CURRICULUM VITAE

NAME: Tristram George Parslow, M.D., Ph.D.

CURRENT TITLES: Associate Director
Blue Ridge Institute for Medical Research (BRIMR)

William Patterson Timmie Professor
and Chair *Emeritus*
Dept. of Pathology and Laboratory Medicine
Emory University School of Medicine

EDUCATION:

1972-77	Grinnell College, Grinnell, IA	B.A.	Biology
1977-83	University of Iowa College of Medicine, Iowa City, IA	Ph.D.	Biochemistry
		M.D.	Medicine
	(Thesis advisor: Daryl K. Granner, M.D.)		
1983-85	Univ. of Calif., San Francisco	Resident	Anatomic Pathology
1983-85	Postdoctoral research in laboratory of Keith R. Yamamoto, Ph.D., Dept. of Biochemistry and Biophysics, Univ. of California at San Francisco (UCSF)		
1994	Sabbatical research (Aug-Oct) in laboratory of Francois Clavel, M.D., Pasteur Institute, Paris		

LICENSES:

1984-now	California Medical License (A041018)
2003-now	Georgia Medical License (053012)

PRINCIPAL POSITIONS HELD:

1985-86	UCSF	Asst. Prof. in Residence, Pathology
1986-90	UCSF	Asst. Prof. in Residence, Pathology and Micro/Immuno
1990-91	UCSF	Asst. Prof., Pathology and Micro/Immuno
1992-96	UCSF	Assoc. Prof. (tenured), Pathology and Micro/Immuno
1992-2002	UCSF	Director, Medical Scientist Training Program
1994-2002	UCSF	Vice Chair for Research, Pathology
1996-2003	UCSF	Professor (tenured), Pathology and Micro/Immuno
2002-18	Emory	Chair of Pathology and Lab Med
2002-18	Emory	Section Chief for Pathology, Emory Physician Practice Group
2002-19	Emory	W.P. Timmie Professor of Pathology and Lab Med (tenured)
2019-now	Emory	W.P. Timmie Professor and Chair *Emeritus*
2020-now	BRIMR	Assoc. Director

HONORS AND AWARDS:

1977-83	NIH Medical Scientist Training Program (MSTP) Trainee
1980	Alpha Omega Alpha
1981	Borts Award for Medical Student Research (Univ. of Iowa)

1984	Berg Award for Doctoral Research in Biochemistry (Univ. of Iowa)
1985-87	Special Fellow, the Leukemia Society of America
1987-92	Scholar, the Leukemia Society of America
1990	Honorable Mention, UCSF Distinction in Teaching Award
1991	Stohlman Memorial Scholar Award, the Leukemia Society of America
1991-now	Member, Assoc of Amer Univ Pathologists (Pluto Society)
1993-now	Co-Editor, *Lange Series: Medical Immunology* (edns. 8-10)
1994-2002	Editorial Board, *Journal of Virology*
1995	President, Assoc of Amer Univ Pathologists (Pluto Society)
1996-97	Barbara Fasken Memorial Fellow in Lymphoma Research
2006	Organizer, 2006 Keystone Symposium on *HIV Pathogenesis*
2006-now	Editorial Board, *American Journal of Pathology*
2008-14	National Council (Secretary/Treasurer), Association of Pathology Chairs
2011	Catalyst Award (for Faculty Recruitment), Georgia Research Alliance
2012-now	Executive Advisory Board, *Archives Pathol and Lab Medicine*
2014-16	President-Elect and National Council member, Assoc Pathology Chairs
2016-18	President and National Council member, Assoc Pathology Chairs
2018	Distinguished Alumnus Award, Univ of Iowa College of Medicine
2018	Past-President and National Council member, Assoc Pathology Chairs
2018	Visiting Professor, Columbia Univ Dept of Pathology

PROFESSIONAL ACTIVITY

SERVICE TO SCIENTIFIC AGENCIES:

