

Maureen Shuh

Curriculum Vitae

(Web version)

Education

- 1986 B.A.
Microbiology and Immunology
University of California, Berkeley, CA.
- 1996 Ph.D. Biology
Program in Cell & Molecular Biology & Biochemistry
Brown University, Providence, RI.
- 2000-2004 Post-doctoral Fellowship
National Cancer Institute-National Institutes of Health
Frederick, MD.

Honors and Awards

- 1983-1984: University of California Regent's Scholarship
- 1991-1992: National Institutes of Health Traineeship for pre-doctoral training,
Division of Biology & Medicine, Brown University
- 2003: University Faculty Senate's Teaching Award, Loyola University New Orleans
- 2004: University Faculty Senate's Advising Award, Loyola University New Orleans
- 2005: Who's Who Among America's Teachers
(nominated by Loyola University New Orleans alumnus)
- 2005: Nominated, University Faculty Senate Research Award

Employment History

- 1986 Laboratory Assistant
Chiron Corporation, 4560 Horton Street, Emeryville, CA.
- 1986-1988 Research Associate
HIV Vaccine Project, Chiron Corporation, Emeryville, CA.
- 1987-1988 Supervisor
Biocontainment Laboratory, level 3, HIV Vaccine Project Chiron Corporation,
Emeryville, CA.
- 1988-1989 Laboratory Specialist
Department of Human Genetics, Howard Hughes Medical Institute
University of Utah, Salt Lake City, UT.

Maureen Shuh

Curriculum Vitae

(Web version)

- 1996-2000 Post-doctoral Fellow
National Cancer Institute, Frederick, MD.
- 2000-present Assistant Professor
Department of Biological Sciences, Loyola University New Orleans, New Orleans, LA.

Teaching

- 1991-1995: Introductory Biology, Advanced Biochemistry Laboratory, Immunology (Brown University): Teaching Assistant.
- 1993-1994: Teaching Certification (Center for the Advancement of College Teaching, Brown University).
- 1996-1997, I: Advanced Biochemistry (Hood College; Frederick, MD): Co-instructor.
- 2000-present: Department of Biological Sciences, Loyola University New Orleans
For majors – Cells and Heredity, Cell and Molecular Biology (lecture and laboratory), Virology, Immunology, Molecular Genetics (lecture and laboratory), Microbiology (lecture and laboratory).
For non-majors – Microbes: Friend or Foe?

Summary of Teaching Philosophy at Loyola:

I emphasize the basic facts and vocabulary of Biology, and I strive to assess students' analytical abilities as opposed to their ability to memorize. To keep students engaged and to infuse new material into courses every semester, I keep students up-to-date on current events in research advances in Biology.

External Funding and Grants

- Agency: LA Board of Regents Research and Development Proposals
Title: Human T Lymphotropic Virus Type I (HTLV-I) Tax Modulation of Chromatin Structure and Chromatin-Related Proteins
PI: **Maureen Shuh**
Status: Funded at \$100,008 (June 2001 to June 2004).
- Agency: National Institutes of Health (PI-initiated R15 grant)
Title: The Mechanism of HTLV-I Activation of the SRF Pathway.
PI: **Maureen Shuh**
Status: Funded in full (August 1, 2003, to July 31, 2006).

Maureen Shuh

Curriculum Vitae
(Web version)

3. Agency: Cancer Association of Greater New Orleans (CAGNO)
Title: The Role of Mitogen Activated Protein Kinase (MAPK) pathway in Adult T Cell Leukemia (ATL)
PI: **Maureen Shuh**
Status: Funded at \$15,000 (February 2002 to February 2003)
4. Agency: Louisiana Board of Regents Undergraduate Enhancement Proposal
Title: Enhancement of Cell and Molecular Biology Laboratory Experiences
PI: Donald Hauber
Co-PI: **Maureen Shuh**
Status: Funded at \$30,125 (2003).
5. Agency: National Institutes of Health, Minority Supplement
Title: The Mechanism of HTLV-I Activation of the SRF Pathway.
PI: **Maureen Shuh**
Status: Funded at \$25,350 (May 2004 to May 2006).
6. Agency: National Institutes of Health, Minority Supplement.
Title: The Mechanism of HTLV-I Activation of the SRF Pathway.
PI: **Maureen Shuh**
Status: Funded at \$23,264 (July 2004 – May 2006).
7. Agency: Louisiana Board of Regents Program Enhancement Grant
Title: Greater New Orleans Area Protein Information Network
PI: Paul Hanson (UNO Chemistry)
Co-PIs: **Maureen Shuh** (Loyola Biology), Bruce Gibb (UNO Chemistry), Bernard Rees (UNO-Biology), Steven Rick (UNO Chemistry)
Status: Recommended for funding at \$27,885 (June 1, 2005 to May 31, 2006)

