CURRICULUM VITAE

Name: Sankar Swaminathan, M.D. March 16, 2021

Present Position and Address:

Professor and Chief, Division of Infectious Disease,

Don Merrill Rees Presidential Endowed Chair

Department of Internal Medicine, University of Utah School of

Medicine, Salt Lake City, UT 84132

Date of Birth: July 4, 1958

Place of Birth: Trivandrum, India

Citizenship: USA

Education:

1979 A.B magna cum laude, Biochemistry and Molecular

Biology, Harvard College, Cambridge, Massachusetts

1982 M.S. Microbiology and Immunology, Emory University School

of Medicine, Atlanta, Georgia

1984 M.D. Emory University School of Medicine, Atlanta, Georgia

Professional and Teaching Experience:

1984-1985 Intern, Internal Medicine, University of Chicago Medical

Center, Chicago, IL.

1985-1987 Resident, Internal Medicine, University of Chicago Medical

Center, Chicago, IL

1987-1988 Clinical Fellow, Division of Infectious Disease, Beth Israel

Hospital, Brigham & Women's Hospital, Dana Farber Cancer

Institute, Boston, MA.

1987-1988 Clinical Fellow in Medicine, Harvard Medical School, Boston,

MA.

1988-1990 Research Fellow, Division of Infectious Disease, Beth Israel

Hospital, Brigham & Women's Hospital, Dana Farber Cancer

Institute, Boston, MA.

1988-1990 Research Fellow, Department of Microbiology and Molecular

Genetics, Harvard Medical School, Boston, MA.

1990-1992 Instructor in Medicine, Division of Infectious Disease, Brigham &

Women's Hospital, Boston, MA.

1992-1995	Assistant Professor, Division of Infectious Disease, Departments of Medicine and Microbiology and Immunology, Thomas Jefferson University, Philadelphia, PA.
1992-1995	Member, Graduate Faculty, College of Graduate Studies, Thomas Jefferson University, Philadelphia, PA.
1995-1997	Assistant Professor, Division of Infectious Diseases, Department of Internal Medicine, University of Texas Medical Branch, Galveston.
1995-2000	Scientist, Sealy Center for Oncology and Hematology, University of Texas Medical Branch, Galveston.
1996-2000	Member, Graduate Faculty, Department of Microbiology and Immunology, University of Texas Medical Branch, Galveston.
1997-2000	Associate Professor, Division of Infectious Diseases, Departments of Internal Medicine and Microbiology &
2000-2008	Immunology, University of Texas Medical Branch, Galveston. Associate Professor, Departments of Internal Medicine and
2000-2000	Molecular Genetics and Microbiology, University of Florida, Gainesville, FL.
2008-2010	Professor, Departments of Internal Medicine and Molecular Genetics and Microbiology, University of Florida, Gainesville, FL.
2009-2010	Acting Chief, Division of Infectious Disease,
	Department of Internal Medicine University of Florida, Gainesville, FL.
2005-2010	Program Co-Director: Cancer Epigenetics and Tumor Virology, UF Shands Cancer Center, University of Florida, Gainesville, FL.
2010- curr.	Professor and Chief, Infectious Diseases Division, University of Utah School of Medicine, Salt Lake City, UT.
2012- curr.	Attending Physician, George E. Wahlen VA Medical Center, Salt Lake City, UT.
2013- curr.	Adjunct Professor, University of Utah, Department of Experimental Pathology.

Research Activities:

- A. 1. Epstein-Barr Virus.
 - 2. Kaposi's sarcoma-associated herpesvirus (KSHV, Human herpesvirus 8).
 - 3. Transcriptional and post-transcriptional gene regulation in oncogenic herpesviruses.
- B. 1988-1993 Physician Scientist Award K11, National Cancer Institute, National Institutes of Health.
 1992-1997 FIRST Award R29, National Cancer Institute, National Institutes of Health: Role of the EBV interleukin BCRF1

	in B cell infection and transformation.
1995-1998	Investigator, NIH Grant NO1-DE-52606: Passive
	Immunization: Treatment of Rabies Virus with Human
	Monoclonal Antibodies.
1997-1999	John Sealy Memorial Endowment Fund Recruitment
	Grant: The Role of Epstein-Barr Virus BMLF1 in Gene
	Regulation and Expression.
1998-2000	T32 Al07536-01, Emerging and Reemerging Infectious Diseases.
1999-2002	R21 CA82985-03 (HL), Regulation of angiogenesis by human
	herpesvirus 8.
2001-2006	T32 Al07110, Basic Microbiology and Infectious Diseases,
	Preceptor.
2006-2011	T32 CA09126 Training in Cancer Biology, Preceptor.
2009-2011	RC2 CA148407, Building a recombinant Herpesvirus core
	laboratory to systematically analyze the role of viral miRNAs in
	innate and adaptive immunity.
2006-2012	1R01CA119905, Viral and cellular gene regulation during lytic
	KSHV replication.
2008-2012	1R01CA119917, MicroRNAs in the KSHV life cycle, Co-investigator.
2014-2017	K08 Immune Responses to Vibrio Cholerae in Children
	Principal Investigator(s): Daniel T. Leung; Sankar Swaminathan
1999-2023	1R01 CA81133, Post-transcriptional gene regulation by EBV SM
	protein.
2014-2019	1101BX002262, Restriction of Oncogenic Herpesviruses by Host
	Cell Factors (VA Merit Review), Principal Investigator.
2018-2020	CSSG P30 supplement: Epigenetic Risk Factors for Lymphoma in
	HIV patients

Committee Responsibilities:

A. National and International:

1997	Ad hoc member, Virology study section (VR), National
	Institutes of Health.
1998-2001	Fellowship & Young Investigator Grants Award Committee,
	Infectious Diseases Society of America.
1999	Ad hoc member, Virology study section (VR), National
	Institutes of Health.
1999	Member, CSR Special Emphasis Panel, ZRG1 VR(01),
	National Institutes of Health.
1999	Member, CSR Special Emphasis Panel, ZRG1 AARR-1 (03), National
	Institutes of Health.
2000	Member, AIDS study section AARR-4 01 S, National

	Institutes of Health. Member, CSR Special Emphasis Panel, ZRG1 AARR-1 (07), April 2000, National Institutes of Health.
	Member, CSR Special Emphasis Panel, ZRG1 AARR-1 (08), July 2000, National Institutes of Health.
	Member, CSR Special Emphasis Panel, ZRG1 AARR-1 (09) Oct
	2000, National Institutes of Health.
2001-2003	Member, AIDS study section AARR-4 01 S, National Institutes of Health.
2004	Ad hoc member, VirB study section, National Institutes of Health. Program Project Special Emphasis Panel NCI-C RPRB (S1) (P).
2005	Member, Special Emphasis Panel, NIH AARR (A) 03.
	Member, Special Emphasis Panel, NIH, AARR-A 94.
2006	Member, Special Emphasis Panel NIH, AOIC.
2006	Reviewer, Science Foundation Ireland, Dublin, Ireland.
2006	Member, ZRG1 AARR-C 04, NIH Special Emphasis Panel.
2006	NCI Cellular and Molecular Biology P01 Cluster Review Panel BBRPD.
2007	Ad hoc member, AOIC study section, National Institutes of Health.
2007	Member, Molecular Oncology P01 Special Emphasis Panel
2008	Ad hoc member, DDR Study Section, National Institutes of Health.
2009	Member, Molecular Oncology P01 Special Emphasis Panel
	Member, ZRG1 IDM-C 58 R, RFA09-003 Challenge Grants Panel 9
	Member, 2009/10 ZRG1 IMM-E (58) R
2010	Member, Molecular Oncology P01 Special Emphasis Panel
2010-2012	CSR College of Reviewers, NIH.
2011	Member, European Commission Evaluation Panel. FP7-HEALTH-2011.2.4.1-3: Epidemiology and aetiology of infection-related
0011 001	cancers. Brussels, Belgium.
2011-2015	Member, National Comprehensive Cancer Network (NCCN)
0011	Prevention and Treatment of Cancer-Related Infections.
2011	ZRG1 AARR-K(02) Special Emphasis Panel
	Ad Hoc Member, VirA NIH Study section
	Member, ZAI1 LGR-I (M1) PO1 Review Panel
2012	Member ZRG1 IDM-M (02) M, NIH Special Emphasis Panel.
	Member ZAI1-LGR-I-M1, NIH PO1 Review Panel
	Member, ZCA1 RPRB-0 (O1) P, NCI PO1 Review Panel
	Ad Hoc Member, VirB NIH Study section
	Ad Hoc Member, AOIC NIH study section
	Chair, NIH Special Emphasis Panel ZRG1 AARR-K(03)
	Member, Special Emphasis Panel, NCI-I R