1986-89	US Veterans Administration	Member, research study section
1990-93	Amer. Soc. for Invest. Pathol.	Member, FASEB program comm.
1990	National Science Foundation	*Ad hoc* grant referee
1993-96	Universitywide AIDS Res Prgm	Member, research study section, UC
1993-98	Leukemia Society of America	Member, research study section
1996, 1999	National Institutes of Health	Intramural site visitor, NCI
1998	National Institutes of Health	*Ad hoc* grant referee, NIGMS
1999	National Institutes of Health	Intramural site visitor, NIGMS
2000-now	Amer Fndn AIDS Res (amfAR)	Member, scientific advisory comm
2004	National Institutes of Health	Member, spec emph panel, NIAID
2004-05	National Institutes of Health	*Ad hoc* grant referee, NIAID
2009-2013	National Institutes of Health	Member, research study section
2009	National Institutes of Health	*Ad hoc* Consultant, Board of Scientific Counselors, NIAID
2014	National Institutes of Health	Chair, research study section, NIAID
2014-15	National Institutes of Health	*Ad hoc* grant referee, spec emph panels and study sections, NIAID
2015	National Institutes of Health	Chair, spec emph panels (2), NIAID
2016	National Institutes of Health	Chair, spec emph panels (2), NIAID
2017	National Institutes of Health	Chair, spec emph panel, NIGMS
2017	National Institutes of Health	*Ad hoc* Consultant, Board of Scientific Counselors, NIAID

INSTITUTIONAL SERVICE ACTIVITIES (Selected):

University of California at San Francisco:

Chancellor's Executive Working Group to Create UCSF Cancer Center, 1992-94
Cancer Center Clinical Trial Protocol Review Committee, 1994-95
Promotions Committee, UCSF Department of Pathology, 1995-2002
UC Academic Senate, SF Division, At-Large Representative, 1996-98
Advisory Committee to AIDS Clinical Research Center, 1997-2002
Committees to Design and Implement New UCSF Medical Curriculum:

- Committee on Curriculum and Educational Policy, 1998-2002
- Curriculum Taskforce, UCSF School of Medicine, 1998
- Curriculum Planning Subcommittee (Prologue Session), 2000

Dean's Taskforce on Physician/Scientist Training, 2001

Emory University:

Board of Directors, Emory Medical Care Foundation (Phys Practice Group for Grady Memorial Hospital, Atlanta), 2002-15
Chair of Search Committee for Chair of Radiology Dept, 2004
Committees to Design and Implement New Emory Medical Curriculum:

- Curriculum Taskforce, 2004-05
- Curriculum Planning Subcommittee (Foundations Session), 2005-06

Faculty Relations Committee, 2006-2008; Chair 2007-2008
Chair of Search Committee for Chair of Ophthalmology Dept, 2006
Conflict-of-Interest Committee, Emory School of Medicine, 2005-08, Chair 2006-08
Chair of Conflict-of-Interest Committee, Emory University; 2008-2018
Co-Chair of Dean's Taskforce on Conflicts of Interest, Emory School of Medicine, 2006-2007
Board of Directors, The Emory Clinic (Phys Practice Group for Emory Healthcare Hospitals, Atlanta), 2007-11
Dean's Taskforce to design a new Medical Educator and Service Track for faculty appointments and advancement, 2008
Co-Chair of Charter Committee on Center for Health in Aging, 2008-09
Co-Chair of Search Committee for Chair of Psychiatry Dept, 2009-11
Funds Flow Taskforce, Woodruff Health Sciences Center, 2009-10
Co-Chair of Search Committee for Director of Yerkes National Primate Research Center, 2013-14

Other Institutions:

External Site-Visit Reviewer of:

- UCLA, Pathology Dept., 2001
- Med Univ of South Carolina, Pathology Dept., 2006
- Univ of Virginia, Carter Immunology Center, 2012
- Penn State Univ, Pathology Dept., 2013
- Univ of Alabama at Birmingham, Pathology Dept., 2013
- Thomas Jefferson Univ, Pathology Dept., 2013

- Univ of Pennsylvania, Pathology Dept., 2017
- Univ of Washington, Pathology and Lab Medicine Depts., 2017
- Harvard/Brigham & Women's Pathology Dept., 2018
- Univ of Texas at Houston, Pathology Dept., 2018, Chair
- Case Western Reserve Univ., Pathology Dept., 2019, Chair
- Case Western Reserve Univ., Anatomy Dept., 2019