Internal funding:

1. Fellows Award for Research Excellence 1999, National Institutes of Health, Travel Award (\$1,000 applied, \$1,000 funded).
2. Loyola University Committee on Grants and Leaves, Fall 2000, "The Mechanism of HTLV-I Transformation of Human T Cells" (\$2,500 applied, \$2,250 funded).
3. Loyola University Committee on Grants and Leaves, Fall 2001, "The Regulation of Kinase Signaling Pathways in T Cell Leukemia" (\$2,500 applied, \$2,500 funded).
4. Loyola University Committee on Grants and Leaves, Fall 2002, "HTLV-I Regulation of the Inhibitor Id in Adult T Cell Leukemia (ATL)" (\$2,500 applied, \$2,500 funded).

Maureen Shuh

Curriculum Vitae
(Web version)

5. Loyola University Committee on Grants and Leaves, Fall 2003, “The Determination of Tax Protein Structure” (\$2,500.00 applied, \$1,250 funded).
6. Loyola University Committee on Grants and Leaves, Fall 2004, “The expression of Id2 in HTLV-I-positive T cells” (\$2,500.00 applied, \$2,000 funded).

Publications

Maureen Shuh and Douglas C. Hixson. V(D)J recombination of chromosomally integrated, wild-type deletional and inversional substrates occurs at similar frequencies with no preference for orientation. *Immunology Letters* (2005) 97(1):69-80.

Maureen Shuh and Mark Beilke. The human T-cell leukemia virus type I (HTLV-I): New insights into the clinical aspects and molecular pathogenesis of adult T-cell leukemia/lymphoma (ATLL) and tropical spastic paraparesis/HTLV-associated myelopathy (TSP/HAM). *Microscopy Research and Technique* (Special Issue on Virus and Neoplasia) (2005) Accepted.

Maureen Shuh and David Derse. Ternary complex factors and cofactors are essential for human T-cell leukemia virus type I Tax transactivation of the serum response element. *Journal of Virology* (2000) 74(23):11394-11397.

David Derse, **Maureen Shuh**, and Shawn A. Hill. Examining HTLV-I gene function and expression with molecularly cloned proviruses. In *Molecular Pathogenesis of HTLV-I: A Current Perspective*. Arlington, Virginia: ABI Professional Publications, 1999, 7 pages.

Shawn A. Hill, **Maureen Shuh**, and David Derse. Comparisons of defective HTLV-I proviruses predict the mode of origin and coding potential of internally deleted genomes. *Virology* (1999) 263:273-281.

Maureen Shuh, Shawn A. Hill, and David Derse. Defective and wild-type HTLV-I proviruses: Characterization of gene products and potential trans-interactions between proviruses. *Virology* (1999) 262:442-451.

Robert. Weiss, Diane M. Dunn, **Maureen Shuh**, John. F. Atkins, and Raymond. F. Gesteland. *E.coli* ribosomes re-phase on retroviral frameshift signals at rates ranging from 2 to 50 percent. *The New Biologist* (1989) 1(2):159-169.

Kathlyn S. Steimer, James C. Stephans, **Maureen Shuh**, Keith W. Higgins, Ian Bathurst, and Phillip J. Barr. HIV-1 polypeptides produced in genetically engineered yeast in identifying the targets of viral the targets of viral-specific neutralizing antibodies. In *Retroviruses of Human A.I.D.S. and Related Animal Disease: Colloque Des Cent Gardes*. Lyon, France: Foundation Marcel Merieux (1987), 6 pages.

Maureen Shuh

Curriculum Vitae
(Web version)

Presentations and Abstracts (* denotes undergraduate student authors)

Kathlyn S. Steimer, James C. Stephans, **Maureen Shuh**, and Elizabeth Miller.

Neutralizing antibodies in human sera bind to genetically engineered non-glycosylated gp120 produced in yeast. In the meeting proceedings of *The Third International Conference on AIDS*, Paris, France 1987, page 69.

