. 17:4820-4829.

Ding H-F, Bustin M, **Hansen U**. (1997) Alleviation of histone H1-mediated transcriptional repression and chromatin compaction by the acidic activation region in chromosomal protein HMG-14. Mol Cell Biol. 17:5843-5855.

Sewack GF, **Hansen U**. (1997) Nucleosome positioning and transcription-associated chromatin alterations on the human estrogen-responsive pS2 promoter. J Biol Chem. 272:31118-31129.

Shirra MK, **Hansen U**. (1998) LSF and NTF-1 share a conserved DNA-recognition motif yet require different oligomerization states to form a stable protein-DNA complex. J Biol Chem. 273:19260-19268.

Hansen U. (1999) Transcriptional and structural analyses of isolated SV40 chromatin. In "*Methods in Molecular Biology: Chromatin Protocols*", Humana Press, Totowa, N.J. vol. 119, pp. 261-290.

Coull JJ, Romerio F, Sun J-M, Volker JL, Galvin KM, Davie JR, Shi Y, **Hansen U**, Margolis DM. (2000) The human factors YY1 and LSF repress the human immunodeficiency virus type-1 long terminal repeat via recruitment of histone deacetylase 1. J Virol. 74:6790-6799.

Powell CMH, Rudge TL, Zhu Q, Johnson LF, **Hansen U**. (2000) Inhibition of the mammalian transcription factor LSF induces S-phase-dependent apoptosis by downregulating thymidylate synthase expression. EMBO J. 19:4665-4675.

Sewack GF, Ellis TW, **Hansen U**. (2001) Binding of TATA binding protein to a naturally positioned nucleosome is facilitated by histone acetylation. Mol Cell Biol. 21:1404-1415.

Frith MC, **Hansen U**, Weng Z. (2001) Detection of *cis*-element clusters in higher eukaryotic DNA. Bioinformatics 17:878-889.

Drouin EE, Schrader CE, Stavnezer J, **Hansen U**. (2002) The ubiquitously expressed DNA-binding protein LSF binds immunoglobulin switch regions and represses class switching to IgA. J Immunol. 168:2847-2856.

Frith MC, Spouge JL, **Hansen U**, Weng Z. (2002) Statistical significance of clusters of motifs represented by position specific scoring matrices in nucleotide sequences. Nucleic Acids Res. 30:3214-3224.

Bruni P, Minopoli G, Brancaccio T, Napolitano M, Faraonio R, Zambrano N, **Hansen U**, Russo T. (2002) Fe65, a ligand of the Alzheimer's β-amyloid precursor protein, blocks cell cycle progression by down-regulating thymidylate synthase expression. J Biol Chem. 277:35481-35488.

Pagon Z, Volker J, Cooper GM, **Hansen U**. (2003) Mammalian transcription factor LSF is a target of ERK signaling. J Cell Biochem. 89:733-746.

Venkatesan K, McManus HR, Mello CC, Smith TF, **Hansen U**. (2003) Functional conservation between members of an ancient duplicated transcription factor family, LSF/Grainyhead. Nucleic Acids Res. 31:4304-4316.

Frith MC, **Hansen U**, Spouge, JL, Weng Z. (2004) Finding functional sequence elements by multiple local alignment. Nucleic Acids Res. 32:189-200.

Haverty PM, **Hansen U**, Weng Z. (2004) Computational inference of transcriptional regulatory networks from expression profiling and transcription factor binding data. Nucleic Acids Res. 32:179-188.

Frith MC, Fu Y, Yu L, Chen J-F, **Hansen U**, Weng Z. (2004) Detection of functional DNA motifs via statistical overrepresentation. Nucleic Acids Res. 32:1372-1381.

Frith MC, Halees AS, **Hansen U**, Weng Z. (2004) Site2genome: Locating short DNA sequences in whole genomes. Bioinformatics 20:1468-1469.

O'Lone R, Frith MC, Karlsson EK, **Hansen U**. (2004) Genomic targets of nuclear estrogen receptors. Mol Endocrinol. 18:1859-1875.

Veljkovic J, **Hansen U**. (2004) Lineage-specific and ubiquitous biological roles of the mammalian transcription factor LSF. Gene 343:23-40.

Haverty PM, Hsiao L-L, Gullans SR, **Hansen U**, Weng Z. (2004) Limited agreement among three global gene expression methods highlights the requirement for non-global validation. Bioinformatics 20:3431-3441.