2012-2015 2012	Grant reviewer, Medical Research Council, United Kingdom Research Committee, Infectious Diseases Society of America NIAID/IDSA ID Research Careers Meeting Program Committee
2012	Member, NCI-I NIH study section
2013	•
2013-2017	Member, Special Emphasis Panel II Program Project Review Panel Chair, NIAID/IDSA ID Research Careers Meeting Program Committee
2014-2018	Member VirA NIH study section.
2014-2010	Member, NIH AIDS Malignancy Consortium Review Panel, NIH.
2015	Member, NCI UNC Lineberger Comprehensive Cancer Center Site Visit Committee, Chapel Hill, NC.
2015	European Commission Evaluation Panel. PHC 14 – 2015: New
	therapies for rare diseases. Brussels, Belgium.
2016	Member, European Commission Evaluation Panel. SC1-PM-08-
	2017: New therapies for rare diseases. Brussels, Belgium.
2017	Member, NIH SEP ZCA1 RTRB-R (M2) R. RFA-CA-16-018
2017	Collaborative Consortia for the Study of HIV-Associated Cancers:
	U.S. and Low- and Middle-Income Country (LMIC) Partnerships
	(U54).
2017	Member, NCI Cancer Center Site Visit Committee, University of
2017	Wisconsin, Madison, WI.
2018	Ad hoc member, AOIC study section, NIH, NCI.
2018	Ad hoc member AOIC study section ZRG1-AARR-K-95
2018	NIAID (P01) Review Committee (ZAI1 PTM-I J4)
	: Vice-Chair, National Comprehensive Cancer Network (NCCN)
2013-current	Panel - Prevention and Treatment of Cancer-Related Infections.
2018-2020	Member, Antimicrobial Drugs Advisory Committee, FDA.
2019	Member, Program Project (P01) Review Panel, NIH/NCI, ZCA1
2019	RPRB-L (M1)
2019	Member, NCI Cancer Center Site Visit Committee, University of
	Washington, Seattle, WA. NCI-A-RTRB-0-E1
2019	Ad hoc member, NIH ZRG1 IDM-W Topics in Virology study section
2019	NIH/NCI Special review panel. Provocative Question RFA
2013	ZCA1-SRB-1-J2.
2020	
2020	Pac-12 COVID-19 Medical Advisory Committee
2020	SEP-6: NCI Clinical and Translational R21 and Omnibus R03 Review
	Study Section

