

## CURRICULUM VITAE

**GARY S. STEIN, Ph.D.**

BIRTHDATE: July 30, 1943: Brooklyn, New York

EDUCATION: B.A., Biology, Hofstra University  
Hempstead, New York, 1965

M.S., Biology, Hofstra University  
Hempstead, New York, 1966

Ph.D., Biology, University of Vermont  
Burlington, Vermont, 1969

PROFESSIONAL EXPERIENCE: Temple University, Department of Pathology  
Philadelphia, Pennsylvania, 1969 - 1972  
Postdoctoral Fellow (with Dr. Renato Baserga)  
University of Florida College of Medicine  
Department of Biochemistry and Molecular Biology  
Gainesville, Florida  
Assistant Professor, 1972 - 1975  
Associate Professor, 1975 - 1979  
Professor, 1979 - 1987  
Associate Chairman, 1981 - 1986

University of Massachusetts Medical School  
Department of Cell Biology, Worcester, Massachusetts  
Professor and Chairman, 1987 - present  
*Haidak Distinguished Professor & Chair of Cell Biology*  
Professor of Medicine  
University of Massachusetts Cancer Center  
Associate Director, 1993 - 1994  
Deputy Director for Research, 1994 - present

MAJOR RESEARCH INTERESTS: Regulation of Cell Growth and Tissue-Specific  
Gene Expression in Normal and Neoplastic Mammalian Cells.  
Interrelationships between Proliferation and Differentiation.

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS: American Association for Cancer Research  
American Chemical Society  
American Society for Cell Biology  
American Association for Advancement of Science (fellow)  
American Society for Microbiology (fellow)  
International Cell Cycle Society  
Southeastern Cancer Research Association  
American Society of Biological Chemists  
New York Academy of Sciences  
American Society of Bone and Mineral Research  
Orthopedic Research Society  
American Society of Hematology  
International Society for Experimental Hematology  
International Bone and Mineral Society

## PROFESSIONAL ACTIVITIES

### Editorial

Editorial Advisory Board - The Cell Nucleus, Vols. IV-VII, Academic Press New York, 1978.  
Editorial Board - Anticancer Research, 1979-present.  
Editorial Board - Cell and Tissue Kinetics, 1981-1990.  
Editorial Board - Molecular and Cellular Biochemistry, 1982-87.  
Editorial Board - Archives of Biochemistry and Biophysics, 1989-present.  
Editorial Board - Cell Biophysics, 1982-1996.  
Editorial Board - Journal of Nutrition, Growth and Cancer, 1982-1986.  
Editorial Board - Journal of Cellular Physiology, 1983-present.  
Editorial Board - Cell Biology International Reports, 1985-present.  
Editorial Board - Biochemistry and Cell Biology, 1985-present.  
Editorial Board - Receptor, 1989-present.  
Editorial Board - Chemtracts: Biochemistry and Molecular Biology Edition, 1989-present.  
Editorial Board - Experimental Cell Research, 1993-present.  
Editorial Board - Bone, 1994-present.  
Associate Editor- Cancer Research, 1986-present.  
Editor - Critical Reviews in Eukaryotic Gene Expression, 1988-present.  
Editorial Advisory Board - Cell Biology Monograph Series, Academic Press, New York.  
1985-present.  
Executive Editor - Journal of Cellular Biochemistry 1988-present.  
Executive Editor - Molecular Biology Reports, 1995-present.  
Editorial Board - Gene Expression, 1996-present.  
Editorial Board - Science Magazine "InSight", 1998-present  
Editorial Board - Pakistan Journal of Zoology, 2001-present  
Editorial Board - International Journal of Oncology, 2001-present

### Other Professional Activities

Chair - Florida Colloquium on Molecular Biology of Gene Expression - 1975.  
President and Chair of the Board - Southeastern Cancer Research Association, 1981 - 1982. Board of Directors, 1975 - 1987.  
Scientific Advisory Committee - The American Cancer Society, Florida Div., 1977 - 1987; Vice Chair, 1984; Chair, 1985 - 1987.  
N.I.H., Biomedical Sciences Study Section, 1982 - 1984.  
N.I.H., Pathobiochemistry Study Section, 1984 - 1989.  
President - International Cell Cycle Society, 1988.  
Research Committee of the Florida Cancer Control and Research Advisory Board, 1984 - 1987.  
Research Advisory Committee, Mayo Clinic, 1990 - 1992.  
Program Committee: American Association for Cancer Research, 1989, 1990, 1997.  
Chairman, Massachusetts Subcommittee of the American Association for Cancer Research Public Education State Committee, 1990 - present.  
Vice Chair (1989); Chair (1991) Gordon Conference on "Biological Structure and Gene Expression".  
Committee on Interagency Radiation Research and Policy Coordination: Panel on the Health Effects of Low-Frequency Electric and Magnetic Fields, 1992 - 1993.