Ylisastigui L, Kaur R, Johnson H, Volker J, He G, **Hansen U**, Margolis D. (2005) Mitogen activated protein kinases regulate LSF occupancy at the human immunodeficiency virus type 1 promoter. J Virol. 79:5952-5962.

Haverty PM, Weng Z, **Hansen U**. (2005) Transcriptional regulatory networks activated by PI3K and ERK transduced growth signals in human glioblastoma cells. J Comput Sci & Technol. 20:439-445.

O'Lone R*, Knorr K*, Jaffe IZ, Schaffer ME, Martini PGV, Karas RH, Bienkowska J, Mendelsohn ME, **Hansen U**. (2007) Estrogen receptors alpha and beta mediate distinct pathways of vascular gene expression, including genes involved in mitochondrial electron transport and generation of reactive oxygen species. Mol Endocrinol. 21:1281-1296.

Zhu N, **Hansen U**. (2007) HMGN1 modulates estrogen-mediated transcriptional activation through interactions with specific DNA-binding transcription factors. Mol Cell Biol, 27:8859-8873.

Schnoes, KK, Jaffe IZ, Iyer, L, Dabreo, A, Aronovitz, M, Newfell, B, **Hansen, U**, Rosano, G, Mendelsohn, ME. (2008) Rapid recruitment of temporally distinct vascular gene sets by estrogen. Mol. Endocrinol, 22:2544-2556.

Saxena UH*, Powell CMH*, Fecko JK, Cacioppo R, Chou HS, Cooper GM, **Hansen U**. (2009) Phosphorylation by cyclin C/CDK2 following mitogenic stimulation of murine fibroblasts inhibits transcriptional activity of LSF during G1 progression. Mol Cell Biol, 29:2335-2345.

Repetny KJ, Zhong X, Holodick NE, Rothstein TL, **Hansen U**. (2009) Binding of LBP-1a to specific immunoglobulin switch regions *in vivo* correlates with specific repression of class switch recombination. Eur J Immunol, 39:1387-1394.

Hansen U, Owens L, Saxena UH (2009) Transcription factors LSF and E2Fs: Tandem cyclists driving G0 to S? Cell Cycle 8:2146-2151.

Yoo BK, Chen D, Gredler R, Vozhilla N, Su Z-z, Chen D, Shah K, Saxena U, **Hansen U**, Fisher PB, Sarkar D.(2009) Identification of important genes conferring resistance to 5-fluorouracil. Proc. Natl. Acad. Sci. USA 106:12038-12043.

Zhu N, **Hansen U**. (2010) Transcriptional regulation by HMGN proteins. Bioch. Biophys. Acta – Gene Regulatory Mechanisms 1799:74-79.

Traylor-Knowles N, **Hansen U**, Dubuc TQ, Martindale MQ, Kaufman L, Finnerty JR. (2010) The evolutionary diversification of LSF and Grainyhead transcription factors preceded the radiation of basal animal lineages. BMC Evolutionary Biology 10:101.

Yoo BK, Emdad L, Gredler R, Fuller C, Dumur CI, Jones KH, Jackson-Cook C, Su Z-z, Chen D, Saxena UH, **Hansen U**, Fisher PB, Sarkar D. (2010) Transcription factor LSF functions as an oncogene in hepatocellular carcinoma. Proc. Natl. Acad. Sci. USA 107:8357-8362.

Saxena UH, Owens L, Graham JR, Cooper GM, **Hansen U**. (2010) Prolyl isomerase Pin1 regulates transcription factor LSF (TFCP2) by facilitating dephosphorylation at two serine-proline motifs. J. Biol. Chem. 285:31139-31147.

Schneider S, Smith T, **Hansen U**. (2012) SCOREM: Statistical consolidation of redundant expression measures. Nucleic Acids Res. 40:e46.

Grant TJ, Bishop JA, Christadore LM, Barot G, Chin HG, Woodson S, Kavouris J, Siddiq A, Gredler R, Shen XN, Sherman J, Meehan T, Fitzgerald K, Pradhan S, Briggs LA, Andrews WH, Sarkar D, Schaus SE, **Hansen U**. (2012) Antiproliferative small molecule inhibitors of the transcription factor LSF reveal oncogene addiction in hepatocellular carcinoma. Proc. Natl. Acad. Sci. USA 109:4503-4508.