В.	OTHER:	
	1993-1994	Thesis Committee for Gloria Chang, M.S. candidate in
		Department of Microbiology and Immunology, Thomas Jefferson University, Philadelphia, PA.
	1994-1995	Thesis Committee for John Maggioncalda, Ph.D. candidate
		in Department of Microbiology and Immunology, Thomas
		Jefferson University, Philadelphia, PA.
	1995-2000	Bone Marrow Transplant Task Force, University of Texas Medical
	.555 _555	Branch, Galveston.
	1997-1998	Graduate Medical Education Subcommittee for the LCME
	1337 1330	Self Study Task Force, University of Texas Medical Branch,
		Galveston.
	1998-2000	Student Evaluation Committee, NIAID Training Grant on Emerging
	1330 2000	and Tropical Infectious Diseases, University of Texas Medical
		Branch, Galveston.
	1998-2000	McLaughlin Fellowship Fund Committee, University of Texas
	1990-2000	Medical Branch, Galveston, TX.
	1999-2000	Biological Safety Committee, University of Texas Medical Branch,
	1999-2000	Galveston, TX.
	1999-2000	Antimicrobial Advisory Subcommittee of the Pharmacy &
	1999 2000	Therapeutics Committee, University of Texas Medical Branch,
		Galveston, TX.
	2000-2001	Joint Faculty Search Committee, Department of Pharmacology and
	2000 2001	Therapeutics and UF Shands Cancer Center.
		Laboratory Utilization Review Committee, Shands Hospital at
		University of Florida.
	2002-2006	Chair, Tumor Virology Faculty Search Committee, UF Shands
	2002 2000	Cancer Center
	2000-2004	Ph. D. supervisory committee, Jerome O'Neil, Molecular Genetics
		and Microbiology.
	2005-2008	Ph. D. supervisory committee, Rebecca Skalsky, Molecular Genetics
		and Microbiology.
	2005-2010	Co-Chair, UF Shands ACS Institutional Research Grant Review
		Committee.
	2005-2008	Member, Harn Museum Faculty Council.
	2005-presen	t Mentor, ASM Minority Mentoring Program.
	2006	Organizing Committee, Twelfth International Symposium on EBV
		and Associated Diseases, Boston, U.S.A., July 8-12th, 2006.
	2006	External Reviewer, Viral Oncology Program of the University of
		Maryland Greenbaum Cancer Center.
	2006-2009	Faculty Council, Department of Medicine representative

2007-2010	Member, University of Florida Performing Arts Advisory
	Committee for Policy and Operations.
2007-2009	Member, Senate Nominating Committee.
2009-2010	Member, University of Florida Cultural Plaza Advisory Committee
2011	Grant Reviewer for Landsteiner Foundation for Blood Transfusion
	Research, Netherlands
2012	Member, University of Utah School of Medicine, Surgery Chairman
	Search Committee
2012-2014	Mission Based Management Advisory Committee, University of
	Utah
2014- 2018	Pharmacy and Therapeutics Committee, University of Utah Health
	Plans

Teaching Responsibilities:

Courses Directed

- 2000 2010 Co-Director, GMS 6181 Virology Seminar, University of Florida, Gainesville, FL
- 2011- curr. Director, INTMD 7650 Infectious Disease Clinical Clerkship Director, INTMD 7880 Research Problems in Infectious Disease

Course Lectures

- 1997 2000 Instructor, University of Texas Medical Branch. Infectious Diseases Core Curriculum, Galveston, TX.
- 1997 2000 Instructor, Epstein Barr Virus, University of Texas Medical Branch, Microbiology & Immunology. Graduate Virology Course, Galveston, TX.
- 1997 2000 Instructor, University of Texas Medical Branch. Infections in patients with impaired immune response, JMS Lecture series, Galveston, TX
- 2000 2010 Instructor, GMS 6181, University of Florida. Virology Seminar
- 2000 2010 Instructor, BMS 5300, University of Florida. Medical Microbiology & Infectious Diseases-Herpesviruses
- 2000 2010 Instructor, Controversies in Microbiology, University of Florida
- 2000 2005 Instructor, GMS 6001, University of Florida. IDP Fundamentals, X.pigmentosum, Ataxia-Telangiectasia
- 2001 2010 Instructor, University of Florida. Clinical Microbiology Conferences (CMC's)
- 2002 2010 Instructor, GMS6035, University of Florida. Cancer Biology, Viral Oncogenesis