### Other Professional Activities (continued)

Co-Chair (1993); Chair (1994) FASEB Research Conference on "Molecular Genetic Basis of Cell and Tissue Structure and Function".

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Scientific Advisory Board - Keystone Symposia, 1989 - 1991.

Board of Directors, Advances in Mineral Metabolism, 1994 - 1998.

Consulting Director, Allegheny Research Institute, 1995 - 1998.

Scientific Advisory Board, Cambridge Symposia on Cellular & Molecular Biology, 1995 - present.

Co-Chair, Keystone Symposium on "The Nuclear Matrix: Involvement in Replication, Transcription, Gene Splicing and Cellular Regulation", 1995.

Chair, Cambridge Symposium on "Nuclear Structure-Gene Expression Interrelationships", 1996.

Chair, Cambridge Symposium on "Cell Cycle Control", 1996.

Co-Chair, Keystone Symposium on "The Nuclear Matrix: Involvement in Gene Organization, Transcription, and Cell Cycle Regulation", 1997.

Chair, Grant Research Review Panel, State of Texas Advanced Research Technology Program, 1997-1999.

Advisory Panel for Los Alamos National Laboratory Life Sciences Division, 1998.

Chair, National Research Council Task Group for the Evaluation of the NASA Biotechnology Facility for the International Space Station, 1999 to 2000.

Science Advisory Panel: National Space Agency of Japan, 1999.

Program Committee: Workshop on Vitamin D, 1990-present.

Chair (2001), FASEB Research Conference on "Nuclear Structure & Cancer".

Member, National Cancer Institute Basic and Pre-Clinical Review Panel, 2000-present.

Program Committee: Third International Conference on Osteopontin, 2002.

Advisory Committee, St. Jude Children's Research Hospital, Memphis, TN, 2001-present

Council of the American Society for Bone & Mineral Research, 2002-2005

### Professional Honors

1993 Elizabeth Winston Lanier-Kappa Delta Award from the American Academy of Orthopaedic Surgeons and the Orthopaedic Research Society (for defining interrelationships between control of cell growth and tissue specific gene expression).

1997 Brown University Steroid Hormone Research Award.

1997 Elected Member: Pakistan Academy of Sciences.

1999 Appointed *The Gerald L. Haidak, M.D. and Zelda S. Haidak Distinguished Professor and Chair of Cell Biology*

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Patents

“Gene Therapy Using Bone Marrow Transplants Transfected With Therapeutic Genes Under The Control of Tissue Specific Promoters”, Gary S. Stein et al.

“Intra-Nuclear Targeting to the Nuclear Matrix: Biological and Chemical Applications”, Gary S. Stein et al.

“Gene-Specific Transcription Factors Controlling Cell Proliferation During S Phase: Biological, Chemical, and Clinical Applications”, Gary S. Stein et al.

### FULL LENGTH ARTICLES

Bagchi, M., Rothstein, H. and Stein, G. (1968) Synthesis of macromolecules in epithelial cells of the cultured amphibian lens. II. Effects of puromycin and actinomycin D on protein synthesis. *Exp. Cell. Res.* 50:454-459.

Stein, G. and Rothstein, H. (1968) Mitomycin C may inhibit mitosis by reducing "G2" RNA synthesis. *Curr. Mod. Biol.* 2:254-263.

Stein, G. and Rothstein, H. (1969) Synthesis of macromolecules in epithelial cells of the cultured amphibian lens. V. Effect of halogenated pyrimidines on mitosis and the synthesis of macromolecules. *Rev. Franc. Etudes Clin. et Biol.* 14:680-685.

Stein, G. and Rothstein, H. (1969) Synthesis of macromolecules in epithelial cells of the cultured amphibian lens. IV. Requirement of DNA replication for the synthesis of RNA and protein during the G2 period of the cell cycle. *Arch. Inter. Physiol. Biochim.* 77:515-521.