Maureen Shuh, James Jackson, and Surendra Sharma. Anti-sense DNA oligonucleotide approach to inhibit growth of malignant human B cells. In *Journal of Cellular Biochemistry: Abstracts, 20th Annual Meetings, Keystone Symposia on Molecular & Cellular Biology*. Keystone, Colorado, 1991, page 33.

David Derse, **Maureen Shuh**, Shawn Hill, Patricia Lloyd, Barry Morse, and Gisela Heidecker. Viral genetic determinants of HTLV-I infectivity and replication. In *Leukemia* (proceedings from the HTLV-I Molecular Biology and Pathogenesis Meeting), Airlie, VA, March 17-19, 2000, page 554.

Maureen Shuh and David Derse. HTLV-I Tax activation of serum response factor-dependent transcription requires ternary complex factors. In the *Proceedings of the 91st Annual Meeting of the American Association for Cancer Research*, San Francisco, CA, April 1-5, 2000, page 456.

David Derse and **Maureen Shuh**. Ternary complex factors and CBP are essential for HTLV-I Tax activation of the serum response element. In the *Abstracts of papers presented at the 1999 meeting on Retroviruses*, Cold Spring Harbor, NY, September 1-5, 2000, page 3.

Barry A. Morse, **Maureen Shuh**, and David Derse. Interaction of HTLV-I Tax with ternary complex factors in stimulating expression from the serum response element. In the proceedings from *The 12th International Workshop on Retroviral Pathogenesis*, Annapolis, MD, October 29-November 1, 2000, page 67.

Jessica E. Landry, Frederick C. Streich, and **Maureen Shuh**. Constitutive activation of the MAPK pathway by HTLV-I Tax. Proceedings from Experimental Biology Meeting 2002. *The FASEB Journal*. 16(4):8.13.

Erin C. Cunningham, Frederick C. Streich, and **Maureen Shuh**. Transcriptional Regulatory Mechanisms, satellite meeting of the American Society for Biochemistry and Molecular Biology (ASBMB): New Orleans, LA, April 19-20, 2002. The regulation of the inhibitor Id by HTLV-I Tax. Proceedings from Experimental Biology Meeting 2002. *The FASEB Journal*. 16(5):681.6.

Patrice Sutton*, Katherine M. Smith*, Frederick C. Streich, Jr., and **Maureen Shuh**. Annual Meeting of the South Central Branch of the American Society for Microbiology (SCB-ASM): New Orleans, LA, October 24-25, 2003. Constitutive activation of MAPK proteins in human T cell leukemia virus type I (HTLV-I) cells.

Maureen Shuh

Curriculum Vitae
(Web version)

Katherine M. Smith*, Frederick C. Streich, Erin C. Cunningham*, and **Maureen Shuh**. The 11th International Conference on Human Retrovirology: HTLV and Related Viruses: San Francisco, CA, June 9-12, 2003. The regulation of the MAPK pathway by HTLV-I Tax. *AIDS Research and Human Retroviruses* 19(2003)S-54.

James B. Delehanty(1), Thomas C. Stuart(2), D. Andrew Knight(3), Ellen R. Goldman(1), Frederick C. Streich(3), **Maureen Shuh**(3), Jason E. Bongard(3) and Eddie L. Chang(1). Designing Antimicrobial Agents Based on Cobalt Cyclen Complexes. (1)Naval Research Laboratory, Washington, DC, (2)Tulane University, New Orleans, LA, (3)Loyola University, New Orleans, LA. 60th Southwest Regional Meeting of the American Chemical Society. (September 29-October 2, 2004).

Collaborators

1. Dr. Andrew Sharrocks, University of Manchester, U.K.
2. Dr. Alan Whitmarsh, University of Manchester, U.K.
3. Dr. David Derse, National Cancer Institute
4. Dr. Mark Beilke, Tulane University Medical School
5. Dr. Pernilla Wittung-Stafeshede, Rice University
6. Dr. Susan Marriott, Baylor University
7. Dr. Paul Hanson, University of New Orleans
8. Dr. D. Andrew Knight, Loyola University New Orleans
9. Dr. Lawrence Cousens, Chiron Corporation
10. Dr. Rosalie Anderson, Loyola University New Orleans
11. Dr. Scott Michael, Florida Gulf Coast University

Professional Societies

Member – The Association for the Advancement of Science

Member – American Association for Cancer Research

Member – American Society for Microbiology

Member – South Central Branch of the American Society for Microbiology

Member -- American Society for Biochemistry and Molecular Biology