2005 - 2010 2007 - 2010	Instructor, GMS 6036, University of Florida. Advanced Virology III. Instructor, GMS 6001: DNA Replication, University of Florida. IDP
2011	Core Course. Instructor, PATH 6410: Molecular Virology, University of Utah, Pathology
2012	Instructor (1): MS2015 H+D - Basic Virology, University of Utah
2012	Instructor (1): MS2015 H+D - Viral Pathogenesis, University of Utah
2012	Instructor (1): MS2015 H+D - CNS Infections, University of Utah
2012	Instructor (1): MS2015 H+D - Bioterrorism, University of Utah
2013	Instructor (1): MS2016 H+D - Basic Virology, University of Utah
2013	Instructor (1): MS2016 H+D - Viral Pathogenesis, University of Utah
2013	Instructor (1): MS2016 H+D - Select Agents/Zoonoses, University of Utah
2013	Instructor (1): MS2016 H+D - GI Infections, University of Utah
2013	Instructor (1): MS2016 H+D - CNS Infections, University of Utah
2013	Instructor, PATH 6410: Molecular Virology, University of Utah, Pathology
2014	Instructor, MD ID (1): MS2017 H+D - Introduction to Virology,
	University of Utah, Deans Office - SOM
2014	Instructor, MD ID (1): MS2017 H+D - Viral Pathogenesis, University of Utah, Deans Office - SOM
2014	Instructor, MD ID (1): MS2017 H+D - GI Infections, University of Utah, Deans Office - SOM
2014	Instructor, MD ID (1): MS2017 H+D - Zoonoses, University of Utah, Deans Office - SOM
2014	Instructor, MD ID (1): MS2017 H+D - CNS Infections, University of Utah, Deans Office - SOM
2015	Instructor, MD ID (1): MS2017 H+D - Introduction to Virology, University of Utah, Deans Office - SOM
2015	Instructor, MD ID (1): MS2017 H+D - Viral Replication, University of Utah, Deans Office - SOM
2015	Instructor, MD ID (1): MS2017 H+D - Viral Genetics, University of Utah, Deans Office - SOM
2015	Instructor, MD ID (1): MS2017 H+D - Viral Pathogenesis, University of Utah, Deans Office - SOM
2015	Instructor, MD ID (1): MS2017 H+D - Zoonoses, University of Utah, Deans Office - SOM
2015	Instructor, MD ID (1): MS2017 H+D - CNS Infections, University of Utah, Deans Office - SOM

Clinical Teaching 2009 Infectious Disease Fellow lectures: Herpesviruses, Catheter-related infections, Bioterrorism agents 2009 2nd year medical student EPC (Physical Diagnosis) 2011 Primary Instructor, INTMD 7880 (1): Infectious Dis Research, 4 SCH, 1 student, University of Utah, Internal Medicine 2012 Primary Instructor, INTMD 7650 (1): Inf Dis Clerkship, 6 SCH, 2 students, University of Utah, Internal Medicine 2013 Primary Instructor, INTMD 7650 (1): Inf Dis Clerkship, 8 SCH, 2 students, University of Utah, Internal Medicine 2014 Primary Instructor, INTMD 7650 (1): Inf Dis Clerkship, 2 SCH, 1 student, University of Utah, Internal Medicine

Laboratory Teaching

2012	Path 6830, [Lab Orientation, 6830]
	Eun A Kim
2014	D:

2014 Primary Instructor, INTMD 7880 (1): Infectious Dis Research, 4 SCH, 1 student, University of Utah, Internal Medicine

Trainee Supervision

PhD/Doctorate

- 2000 2004 Advisor, Ashish Gupta, University of Florida. Role of KSHV-SM protein in angiogenesis and endothelial cell transformation *Trainee's Current Career Activities:* Physician, Cardiology.
- 2000-2004 Supervisor, Garnet Suck, Medizinishke Universitaet zu Luebeck, Germany. Protein interactions of Epstein-Barr Virus SM Protein. *Trainee's Current Career Activities:* Head of cell processing laboratory, centre for transfusion medicine, Health Sciences Authority, Singapore.
- 2006 2007 Advisor, Melusine Gaillard, University of Western Brittany, France.
 Protein interactions of Epstein-Barr Virus SM Protein.