Stein, G. and Baserga R. (1970) The synthesis of acidic nuclear proteins in the prereplicative phase of isoproterenol-stimulated salivary gland. *J. Biol. Chem.* 245:6097-6105.

Stein, G. and Baserga, R. (1970) Continued synthesis of nonhistone chromosomal proteins during mitosis. *Biochem. Biophys. Res. Comm.* 41:715-722.

Stein, G. and Baserga, R. (1971) Cytoplasmic synthesis of acidic chromosomal proteins. *Biochem. Biophys. Res. Comm.* 44:218-223.

Chaudhuri, S.C., Stein, G.S. and Baserga, R. (1972) Binding of chromosomal acidic proteins to DNA and chromatin. *Proc. Soc. Exp. Biol. Med.* 139:1363-1366.

Farber, J., Stein, G.S. and Baserga, R. (1972) The regulation of RNA synthesis during mitosis. *Biochem. Biophys. Res. Comm.* 47:790-797.

Pegoraro, L., Galanti, N., Stein, G. and Baserga, R. (1972) The synthesis of phospholipids in the nucleus and nuclear membrane of synchronized HeLa cells. *Cell Tissue Kinet.* 5:65-77.

Adelman, R., Stein, G., Roth, G. and Englander, D. (1972) Age-dependent regulation of mammalian DNA synthesis and cell proliferation in vivo. *Mech. Ageing Devel.* 1:49-59.

Maul, G.G., Maul, H.M., Scogna, J.E., Lieberman, M.W., Stein, G.S., Hsu, B.Y. and Borun, T.W. (1972) Time sequence of nuclear pore formation in phytohemagglutinin-stimulated lymphocytes and in HeLa cells during the cell cycle. *J. Cell. Biol.* 55:433-447.

Stein, G.S., Chaudhuri, S. and Baserga, R. (1972) Gene activation in WI-38 fibroblasts stimulated to proliferate: role of nonhistone chromosomal proteins. *J. Biol. Chem.* 247:3918-3922.

Stein, G.S. and Borun, T.W. (1972) The synthesis of acidic chromosomal proteins during the cell cycle of HeLa S3 cells. I. The accelerated accumulation of acidic residual nuclear protein before the initiation of DNA replication. *J. Cell Biol.* 52:292-307.

Borun, T.W. and Stein, G.S. (1972) The synthesis of acidic chromosomal proteins during the cell cycle of HeLa S3 cells. II. The kinetics of residual protein synthesis and transport. *J. Cell Biol.* 52:308-315.

Stein, G.S. and Farber, J.L. (1972) Role of nonhistone chromosomal proteins in the restriction of mitotic chromatin template activity. *Proc. Natl. Acad. Sci. U.S.A.* 69:2918-2921.

Platz, R.D., Stein, G.S. and Kleinsmith, L.J. (1973) Changes in the phosphorylation of nonhistone chromatin proteins during the cell cycle of HeLa S3 cells. *Biochem. Biophys. Res. Comm.* 51:735-740.

Stein, G.S. and Thrall, C.L. (1973) Uncoupling of nonhistone chromosomal protein synthesis and DNA replication in human diploid WI-38 fibroblasts. *FEBS Letters* 34:35-39.

Stein, G.S. and Thrall, C.L. (1973) Evidence for the presence of nonhistone chromosomal proteins in the nucleoplasm of HeLa S3 cells. *FEBS Letters* 32:41-45.

Stein, G.S. and Matthews, D.E. (1973) Nonhistone chromosomal protein synthesis: utilization of pre-existing and newly transcribed messenger RNAs. *Science* 181:71-73.

Stein, G.S., Wang, P.L. and Adelman, R.C. (1973) Age-dependent changes in the structure and function of mammalian chromatin. I. Variations in chromatin template activity. *Exp. Geront.* 8:123-133.

Stein, G.S., Moscovici, G., Moscovici, C. and Mon, M. (1974) Acidic nuclear protein synthesis in rous sarcoma virus-infected chick embryo fibroblasts. *FEBS Letters* 38:295-298.

Krause, M.O. and Stein, G.S. (1974) Modifications in the chromosomal proteins of SV-40 transformed WI-38 human diploid fibroblasts. *Biochem. Biophys. Res. Comm.* 59:796-803.

Stein, G.S., Criss, W.E. and Morris, H. (1974) Properties of the genome in experimental hepatomas: variations in the composition of chromatin. *Life Sci.* 14:95-105.