Santhekadur PK, Rajasekaran D, Siddiq A, Gredler R, Chen D, Schaus SE, **Hansen U**, Fisher PB, Sarkar D. (2012) The Transcription Factor LSF: a Novel Oncogene for Hepatocellular Carcinoma. Am. J. Cancer Res. 2:269-285.

Bernelot Moens SJ, Schnitzler GR, Nickerson M, Guo, H, Ueda K, Lu Q, Aronovitz MJ, Nickerson H, Baur WE, **Hansen U**, Iyer LK, Karas RH. (2012) Rapid estrogen receptor signaling is essential for the protective effects of estrogen against vascular injury. Circulation 126:1993-2004.

Rajasekaran D, Siddiq A, Willoughby JLS, Biagi JM, Christadore LM, Yunes SA, Gredler R, Jariwala N, Robertson CL, Akiel MA, Shen X-N, Subler MA, Windle JJ, Schaus SE, Fisher PB, **Hansen U**, Sarkar D. (2015) Small molecule inhibitors Late SV40 Factor (LSF) abrogate hepatocellular carcinoma (HCC): Evaluation using an endogenous HCC model. Oncotarget 6:26266-26277.

Acevedo-Luna N, Mariño-Ramírez L, Halbert A, **Hansen U**, Landsman D, Spouge JL. (2016) Most of the tight positional conservation of transcription factor binding sites near the transcription start site reflects their co-localization within regulatory modules. BMC Bioinformatics 17:479. doi: 10.1186/s12859-016-1354-5

Chin HG, Ponnaluri C, Zhang G, Estève P-O, Schaus SE, **Hansen U**, Pradhan S. (2016) Transcription factor LSF-DNMT1 complex dissociation by FQI1 leads to aberrant DNA methylation and gene expression. Oncotarget 7:83627-83640. doi: 10.18632/oncotarget.13271

PATENTS (ISSUED)

Scott Schaus, Ulla Hansen, Joshua Bishop (Issued November 3, 2015) [1,3] Dioxolo [4,5-G] [1,2,4] triazolo [1,5-A] quinolone derivatives as inhibitors of the Late SV40 Factor (LSF) for use in treating cancer. U.S. Patent No. 9,175,001.

Scott Schaus, Ulla Hansen, Joshua Bishop (Issued July 26, 2016) [1,3] Dioxolo [4,5-G] quinolone-6(5H) thione derivatives as inhibitors of the Late SV40 Factor (LSF) for use in treating cancer. U.S. Patent No. 9,399,644.

PATENT APPLICATIONS

Ulla Hansen, Scott Schaus, Trevor Grant, Joshua Bishop, John Kavouris, Lisa Christadore (Published April 19, 2012) Inhibitors of Late SV40 Factor (LSF) as Cancer Chemotherapeutics. No. WO 2012/050985