 Trainee's Current Career Activities: Scientific Communications.
- 2006 2010 Supervisor, Dinesh Verma, University of Florida. *Trainee's Current Career Activities:* Research Assistant Professor, University of Utah.
- 2007 2009 Advisor, Bindhu Monica Selvakumar, University of Florida. Effect of Interferon-stimulated genes on virus replication *Trainee's Current Career Activities:* Staff position, Christian Medical College, Vellore.

- 2009 2015 Supervisor, Dajiang Li, University of Florida. *Trainee's Current Career Activities:* Research Assistant Professor, University of Utah, Salt Lake City, UT.
- 2010 2011 Supervisor, Eleonora Forte, University of Utah. Innate immune responses to EBV and KSHV. *Trainee's Current Career Activities*. Postdoctoral fellow, Northwestern University, Chicago, IL.
- 2011 2012 Supervisor, Dominique Kagele, University of Utah. *Trainee's Current Career Activities*. Technical information scientist, Jackson Laboratory, Sacramento, CA.
- 2016- curr. Supervisor, Wenmin Fu. University of Utah. Host chromatin factor control of herpesvirus replication. *Trainee's Current Career Activities*. Postdoctoral fellow, University of Utah, Salt Lake City, UT.

<u>Masters</u>

2007 - 2008 Preceptor, Zhao Han, University of Florida

<u>Undergraduate</u>

2004 Advisor, Zhao Han, University of Florida. RNA binding characteristics of EBV SM protein. *Trainee's Current Career Activities:* Received M.S. Medical student.

Graduate Student Committees

- 1993 1994 Member, Gloria Chang, Masters Thesis Committee. Department of Microbiology and Immunology, Thomas Jefferson University, Philadelphia, PA.
- 1994 1995 Member, John Maggioncalda, PhD/Doctorate Committee.

 Department of Microbiology and Immunology, Thomas Jefferson University, Philadelphia, PA.
- 2000 2004 Member, Jerome O'Neil, University of Florida, PhD/Doctorate
 Committee. Ph. D. supervisory committee, Molecular Genetics and
 Microbiology
- 2005 2008 Member, Rebecca Skalsky, University of Florida, PhD/Doctorate Committee. Ph. D. supervisory committee, Molecular Genetics and Microbiology.
- 2011-2015 Ph.D. Thesis Committee, Peter Ramirez, Experimental Pathology, University of Utah
- 2013-2015 Ph.D. Thesis Committee, John Frank, Biochemistry, University of Utah

Membership in Scientific Societies:

American College of Physicians
International Association for Research on Epstein-Barr Virus and
Associated Diseases
American Society for Microbiology
Infectious Diseases Society of America

Board Certification:

1987	Board Certified, American Board of Internal Medicine.
1990	Board Certified, Infectious Disease, American Board of Internal
	Medicine.
2003	Board Certified, Infectious Disease, American Board of Internal
	Medicine.
2014	Board Certified, Infectious Disease, American Board of Internal
	Medicine.

Licensure:

2015 Utah License Registration 7746146-1205

Awards and Honors:

as and monors	··	
1975	Presidential Scholar	
1977-1979	Harvard Scholar	
1979	magna cum laude, Harvard College	
1999	Fellow, American College of Physicians	
2000	Department of Internal Medicine Basic Science Research Award,	
	University of Texas Medical Branch, Galveston, TX.	
2008	University of Florida Department of Medicine Teaching Excellence	
	Award	
2011	Fellow, Infectious Diseases Society of America	
2008-2011	University of Florida Research Foundation Professorship	
2004-present Member, Governing Board, International Association for Research		
	on Epstein-Barr virus and Associated Diseases.	
2005-presen	t Editorial Board, Journal of Virology.	
2006-presen	t Editorial Board, Future Microbiology.	
2006-presen	tTreasurer, International Association for Research on Epstein-Barr	

virus and Associated Diseases.
2009-2017 Editorial Board, Advances in Tumor Virology

2014-present Associate Editor, PLOS Pathogens

Additional Information:

1996- Reviewer, Clinical Infectious Diseases

1996-	Reviewer, Journal of Biological Chemistry
2000-	Reviewer, Journal of Clinical Microbiology
2001-	Reviewer, Journal of Virology
2002-	Reviewer, Cancer Research
2003-	Reviewer, Virology
2003-	Reviewer, Clinical Cancer Research
2003-	Reviewer, Proc. Natl. Acad. Sci. USA
2004-	Reviewer, Journal of the National Cancer Institute
2005-	Reviewer, Blood
2005	Reviewer, Human Gene Therapy
2006	Reviewer, Laboratory Investigation
2007	Reviewer, Journal of Cellular Physiology
2007	Reviewer, EMBO Journal
2007	Reviewer, Journal of Leukocyte Biology
2007	Reviewer, Virus Research
2008	Reviewer, PLOS Pathogens
2008	Reviewer, Journal of Bacteriology
2008	Reviewer, Journal of Cellular Biochemistry
2009	Reviewer, Journal of General Virology
2009	Reviewer, Cancer Biology and Therapy
2013	Guest Editor, PLOS Pathogens
2015	Reviewer, Oncogene, Proc. Natl. Acad. Sci. USA
2017	Reviewer, Nature Microbiology

Bibliography:

A. Articles in peer-reviewed journals:

- 1. Swaminathan S, Gooding L. Inhibition of glycosylation prevents surface H-2 K and D antigen expression on SV40 virus-transformed cells. Eur J. Immunol. 1983; 13:335-339.
- 2. Swaminathan S, Tomkinson B, Kieff E. Recombinant Epstein-Barr virus with deleted small RNA (EBER) genes transforms lymphocytes and replicates <u>in vitro</u>. Proc. Natl. Acad. Sci. 1991; 88:1546-1550.
- 3. Swaminathan S, Huneycutt B, Reiss C, Kieff E. Epstein-Barr virus encoded small RNAs (EBERs) do not modulate interferon effects in infected lymphocytes. J. Virol. 1992; 66: 5133-5136.

- 4. Swaminathan S, Hesselton R, Sullivan J, Kieff E. 1993. Epstein-Barr virus recombinants with specifically mutated BCRF1 genes. J. Virol. 1993; 67: 7406-7413.
- 5. Kurilla M, Swaminathan S, Welsh R, Kieff E, Brutkiewicz R. 1993. The effects of virally expressed interleukin-10 on vaccinia virus infection in mice. J. Virol. 1993; 67: 7623-7628.
- 6. Swaminathan S. Characterization of Epstein-Barr Virus recombinants with deletions of the BamHI C EBNA promoter. Virology 1996; 217: 532-541.
- 7. Evans TJ, Farrell, P and Swaminathan, S. Molecular genetic analysis of Epstein-Barr virus Cp promoter function. J. Virol. 1996; 70: 1695-1705.
- 8. Ruvolo, V, Wang, E, Boyle, S, Swaminathan, S. The Epstein-Barr virus nuclear protein SM is both a post-transcriptional inhibitor and activator of gene expression. Proc. Natl. Acad. Sci. 1998; 95:8852-8857.
- 9. Fuentes-Panana, EM, Swaminathan, S, Ling, PD. Transcriptional activation signals found in the EBV latency C promoter are conserved in the latency C promoter sequences from baboon and rhesus monkey EBV-like lymphocryptoviruses (cercopithicine herpesviruses 12 and 15). J. Virol. 1999, 73:826-833.
- 10. Boyle, S, Ruvolo, V, Gupta, AK, Swaminathan, S. Association with the cellular export receptor CRM1 mediates function and intracellular localization of the EBV SM protein, a regulator of gene expression. J. Virol. 1999, 73:6872-6881.
- 11. Gupta, AK, Ruvolo, V, Patterson, C, Swaminathan, S. The HHV8 homolog of Epstein Barr Virus SM protein (KS-SM) is a post-transcriptional activator of gene expression. J. Virol. 2000, 74:1038-44.
- 12. Ruvolo V, Gupta, AK, Swaminathan, S. Epstein-Barr virus SM protein interacts with messenger RNA in vivo and mediates a gene-specific increase in cytoplasmic mRNA. J. Virol. 2001, 75: 6033-6041.
- 13. Boyer JL, Swaminathan, S and Silverstein, SJ. The Epstein-Barr virus SM protein is functionally similar to ICP27 from herpes simplex virus. J. Virol. 2002, 76(18):9420-33.