SERVICE TO PROFESSIONAL PUBLICATIONS:

Editorial Boards: *Journal of Virology* (Associate Editor, 1994-2002)
American Journal of Pathology (2006-now)

Exec Adv Board: *Archives Pathol and Lab Medicine* (2012-now)

Ad hoc manuscript reviews (since 2006):

Proc Natl Acad Sci USA	*Science*
RNA	*Nature*
PLoS Pathogens	*Am J Pathology*
Nucleic Acids Research	*Virology*
J Virology	*Biochemistry*

OTHER PROFESSIONAL SERVICE:

Calypte Biomedical Co., Berkeley CA, Scientific Advisory Board, 1988-91
SANDOZ Research Institute, Vienna Austria, Scientific Consultant, 1992-93
NeXstar Pharmaceuticals, Boulder CO, Scientific Consultant, 1995
MERCK Res. Inst., West Point PA, Scientific Consultant, 1995-97
Heinrich-Pette (Leibniz) Inst Virol, Hamburg, Germany, Scientific Advisory Board, 2008-2016
College of American Pathologists, Council on Government and Professional Affairs, 2017-18

TEACHING

SERVICE TO INSTITUTIONAL TRAINING PROGRAMS:

UCSF Experimental Pathology Graduate Program – Director 1986-92
UCSF Immunology Graduate Program - Member 1986-2002; Program Director and Steering Committee Member, 1995-99
UCSF Program in Biological Sciences (PIBS) - Executive Committee, 1992-2002
UCSF Molecular Medicine Training Program - Founding member, 1988-2002; Fellowship Selection Committee, 1989-95; PIBS Executive Committee Representative, 1992-98
UCSF BioMedical Sciences (BMS) Graduate Program - Founding member, 1992-2002; Executive Committee, 1992-2002; Curriculum Committee, 1993-95
Emory Graduate Program in Immunology and Molecular Pathogenesis – Member, 2004-09

GRADUATE STUDENTS SUPERVISED (Thesis students only):

David Edelman (Experimental Pathology); M.A. awarded May 1988
David McDonald (Immunology); Ph.D. awarded October 1993
John Hunter (Immunology); Ph.D. awarded May 1996
Maureen Fitch (BioMedical Sciences); Ph.D. awarded August 1999
Christa Tobey (BioMedical Sciences); Ph.D. awarded March 2002
Daniel Miranda (Bio Medical Sciences); Ph.D. awarded August 2004
Jack Regan (BioMedical Sciences); Ph.D. awarded December 2005

POSTDOCTORAL FELLOWS SUPERVISED:

1988-90	Howard Fox, M.D., Ph.D. Current position: Professor Pharmacol & Exper Neurosci, Senior Assoc Dean for Research, Univ of Nebraska
1988-90	Xiaojian Huang, M.D. Current position: Scientist, Maxygen Inc., South San Francisco, CA
1988-93	Thomas J. Hope, Ph.D. Current position: Professor, Cell & Molecular Biology, Northwestern Univ., Chicago IL
1990-93	Melissa Elder, M.D., Ph.D. Current position: Assoc Professor of Pediatrics, Univ of Florida
1992-94	Li Zhu, M.D. Subsequent position: Res Scientist, Bayer Healthcare, San Francisco
1993	Karl Bishop, Ph.D. (with T.L. James) Subsequent position: Director NMR Facility, Michigan State Univ
1993-94	Anthony Davies, Ph.D. Current position: Chief Technology Officer, Capricor Inc.
1994-96	Michael Bell, M.D. Current position: Deputy Director, Div Healthcare Quality Promotion, CDC, Atlanta GA
1994-97	Nadine Defranoux, Ph.D. Current position: Assoc Director, Crescendo Bioscience, San Francisco
1992-98	Jared Clever, Ph.D. Current position: Director R&D, ImmunoScience Inc, San Francisco
1996-98	Randy Taplitz, M.D. Current position: Prof. and Chair of Medicine, City of Hope
1995-99	Chi-Ming Chang, Ph.D. Subsequent position: Postdoc, Dept. Radiation Oncol, Univ Penn
1998-99	Chris Kirk, Ph.D. Subsequent position: Postdoc, Dept. Pathology, Univ Penn
1993-98	Anwer Mujeeb, Ph.D. Current position: Scientific Administrator, Universitywide AIDS Research Program, Univ of California
1998-2002	Michael Inman, Ph.D. Subsequent position: Postdoc, Mount Sinai Hospital, New York