SERVICE: International, National, and Regional

1984-	Reviewer for National Science Foundation grant applications
1996, 2001	Reviewer for The Israel Science Foundation grant application
2001	Reviewer for proposals for the Ohio Board of Regents
1985-present	Referee for scientific journals: *Molecular and Cellular Biology*, *Nature*, *Nucleic Acids Research*, *Genes and Development*, *Science*, *Journal of Biological Chemistry*, *Proceedings of the National Academy of Sciences (USA)*, *Development*, *Developmental Biology*, *Molecular Biology of the Cell*, *Journal of Applied Physiology*, *Trends in Biochemical Sciences*, *European Journal of Biochemistry*, *Cell Growth and Differentiation*, *Biochimica et Biophysica Acta*, *Bioinformatics*, *Genes to Cells*, *Blood*, *BMC-Molecular Biology*, *Journal of Molecular Biology*, *Expert Review in Molecular Medicine*, *Gene*, *Journal of Endocrinology*, *The FEBS Journal*, *EMBO Journal*, *Journal of Clinical Investigation*, *Reproductive Biology and Endocrinology*, *BMC Genomics*, *Anti-Cancer Drug*, *Journal of Pharmacy and Pharmacology*, *Molecular Cancer Research*, *Journal of Translational Medicine*, *Journal of Visualized Experiments (JOVE), Frontiers in Endocrinology*, *Genome Research, Bioessays*, *Chinese Journal of Cancer Research*, *BMC-Cancer*
1997-2006	Reviewer, chapters of books: Cell (G. Cooper) Molecular Biology (R. Weaver) Cell (G. Cooper and R. Hausman)
1990	Ad Hoc Member of the NIH Virology Study Section
1994	Ad Hoc Reviewer, American Cancer Society Scientific Advisory Committee on Personnel
1996-1997	Ad Hoc Reviewer, American Cancer Society Scientific Advisory Committee on Genetic Mechanisms in Cancer
1998-1999	Reviewer, American Cancer Society Scientific Advisory Committee on Genetic Mechanisms in Cancer
1998-	Reviewer, Faculty Promotion cases: Harvard Medical School; Johns Hopkins University; National Cancer Institute (NIH); Tufts-New England Medical Center; Tufts Univ. School of Medicine; Univ. of California, Berkeley; Univ. of Massachusetts Medical School, Worcester; Univ. of Missouri-Columbia; Univ. of South Florida; Virginia Commonwealth Univ.
2000	Vice-Chair, American Cancer Society Scientific Advisory Committee on Genetic Mechanisms in Cancer
2001	Chair, American Cancer Society Scientific Advisory Committee on Genetic Mechanisms in Cancer
1999	Ad Hoc Reviewer, National Institutes of Health CBY-2 Study Section
2002-2004	Member, National Institutes of Health CDF3 Study Section
2002	Reviewer, Intramural site visit team, review of Laboratory of Metabolism, National Cancer Institute, NIH
2002	Outside reviewer, Ph.D. Thesis Examination Committee, Doug Selinger (student of George Church), Harvard Medical School

2005	Reviewer, Senior Research Fellowship application for The Wellcome Trust, London, UK
2005	Invited to be member of NSF Review Panel on Epigenetics, Transcription, and Chromatin (declined due to temporary conflicts)
2005	Outside reviewer, Ph.D. Thesis Examination Committee, Zhou Zhu (student of George Church), Harvard Medical School
2007	Outside reviewer, Ph.D. Thesis Examination Committee, Seth Frietze (student of Pamela Silver), Harvard Medical School
2006-2011	Reviewer, The Medical Foundation: The Charles A. King Trust Postdoctoral Research Fellowship Program, Boston, MA
2011-2016	Reviewer, Alzheimer's Association International Grant Program
2011-present	Review Editor, Frontiers in Molecular and Structural Endocrinology

SERVICE: Harvard Medical School and Dana-Farber Cancer Institute

1984-1988	Graduate Student Advisory Committee, Committee on Virology
1985-1987	Chairperson, Graduate Student Advisory Committee, Committee on Virology
1984-1992	Biomedical Research Support Grant Review Committee, Dana-Farber Cancer Institute
1986-1988	Program and Admissions Committee, Harvard Medical School
1991-1993	Faculty Council, Harvard Medical School
1991-1994	Chairperson, Seminars in Oncology, Dana-Farber Cancer Institute
1995-1997	Virology Steering Committee, Harvard Medical School

SERVICE: Boston University

1999	Mentor, Pathways Program
2001	Panel member, Orientation for New Faculty, Hosted by Boston University Center for Excellence in Teaching
2000-2002	Alternate Member, Faculty Council
2002, 2003	Ada Draper Award Selection Committee
2002-3, 2008, 2011, 2013	Science and Technology Day Judge
2002-2003	Member, Advisory Board, Women's Studies Program
2002	Member, Committee of Misconduct Inquiry for the Office of the Provost
2005	Internal reviewer, 2006 Searle Scholar's Program competition
2006	College of Arts and Sciences Dean's delegate, polling Biology Department regarding Chairman position
1999, 2000, 2007-2008	Member, Appointment, Promotions and Tenure Committee, College and Graduate School of Arts and Sciences
2002-2003, 2006-2007	Chair, Appointment, Promotions and Tenure Committee, College and Graduate School of Arts and Sciences
2007	Chair, Ad hoc Appointment, Promotions and Tenure Committee, College and Graduate School of Arts and Sciences
2008	Organizer, Symposium in Honor of Sir Hans Kornberg (Jan. 19, 2008)
2008-2010	Member, University-wide Bioinformatics and Integrative Biology Working Group
2008-2009	Faculty Facilitator, Responsible Conduct for Research Sessions
2009-present	Member, Steering Committee for the Evans Center for Interdisciplinary Biomedical Research (Director: Katya Ravid)
2009-2013	Faculty Representative, Academic Affairs Committee of the Board of Trustees
2011	Reviewer, Boston University School of Medicine Biochemistry graduate program
2012	Reviewer for Provost's Office, Clare Boothe Luce Graduate Fellowships