Mans, R.J. and Stein, G.S. (1974) Addition of polyadenylic acid to RNA by ATP: polynucleotidylexotransferase partially purified from HeLa cells. *Life Sci.* 14:437-445.

Roti Roti, J.L., Stein, G.S. and Cerutti, P.A. (1974) Reactivity of thymine to gamma rays in HeLa chromatin and nucleoprotein preparations. *Biochem.* 13:1900-1905.

Stein, G.S. and Burtner, D.E. (1974) Utilization of pre-existing messenger RNAs for nonhistone chromosomal protein synthesis in WI-38 human diploid fibroblasts. *Exp. Cell Res.* 88:319-326.

Stein, G.S., Hunter, G. and Lavie, L. (1974) Nonhistone chromosomal proteins: evidence for their role in mediating the binding of histones to deoxyribonucleic acid during the cell cycle. *Biochem. J.* 139:71-76.

Thrall, C.L., Park, W.D., Rashba, H.W., Stein, J.L., Mans, R.J. and Stein, G.S. (1974) *In vitro* synthesis of DNA complementary to polyadenylated histone messenger RNA. *Biochem. Biophys. Res. Comm.* 61:1443-1449.

Stein, G.S. and Burtner, D.L. (1975) Gene activation in human diploid cells: age-dependent modifications in the stability of messenger RNAs for nonhistone chromosomal proteins. *Biochim. Biophys. Acta* 390:56-68.

Stein, G.S., Mans, R.J., Gabbay, E.J., Stein, J.L., Davis, J. and Adawadkar, P.D. (1975) Evidence for fidelity of chromatin reconstitution. *Biochem.* 14:1859-1886.

Krause, M.O., Kleinsmith, L.J. and Stein, G.S. (1975) Properties of the genome in normal and SV-40 transformed WI-38 human diploid fibroblasts. I. Composition and metabolism of nonhistone chromosomal proteins. *Exp. Cell Res.* 92:164-174.

Krause, M.O. and Stein, G.S. (1975) Properties of the genome in normal and SV-40 transformed WI-38 human diploid fibroblasts. II. Metabolism and binding of histones. *Exp. Cell Res.* 92:175-190.

Krause, M.O., Kleinsmith, L.J. and Stein, G.S. (1975) Properties of the genome in normal and SV-40 transformed WI-38 human diploid fibroblasts. III. Turnover of nonhistone chromosomal proteins and their phosphate groups. *Life Sci.* 16:1047-1058.

Knock, F.E., Stein, G.S., Davis, J., Galt, R.M. Oester, Y.T. and Sylvester, R. (1975) Effects of selected sulfhydryl inhibitors on nonhistone chromosomal proteins of HeLa cells. *Oncology* 32:291.

Maale, G., Stein, G. and Mans, R. (1975) Effects of cordycepin and cordycepintriphosphate on polyadenylic and ribonucleic acid synthesizing enzymes from eukaryotes. *Nature* 255:80-82.

Pumo, D.E., Stein, G.S. and Kleinsmith, L.J. (1975) Stimulated phosphorylation of nonhistone phosphoproteins in SV-40 transformed WI-38 human diploid fibroblasts. *Biochim. Biophys. Acta* 402:125-130.

Stein, G.S., Park, W.D., Thrall, C.L., Mans, R.J. and Stein, J.L. (1975) Cell cycle stage-specific transcription of histone genes. *Biochem. Biophys. Res. Comm.* 63:945-949.

Stein, J.L., Thrall, C.L., Park, W.D., Mans, R.J. and Stein, G.S. (1975) Hybridization analysis of histone messenger RNA: association with polyribosomes during the cell cycle. *Science* 189:557-558.

Park, W.D., Thrall, C.L., Stein, J.L. and Stein, G.S. (1975) Nonhistone chromosomal proteins: evidence for their role in the regulation of histone gene transcription from chromatin during the cell cycle. *IRCS Med. Sci.* 3 (suppl): 7.

Stein, G.S., Thrall, C.L., Park, W.D. and Stein, J.L. (1975) Cell cycle stage-specific expression of histone genes in intact HeLa S3 cells. *IRCS Med. Sci.* 3 (suppl):6.

Zornetzer, M.S. and Stein, G.S. (1975) Gene expression in mouse neuroblastoma cells: properties of the genome. *Proc. Natl. Acad. Sci. U.S.A.* 72:3119-3123.