2000-2005 Hinh Ly, Ph.D.
Current position: Prof., Veterinary and Biomedical Sciences, Univ Minnesota
2003-2006 Yuying Liang, Ph.D.
Current position: Prof., Veterinary and Biomedical Sciences, Univ Minnesota
2004-2005 Clay Gipson, Ph.D.
Current position: Assoc VP Bus Devel, LabCorp Diagnostics Inc.
2005-2007 Guangnan Chen, Ph.D.
Subsequent position: Staff Researcher, Dept. Biology, Emory Univ.

FORMAL TEACHING:

Medical Student Teaching (all at UCSF):

Path 101: PATHOLOGY FOR MED STUDENTS (PreFall Session)
Course Director, 1986-1990
Lectures (2 hrs.) on Cancer Biology, 1986-1990
Supervisor, Teaching Labs (6 hrs.), 1986-2001
Path 103: PATHOLOGY FOR MED STUDENTS (Spring Session)
Lecture (1hr.) on Lymphomas, 1997-2001
New Medical Curriculum (Prologue Session)
Lecture (1 hr.) on Cell Injury & Cell Death (2001-02)
Lectures (2 hrs.) on Inflammation (2001-02)
Supervisor, Teaching Labs (4 hrs.) (2001-02)

Graduate Student Teaching (all at UCSF):

Micro 209: IMMUNE SYSTEM CANCERS
Course Co-Director (1997)
BMS225A: TISSUE & ORGAN BIOLOGY
Lectures (3 hrs.) on Immunology (1995-2002)
Micro 209: VIROLOGY
Lectures (6 hrs.) on SV40, HPV, flu (2002)

RESEARCH FOCUS

My scientific interests extend broadly over the fields of RNA virology, immunology, and the molecular basis of human diseases. My early work focused on the regulation of immunoglobulin genes, helping to identify and characterize the enhancers and promoter elements that govern expression of those genes in lymphocytes. Soon after joining the UCSF faculty at the dawn of the worldwide HIV pandemic, however, I refocused most of my research efforts onto the molecular virology of HIV, and particularly onto specific RNA-protein interactions that regulate key steps in the viral lifecycle. My lab contributed to understanding of the HIV *trans*-activator protein Rev and its counterparts in other retroviruses, and also helped elucidate 3-dimensional structures in HIV genomic RNA that enable this RNA to dimerize and be packaged into nascent viral particles. We subsequently also pursued similar questions of RNA structure and packaging in influenza A virus. As Pathology Chair at Emory, I was

privileged to build a top-ranked research department by recruiting and fostering the work of other investigators, but I have also had the great pleasure of collaborating personally in studies using non-human primate models to explore pathogenesis and potential new therapeutic approaches to HIV disease.

Along the way, I have been involved in a number of other research projects. Those included co-discovery of a novel form of human severe combined immunodeficiency resulting from an inherited defect in ZAP-70, a protein tyrosine kinase involved in signal transduction from the T-cell antigen receptor. My lab contributed insights into structure/function relationships in Bcl2, Bax, and related human proteins that regulate programmed cell death (apoptosis). We collaborated in studies of the molecular biology of telomerase, as well as in elucidating the immunobiology of the parasites responsible for leishmaniasis and schistosomiasis. Finally, as a pathologist, I have also enjoyed several opportunities to collaborate in characterizing novel transgenic or knockout mouse strains whose phenotypes shed light on important facets of mammalian development, immunity, and carcinogenesis.