2012 Reviewer, Boston University Searle Scholar nominations
2012 Reviewer, Boston University Pew Scholar nominations
2012-present Reviewer, Evans Center ARC grant proposals
2012 Member, Boston University HHMI Graduate Fellowship Nomination Committee
2013 Reviewer, Boston University Blavatnik Young Scientist Award nomination
2013-2014 Member, Organic Chemistry Faculty Search Committee, Dept. Chemistry
2013-2015 Member, University Committee on Academic Program Review
2014 Member, Ad hoc faculty committee on plagiarism allegation,
College and Graduate School of Arts and Sciences
2015 Chair, Investigation Misconduct Committee for the Office of the Provost
2015-2016 Vice-Chair, University Committee on Academic Program Review
2016-2018 Chair, University Committee on Academic Program Review
2016 Reviewer, BU Clinical and Translational Science Institute Pilot Grants

SERVICE: Boston University, Department of Biology

1997-2007 Faculty Search Committees in Cell and Molecular Biology
(for 5 of the years indicated)
Hired: J. Deshler, K. McCall, F. Naya, C. Bradham, H. Frydman
2008-2009 Member, Systems Biology Junior Faculty Search Committee
2009-2010 Chair, Systems Biology Faculty Search Committee
1999-present Mentor of Junior Faculty
Jim Deshler (1999-2008)
Frank Naya (2001-2012)
Daniel Segrè (2005-2012)
Cynthia Bradham (2008-2016)
Jeffrey Gavornik (2016-present)
Jerry Chen (2016-present)
1998 Biology Department Graduate Committee
(including Graduate Student Admissions)
1998-1999 Chair, Cellular and Molecular Biology Seminar Committee
1999-2003, 2006-2015 Preliminary Examination Committee,
Cell and Molecular Biology and MCBB Graduate Programs
1998-2011 Appointment, Promotions and Tenure Committee, Department of Biology
(for six of the 13 years indicated)
2013 Ad Hoc Appointment, Promotions and Tenure Committee, Department of Biology
2007-2008, 2010-2011, 2017-2018 Merit and Equity Advisory Committee, Department of Biology
1998-2000, 2002-2004 Biology Chairman's Advisory Committee
2007-2011 Associate Chair, Department of Biology
2011-2012 Biology Department representative, Provost Space Utilization Study Committee
2013-2014, 2015-2017 Appointment, Promotions and Tenure Committee, Department of Biology

SERVICE: Boston University, Interdepartmental Graduate Programs

1998-2000 Molecular Biology, Cell Biology, and Biochemistry (MCBB) Graduate Program
Oversight Committee
1998-2000 Graduate Student Admissions Committee, MCBB Graduate Program

1999	Recruitment of minority students for the Bioinformatics Program at University of Houston-Downtown, Houston, TX
1999	Lecturer, Pre-entrance Training Week, Bioinformatics Program
1999-2001	Chair, Interdepartmental Seminar Series – Biomolecular Seminar Series (Cell and Molecular Biology, MCBB, Bioinformatics)
2000-2010	Member, Biomolecular Seminar Series Committee
2000-2003	Chair, Committee on Curriculum and Degree Requirements, Bioinformatics Program
1999-2001, 2005-	Graduate Advisor, Bioinformatics Program
2005-2006, 2007-2008	Admissions Committee, Program in Bioinformatics
2008-2009	Member, Systems Biology Seminar Series Committee
2009	Member, Curriculum Committee, University-wide Integrative Biology Program
2008-2009, 2010-2011	Member, Executive Committee, Program in Bioinformatics
2008-present	Director, MCBB Graduate Program
2013	Bioinformatics representative, SACNAS conference, San Antonio, TX