Stein, G.S., Park, W.D., Thrall, C.L., Mans, R.J. and Stein, J.L. (1975) Regulation of cell cycle stage-specific transcription of histone genes from chromatin by nonhistone chromosomal proteins. *Nature* 257:764-767.

Cohen, R.J. and Stein, G.S. (1975) Chromosomal proteins of *phycomyces blakesleeanus*. *Exp. Cell Res.* 96:247-254.

- Stein, G.S., Roberts, R.M., Davis, J.L., Head, W.J., Stein, J.L., Thrall, C.L., Van Veen, J. and Welch, D.W. (1975) Are glycoproteins and glycosaminoglycans components of the eukaryotic genome? *Nature* 258:639-641.
- Pumo, D.E., Stein, G.S. and Kleinsmith, L.J. (1976) Phosphorylation of nonhistone chromosomal proteins early during the pre-replicative phase of the cell cycle of WI-38 human diploid fibroblasts. *Cell Diff.* 5:45-52.
- Krause, M.O. and Stein, G.S. (1976) Arginine-rich histone synthesis and acetylation in WI38 cells stimulated to proliferate. *Exp. Cell Res.* 100:63-70.
- Krause, M.O., Noonan, K.D., Kleinsmith, L.J. and Stein, G.S. (1976) The effect of SV40 transformation on the chromosomal proteins of 3T3 mouse embryo fibroblasts. *Cell Diff.* 5:83-96.
- Kleinsmith, L.J., Stein, J.L. and Stein, G.S. (1976) Dephosphorylation of nonhistone proteins specifically alters the pattern of gene transcription in reconstituted chromatin. *Proc. Natl. Acad. Sci. U.S.A.* 73:1174-1178.
- Park, W.D., Thrall, C.L., Stein, J.L. and Stein, G.S. (1976) Activation of histone gene transcription from chromatin of G1 HeLa cells by S-phase nonhistone chromosomal proteins. *FEBS Letters* 62:226-229.
- Stein, J.L., Reed, K. and Stein, G.S. (1976) Effect of histones and nonhistone chromosomal proteins on the transcription of histone genes from HeLa S3 cells DNA. *Biochem.* 15:3291-3295.
- Thomson, J.A., Stein, J.L., Kleinsmith, L.J. and Stein, G.S. (1976) Activation of histone gene transcription by nonhistone chromosomal phosphoproteins. *Science* 194:428-431.
- Stein, G.S., Park, W.D., Stein, J.L. and Lieberman, M.W. (1976) Synthesis of nuclear proteins during DNA repair synthesis in human diploid fibroblasts damaged with ultraviolet radiation or N-acetoxy-2-acetylaminofluorene. *Proc. Natl. Acad. Sci. U.S.A.* 73:1466-1470.
- Park, W.D., Stein, J.L. and Stein, G.S. (1976) Activation of *in vitro* histone gene transcription from HeLa S3 chromatin by S-phase nonhistone chromosomal proteins. *Biochem.* 15:3296-3300.
- Jansing, R.L., Stein, J.L. and Stein, G.S. (1977) Activation of histone gene transcription by nonhistone chromosomal proteins in WI-38 human diploid fibroblasts. *Proc. Natl. Acad. Sci. U.S.A.* 74:173-177.
- Stein, J.L., Stein, G.S. and McGuire, P.M. (1977) Histone messenger RNA from HeLa cells: evidence for modified 5'-termini. *Biochem.* 16:2207-2213.
- Stein, G., Stein, J.L., Shephard, E., Park, W. and Phillips, I. (1977) Evidence that the coupling of histone gene expression and DNA synthesis in HeLa S3 Cells is not mediated at the transcriptional level. *Biochem. Biophys. Res. Comm.* 77:245-252.
- Park, W., Jansing, R., Stein, J. and Stein, G. (1977) Activation of histone gene transcription in quiescent WI-38 cells or mouse liver by a nonhistone chromosomal protein fraction from HeLa S3 cells. *Biochem.* 16:3713-3721.



Lichtler, A.C., Stein, G.S. and Stein, J.L. (1977) Isolation and characterization of two mRNAs from HeLa S3 cells coding for histone H4. *Biochem. Biophys. Res. Comm.* 77:845-853.

Detke, S., Stein, J.L. and Stein, G.S. (1978) Synthesis of histone messenger RNAs by RNA polymerase II in nuclei from S-phase HeLa S3 cells. *Nucl. Acids Res.* 5:1515-1528.