PUBLICATIONS

ORIGINAL ARTICLES:

1982 Parslow TG and Granner DK; Chromatin Changes Accompany Immunoglobulin Kappa Gene Activation: A Potential Control Region Within the Gene; **Nature 299**: 449-451 [PMID: 6811947]

1983 Parslow TG, Milburn GL, Lynch RG and Granner DK; Suppressor T-Cell Action Inhibits the Expression of an Excluded Immunoglobulin Gene; **Science 220**: 1389-1391 [PMID: 6222474]

1983 Parslow TG and Granner DK; Structure of a Nuclease-Sensitive Region Inside the Immunoglobulin Kappa Gene: Evidence for a Role in Gene Regulation; **Nucl Acids Res 11**: 4775-4792 [PMID: 6308559]

1984 Milburn GL, Parslow TG, Goldenberg C, Granner DK and Lynch RG; Idiotype-Specific T Cell Suppression of Light Chain mRNA Expression in MOPC-315 Cells is Accompanied by a Post-Transcriptional Inhibition of Heavy Chain Expression; **J Molec Cell Immunol 1**:115-123 [PMID: 6242851]

1984 Parslow TG, Blair DL, Murphy WJ and Granner DK; Structure of the 5' Ends of Immunoglobulin Genes: A Novel Conserved Sequence; **Proc Natl Acad Sci USA 81**: 2650-2654 [PMID: 6425835]

1987 LeBoit P, Parslow TG and Choy SH; Hair Matrix Differentiation: Occurrence in Lesions Other Than Pilomatricoma; **Am J Dermatopathol 9**: 399-405 [PMID: 3688366]

1987 LeBoit P, Beckstead JH, Bond B, Epstein WL, Frieden I and Parslow TG; Granulomatous Slack Skin: Clonal Rearrangement of the T-Cell Receptor β Gene is Evidence for the Lymphoproliferative Nature of a Cutaneous Elastolytic Disorder; **J Invest Dermatol 89**: 183-186 [PMID: 3496402]

1987 Cohen MB, Parslow TG, Parslow MA, Laky D, Molnar JJ and Miller TR; Classics in Cytology II: The Diagnosis of Cancer of the Uterine Cervix in Smears; **Acta Cytol 31**: 642-643 [PMID: 3314306]

1987 Conrad D and Parslow TG; Variations in Chickens; **Nature 325**: 582 [PMID: 3808062]

1987 Parslow TG, Jones SD, Bond B and Yamamoto KR; The Immunoglobulin Octanucleotide: Independent Activity and Selective Interaction with Enhancers; **Science 235**: 1498-1501 [PMID: 3029871]

1988 LeBoit PE, Abel EA, Cleary ML, Hoppe RT, Williams ML, Wood GS and Parslow TG; Clonal Rearrangement of the T-Cell Receptor β Gene in the Circulating Lymphocytes of Erythrodermic Follicular Mucinosis; **Blood 71**: 1329-1333 [PMID: 2965926]

1988 Tsukamoto AS, Grosschedl R, Guzman RC, Parslow T and Varmus HE; Expression of the *int*-1 Gene in Transgenic Mice is Associated With Mammary Gland Hyperplasia and Adenocarcinomas in Male and Female Mice; **Cell 55**: 619-625 [PMID: 3180222]

1990 Sarvetnick N, Shizuru J, Liggitt D, Martin L, McIntyre B, Gregory A, Parslow T and Stuart T; Loss of Pancreatic Islet Tolerance Induced by Beta Cell Expression of IFN-Gamma; **Nature 346**: 844-847 [PMID: 2118234]

1990 Hope TJ, Huang X, McDonald D and Parslow TG; Steroid-Receptor Fusion of the Human Immunodeficiency Virus Type 1 Rev Transactivator: Mapping Cryptic Functions of the Arginine-Rich Motif; **Proc Natl Acad Sci USA 87**: 7787-7791 [PMID: 2217212]

1990 Hope TJ, McDonald D, Huang X, Low J and Parslow TG; Mutational Analysis of the Human Immunodeficiency Virus Type 1 Rev Transactivator: Essential Residues Near the Amino Terminus; **J Virol 64**: 5360-5366 [PMID: 2120472]