TEACHING: Harvard Medical School

1984-1986	Co-Director, “Principles and Techniques in Molecular Genetics” (graduate student course), Program in Genetics, Harvard Medical School
1986-1993	Director, “Molecular Biology of Animal Viruses” (graduate student course), Committee on Virology, Harvard Medical School
1989,1992	Course leader, “Tridepartment Proposal Mini-Course” (graduate student course), Harvard Medical School
1990,1993	Leader, Conduct of Science discussion groups, Harvard Medical School
1995,1996	Member of teaching team (with Jean Patterson, Jo Sodroski), “Animal Virology” (graduate student course), Committee on Virology, Harvard Medical School
1983-1997	Chair/Member of Thesis Advisory Committees (students from Biological and Biomedical Sciences Program, Committee on Virology, Program in Immunology)

TEACHING: Boston University

1998	Lecturer on Cell Signaling and Transcription Factors, “Advanced Cell Biology” (graduate student course)
1999	Co-director, “Biology of the Cell Cycle” (graduate and upper level undergraduate course), with Professor Frank Monette
2000-2003	Co-director, “Molecular Biology II” (graduate and upper level undergraduate course) 2000-2002: with Professor Kim McCall 2003: with Professor Frank Naya
2000, 2002	Lecturer on Basic Transcription Mechanisms, “Molecular Biology” at BU Medical School (graduate student course)
2001	Lecturer on Mammalian Gene Expresssion, “Biomolecular Engineering”
2000-2003	Discussion Leader on The Estrogen Receptor and Breast Cancer, “Biology 108 Honors Section” (freshman undergraduate students)
1999-2000	Instructor, “Reading in Biology” (undergrad independent library research) Nicolas Aguirre (’99), Amartya Ray (’99)

2002, 2004 Lecturer on current research of my laboratory,
"Research Opportunities in Bioinformatics" (graduate student course)
2006, 2007 Director, "Research Opportunities in Bioinformatics" (graduate student course)
2006 Faculty, "Cell Biology" (sophomore-level undergraduate and MMEDIC courses), with Professor Frank Monette, Course Director
2008 Co-director, "Cell Biology" (sophomore-level undergraduate and MMEDIC courses), with Professors Cynthia Bradham and Robert Hausman
2010 Director, "Molecular Biology II" (graduate and upper level undergraduate course)
2010 Instructor, "Reading in Biology" (undergrad independent library research) Sarah Woodson ('11)
2004-2007, 2010-present Director, "Advanced Molecular Biology" (graduate student course)
2012-2014, 2016-2017 Guest Lecturer, "Carcinogenesis" (graduate & upper level undergraduate course)
2013 Guest Lecturer, "Epigenetics" (graduate level course)
2014 Director, Grant-writing workshop for Cell and Molecular Biology and MCBB PhD students (includes writing/submission of NSF fellowship proposals)
2016 Director, "Progress in Cell and Molecular Biology Seminar" (weekly seminar series of Cell and Molecular Biology and MCBB PhD students)

NATIONAL/INTERNATIONAL CONTRIBUTIONS:

Presentations at Symposia (1992-present)

1992 Gordon Research Conference on "Chromatin"
Cold Spring Harbor Meeting on "DNA Tumor Viruses"

1993 Gordon Research Conference on "Biological Regulatory Mechanisms"
Cold Spring Harbor Meeting on "Mechanisms of Eukaryotic Transcription"

1994 Massachusetts Department of Public Health, Boston, MA,
Breast Cancer Award Symposium
Massachusetts Institute of Technology, Boston, MA,
Symposium honoring Phillip A. Sharp

1995 Keystone Symposium on "Epigenetic Regulation of Transcription"
FASEB Research Conference on "Chromatin and Transcription"
Session Chair and Speaker, Summer Symposium in Molecular Biology, Penn State on "Chromosomal Controls of Gene Expression"
Cold Spring Harbor Cancer Cells Meeting
on "Mechanisms of Eukaryotic Transcription"

1996 Gordon Research Conference
on "Nuclear Proteins, Chromatin Structure and Gene Regulation"
Cambridge Symposia
on "Cell Cycle Control: Regulatory Signals and Clinical Applications"

1997 Gordon Research Conference on "Molecular and Genetic Basis of Cell Proliferation"

2000 Society for the Advancement of Women's Health Research Conference
on "Sex and Gene Expression", Winston-Salem, North Carolina

2002 BCMP Minisymposium on "The Biochemistry of Eukaryotic Transcription", Harvard Medical School, Boston, MA

2003 Panel Moderator and Speaker, Society for Womens' Health Fourth Annual Conference on "Sex and Gene Expression", Winston-Salem, North Carolina