Mon, M.J., Jansing, R.L., Doggett, S., Stein, J.L. and Stein, G.S. (1978) Influence of tetrahydrocannabinol on cell proliferation and macromolecular biosynthesis in human cells. *Biochem. Pharmacol.* 27:1759-1765.

Detke, S., Lichtler, A., Phillips, I., Stein, J. and Stein, G. (1979) Reassessment of histone gene expression during the cell cycle in human cells by using homologous H4 histone cDNA. *Proc. Natl. Acad. Sci. U.S.A.* 76:4995-4999.

Phillips, I.R., Shephard, E.A., Tatcher, W.B., Stein, J.L. and Stein, G.S. (1979) Evidence for nonhistone chromosomal protein kinase activity associated with nucleosomes isolated from HeLa S3 cells. *FEBS Letters* 106:56-62.

Thomson, J.A., Mon, M.J., Stein, J.L., DuVal, K.A., Kleinsmith, L.J. and Stein, G.S. (1979) Partial fractionation and characterization of nuclear protein kinases in HeLa S3 cells. *Cell Diff.* 8:305-321.

Briggs, R.C., Campbell, A., Chiu, J-F., Hnilica, L.S., Lincoln, G., Stein, J. and Stein, G. (1979) Specificity of DNA-associated nuclear antigens in HeLa cells and distribution during the cell cycle. *Cancer Res.* 39:3683-3688.

Phillips, I.R., Shephard, E.A., Stein, J.L., Kleinsmith, L.J. and Stein, G.S. (1979) Nuclear protein kinase activities during the cell cycle of HeLa S3 cells. *Biochim. Biophys. Acta* 565:326-346.

Thomson, J.A., Laipis, P.J., Stein, G.S., Stein, J.L., Lander, M.R. and Chattopadhyay, S.K. (1980) Regulation of endogenous type C viruses: evidence for transcriptional control of AKR viral expression. *Virology* 101:529-533.

Detke, S., Stein, G.S. and Stein, J.L. (1980) Influence of chlorambucil, a bifunctional alkylating agent on DNA replication and histone gene expression in HeLa S3 Cells. *Cancer Res.*, 40:967-974.

Lichtler, A.C., Detke, S., Phillips, I.R., Stein, G.S. and Stein, J.L. (1980) Multiple forms of H4 histone mRNA in human cells. *Proc. Natl. Acad. Sci. U.S.A.* 77:1942-1946.

McMaster, G.K., Samulski, R.J., Stein, J.L. and Stein, G.S. (1980) Rapid purification of covalently closed circular DNAs of bacterial plasmids and animal tumor viruses. *Analytical Biochem.* 109:47-54.

Olinski, R., Briggs, R.C., Hnilica, L.S., Stein, J. and Stein, G. (1981) Cross-linking of chromosomal nonhistone proteins to DNA by UV radiation and some antitumor drugs. *Chem.-Biol. Interactions* 34:173-183.

Mon, M.J., Haas, A.E., Stein, J.L. and Stein, G.S. (1981) Influence of psychoactive and nonpsychoactive cannabinoid on cell proliferation and macromolecular biosynthesis in human cells. *Biochem. Pharmacol.* 30:31-43.

Mon, M.J., Haas, A.E., Stein, J.L. and Stein, G.S. (1981) Influence of psychoactive and nonpsychoactive cannabinoid on chromatin structure and function in human cells. *Biochem. Pharmacol.* 30:45-58.

Phillips, I.R., Shephard, E.A., Stein, J.L. and Stein, G.S. (1981) Phosphorylation and dephosphorylation of chromosomal proteins during *in vitro* transcription. *Cell Diff.* 10:23-31.

Shephard, E.A., Jansing, R.L., Phillips, I.R., Stein, J.L. and Stein, G.S. (1981) Representation of mRNA sequences in normal and SV40 transformed human diploid fibroblasts. *Anticancer Res.* 1:89-92.

Olinski, R., Briggs, R.C., Hnilica, L.S., Stein, J. and Stein, G. (1981) Gamma-radiation-induced crosslinking of cell-specific chromosomal nonhistone protein--DNA complexes in HeLa chromatin. *Radiation Research* 86:102-114.