- 14. Ruvolo V, Navarro L, Sample C, David M, Swaminathan S. The Epstein-Barr Virus SM protein activates STAT1 and induces interferon stimulated gene expression. J. Virol. 2003, 77(6):3690-701.
- 15. Swaminathan, S. Molecular biology of Epstein-Barr virus and Kaposi's sarcoma-associated herpesvirus. Semin. Hematol. 2003, 40(2):107-15.
- 16. Ruvolo V, Sun L, Howard K, Sung S, Delecluse H-J, Hammerschmidt W, Swaminathan S. Functional analysis of Epstein-Barr virus SM protein: identification of amino acids essential for structure, trans-activation, splicing inhibition and virion production. J. Virol. 2004, 78(1):340-352.
- 17. Nicewonger, J, Suck, G, Bloch D, Swaminathan, S. Epstein Barr virus SM protein induces and recruits cellular Sp110b to stabilize mRNAs and enhance EBV lytic gene expression. J. Virol. 2004, 78(17):9412-22.
- 18. Swaminathan, S. Post-transcriptional gene regulation in gamma-herpesviruses. J. Cell. Biochem. 2005, 95(4):698-711.
- 19. Han, Z and Swaminathan, S. The KSHV lytic gene ORF57 is essential for infectious virion production. J Virol. 2006, 80(11):5251-60.
- 20. Han, Z, Marendy, E, Wang, Y-D, Yuan, J, Sample, JT, Swaminathan, S. Multiple roles of Epstein Barr virus SM protein in lytic replication. J. Virol. 2007 81(8): 4058-69.
- 21. Nekorchuk, M, Han, Z, Hsieh, T and Swaminathan, S. Kaposi's sarcoma-associated herpesvirus ORF 57 protein enhances nuclear mRNA accumulation independent of effects on RNA export. J Virol. 2007, 81:(18): 9990-9998.
- 22. Verma, D and Swaminathan, S. Epstein-Barr virus SM protein functions as an alternative splicing factor, J Virol. 2008, 82(14): 7180-8.
- 23. Swaminathan S. <u>Noncoding RNAs produced by oncogenic human herpesviruses.</u> J Cell Physiol. 2008 Aug;216(2):321-6. doi: 10.1002/jcp.21480. Review. PubMed PMID: 18484093.
- 24. Verma, D, Ling, C, Johannsen, E, Nagaraja, T, Swaminathan, S. Negative autoregulation of EBV replicative gene expression by Epstein-Barr virus (EBV) SM protein, J. Virol. 2009 Aug;83(16):8041-50.

- 25. Han Z, Verma D, Hilscher C, Dittmer DP, Swaminathan S. General and target-specific RNA binding properties of Epstein Barr virus SM post-transcriptional regulatory protein. J Virol. 2009, 83(22): 11635-11644.
- 26. Swaminathan, S. 2009. Gamma-secretase inhibitors Do they have a role in the treatment of B cell lymphoma? Cancer Biol. Ther. Cancer Biol. Ther. 8(22):2126-43.
- 27. Verma, D, Bais, S, Gaillard, M and Swaminathan, S. Epstein-Barr virus SM protein utilizes cellular splicing factor SRp20 to mediate alternative splicing. J. Virol. 2010, 84(22):11781-9.
- 28. Li, D, Verma, D and Swaminathan, S. Binding of cellular export factor REF/Aly by KSHV ORF57 protein is not required for efficient KSHV lytic replication. J. Virol. 2012, 86(18):9866-9874.
- 29. Verma D, Kim EA, Swaminathan, S. Cell-based screening assay for antiviral compounds targeting the ability of herpesvirus posttranscriptional regulatory proteins to stabilize viral mRNAs. J Virol. 2013, 87(19):10742-51.
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