2007 Session Chair and Speaker, Boston Area Gene Expression Meeting, Tufts University School of Medicine

2008 Bregenz Summer School on Endocrinology: Nuclear Receptors in Health and Disease, Bregenz, Austria

REGIONAL/NATIONAL CONTRIBUTIONS:

Invited Presentations at Institutions (1993-present)

1993 Dana-Farber Cancer Institute, Boston, MA, Seminars in Oncology
University of Pittsburgh School of Medicine, Pittsburgh, PA, Department of Molecular Genetics
Tufts University School of Medicine, Boston, MA, Department of Physiology
Scripps Research Institute, La Jolla, CA, Department of Molecular Biology
University of Connecticut, Storrs, CT, Department of Molecular and Cellular Biology
Mount Sinai School of Medicine, New York, NY, Brookdale Center for Molecular Biology
Tufts University School of Medicine, Boston, MA, Department of Biochemistry

1994 Harvard Medical School, Boston, MA, Committee on Virology

1995 University of Texas Health Science Center, San Antonio, TX, Center for Molecular Medicine
National Institutes of Health, Bethesda, MD, National Cancer Institute
University of Oregon, Eugene, OR, Institute of Molecular Biology
Fred Hutchinson Cancer Center, Seattle, WA
Tufts University School of Medicine, Boston, MA, Department of Molecular Biology and Microbiology
Dana-Farber Cancer Institute, Boston, MA, Seminars in Oncology
Harvard Medical School, Boston, MA, Department of Microbiology and Molecular Genetics
Mount Sinai School of Medicine, New York, NY, The Derald H. Ruttenberg Cancer Center
Medical College of Georgia, Augusta, GA, Institute for Molecular Medicine and Genetics
University of Massachusetts Medical Center, Worcester, MA, Department of Molecular Genetics and Microbiology
Louisiana State University Medical Center, New Orleans, LA, Stanley S. Scott Cancer Center

1996 University of Georgia, Athens, GA, Department of Biochemistry
Emory University School of Medicine, Atlanta, GA, Division of Pediatric Endocrinology
Vanderbilt University, Nashville, TN, Department of Molecular Biology, and Cancer Center

Harvard Medical School, Boston, MA, Department of Pathology
Harvard Medical School, Boston, MA, Committee on Virology
Schepens Eye Research Institute, Boston, MA

1997 Boston University, Boston, MA, Department of Biology

1998 Brown University, Providence RI,
Department of Molecular Biology, Cell Biology and Biochemistry
Oberlin College, Oberlin, OH, Chemistry Department

1999 Boston University School of Medicine, Boston, MA, Department of Biochemistry
Boston University School of Medicine, Boston, MA, Department of Pathology
LSU Medical Center, Shreveport, LA,
Department of Biochemistry and Molecular Biology
University of Houston-Downtown, Houston, Texas

2000 University of South Florida, Tampa, FL, Institute for Biomolecular Science
Massachusetts General Hospital, Harvard Medical School, Boston, MA,
Department of Reproductive Endocrinology
University of Massachusetts Medical Center, Worcester, MA,
Department of Cell Biology
Boston University School of Medicine, Boston, MA, Department of Pharmacology

2001 Boston University School of Medicine, Boston, MA, Department of Medicine,
Hematology/Oncology Research Roundtable

2003 Boston University School of Medicine, Boston, MA, Arthritis Grand Rounds
Boston University School of Medicine, Boston, MA,
Department of Genetics and Genomics

2005 Boston University Goldman School of Dental Medicine, Boston, MA,
Department of Molecular and Cell Biology
The Johns Hopkins University, School of Medicine, Baltimore, MD,
Johns Hopkins Asthma and Allergy Center
The Johns Hopkins University, School of Medicine, Baltimore, MD,
Johns Hopkins Immunology Council
University of Massachusetts Medical School, Worcester, MA,
Department of Cell Biology
Boston University, Boston, MA, LSEB Dedication Symposium

2009 Virginia Commonwealth University, Richmond, VA,
Department of Human and Molecular Genetics
New England BioLabs, Ipswich, MA

2011 Alnylam Pharmaceuticals, Cambridge, MA
Boston University School of Medicine, Boston, MA, Department of Biochemistry

2013 Boston University School of Medicine, Boston MA, Department of Microbiology

2016 Boston University-wide Cancer Seminar Series, Boston MA