Sierra, F., Marashi, F., McMaster, G., Rickles, R., Cornwall, S., Leza, A., Stein, J. and Stein, G. (1981) Two molecular approaches for identification of human genomic sequences whose expression is functionally coupled with DNA replication. *Anticancer Res.* 1:353-360.

Shephard, E.A., Phillips, I., Davis, J.L., Stein, J.L. and Stein, G.S. (1982) Evidence for the resumption of DNA replication prior to histone synthesis in HeLa cells after release from treatment with hydroxurea. *FEBS Letters* 140(2):189-192.

Marashi, F., Baumbach, L., Rickles, R., Sierra, F., Stein, J. and Stein, G. (1982) Histone proteins in HeLa S3 cells are synthesized in a cell cycle stage specific manner. *Science* 215:683-685.

Sierra, F., Leza, A., Marashi, F., Plumb, M., Rickles, R., Van Dyke, T., Clark, S., Wells, J., Stein, G.S. and Stein, J.L. (1982) Human histone genes are interspersed with members of the Alu family and with other transcribed sequences. *Biochem. Biophys. Res. Comm.* 104:785-792.

Sierra, F., Lichtler, A., Marashi, F., Rickles, R., Van Dyke, T., Clark, S., Wells, J., Stein, G. and Stein, J. (1982) Organization of human histone genes. *Proc. Natl. Acad. Sci. U.S.A.* 79:1795-1799.

Rickles, R., Marashi, F., Sierra, F., Clark, S., Wells, J., Stein, J. and Stein, G. (1982) Analysis of histone gene expression during the cell cycle in HeLa cells by using cloned human histone genes. *Proc. Natl. Acad. Sci. U.S.A.* 79:749-753.

Lichtler, A.C., Sierra, F., Clark, S., Wells, J.R.E., Stein, J.L. and Stein, G.S. (1982) Multiple H4 histone mRNAs of HeLa cells are encoded in different genes. *Nature* 298:195-198.

Wojtkowiak, Z., Duhl, D.M., Briggs, R.C., Hnilica, L.S., Stein, J.L. and Stein, G.S. (1982) A nuclear matrix antigen in HeLa and other human malignant cells. *Cancer Research* 42:4546-4552.

Kappy, M.S., Stein, G. and Stein, J. (1983) Recombinant DNA and endocrine therapy in children. *Am. Jour. Dis. Child.* 137:685-690.

Plumb, M.A., Stein, J. and Stein, G. (1983) Coordinate regulation of multiple histone mRNAs during the cell cycle in HeLa cells. *Nucl. Acids Res.* 11:2391-2410.

Sierra, F., Stein, G. and Stein, J. (1983) Structure and *in vitro* transcription of a human H4 histone gene. *Nucl. Acids Res.* 11:7069-7086.

Green, L.G., Stein, J.L. and Stein G.S. (1983) A decreased influence of cannabinoids on macromolecular biosynthesis and cell proliferation in human cells which metabolize polycyclic hydrocarbon carcinogens. *Anticancer Res.* 3:211-218.

Plumb, M., Stein, J. and Stein, G. (1983) Influence of DNA synthesis inhibition on the coordinate expression of core human histone genes. *Nucl. Acids Res.* 11 (22):7927-7945.

Banjar, Z.M., Hnilica, L.S., Briggs, R.C., Stein, J. and Stein, G. (1983) Crosslinking of chromosomal proteins to DNA in HeLa cells by UV, gamma radiation and some antitumor drugs. *Biochem. Biophys. Res. Comm.* 114:767-773.

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Green, L., Stein, G. and Stein, J. (1984) Histone gene expression in human diploid fibroblasts: analysis of histone mRNA levels using cloned human histone genes. *Mol. Cell. Biochem.* 60:123-130.

Banjar, Z.M., Hnilica, L.S., Briggs, R.C., Stein, J. and Stein, G. (1984) Cis- and trans-diamminedichloroplatinum (II) mediated cross-linking of chromosomal non-histone proteins to DNA in HeLa cells. *Biochem.* 23:1921-1926.

Baumbach, L., Marashi, F., Plumb, M., Stein, G. and Stein, J. (1984) Inhibition of DNA replication coordinately reduces cellular levels of core and H1 histone mRNAs: Requirement for protein synthesis. *Biochem.* 23:1618-1625.

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Helms, S., Baumbach, L., Stein, G. and Stein, J. (1984) Requirement of protein synthesis for the coupling of histone mRNA levels and DNA replication. *FEBS Letters* 168:65-69.

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