1991 Huang X, Hope TJ, Bond BL, McDonald D, Grahl K and Parslow TG; Minimal Rev Response Element for Human Immunodeficiency Virus Type 1; **J Virol 65**: 2131-2134 [PMID: 2002556]

1991 Fox HS, Bond BL, and Parslow TG; Estrogen Regulates the Interferon-Gamma Promoter; **J Immunol 146**: 4362-4367 [PMID: 1904081]

1991 Zapp ML, Hope TJ, Parslow TG and Green MR; Oligomerization and RNA Binding Domains of the HIV-1 Rev Protein: A Dual Function for an Arginine-Rich Binding Motif; **Proc Natl Acad Sci USA 88**: 7734-7738 [PMID: 1715576]

1991 Holaday BJ, Sadick MD, Wang Z-E, Reiner SL, Heinzel FP, Parslow TG and Locksley RM; Reconstitution of Leishmania Immunity in scid Mice Using Th1- and Th2-Like Cell Lines; **J Immunol 147**: 1653-1658 [PMID: 1831830]

1991 Hope TJ, Bond BL, McDonald D, Klein NP, and Parslow TG; Effector Domains of HIV-1 Rev and HTLV-I Rex are Functionally Interchangeable and Share an Essential Peptide Motif; **J Virol 65**: 6001-6007 [PMID: 1920623]

1992 Kwan H, Pecenka V, Tsukamoto A, Parslow TG, Guzman R, Lin T-P, Muller WJ, Lee FS, Leder P and Varmus HE; Transgenes Expressing the Wnt-1 and int-2 Proto-oncogenes Cooperate During Mammary Carcinogenesis in Doubly Transgenic Mice; **Mol Cell Biol 12**: 147-154 [PMID: 1530875]

1992 Hope TJ, Klein NP, Elder ME and Parslow TG; *Trans*-Dominant Inhibition of Human Immunodeficiency Virus Type 1 Rev Occurs Through Formation of Inactive Protein Complexes; **J Virol 66**: 1849-1855 [PMID: 1548742]

1992 Amiri P, Locksley RM, Parslow TG, Sadick M, Rector E, Ritter D and McKerrow JH; Tumor Necrosis Factor α Restores Granulomas and Induces Parasite Egg-Laying in Schistosome-Infected SCID Mice; **Nature 356**: 604-607 [PMID: 1560843]

1992 McDonald D, Hope TJ, and Parslow TG; Posttranscriptional Regulation by the Human Immunodeficiency Virus Type 1 Rev and Human T-Cell Leukemia Virus Type I Rex Proteins Through a Heterologous RNA Binding Site; **J Virol 66**: 7232-7238 [PMID: 1433516]

1993 Luo Y, Madore SJ, Parslow TG, Cullen BR, and Peterlin BM; Functional Analysis of Interactions Between Tat and TAR of HIV-1 in Cells; **J Virol 67**: 5617-5622 [PMID: 8350414]

1994 Mancuso VA, Hope TJ, Zhu L, Derse D, Phillips T, and Parslow TG; Post-Transcriptional Effector Domains from Rev Proteins of Feline Immunodeficiency Virus and Equine Infectious Anemia Virus; **J Virol 68**: 1998-2001 [PMID: 8107262]

1994 Auer M, Gremlich H-U, Seifert J-M, Daly TJ, Parslow TG, Casari G, and Gstach H; Helix-Loop-Helix Motif in HIV-1 Rev; **Biochemistry 33**: 2988-2996 [PMID: 7510518]

1994 Elder ME, Dong L, Clever J, Chan AC, Hope TJ, Weiss A, and Parslow TG; Human Severe Combined Immunodeficiency Due to a Defect in ZAP-70, a T-Cell Tyrosine Kinase; **Science 264**: 1596-1599 [PMID: 8202712]

1994 Chan AC, Kadlacek TA, Elder ME, Filipovich AH, Gray JW, Iwashima M, Parslow TG, and Weiss A; ZAP-70 Protein Tyrosine Kinase Deficiency in an Autosomal Recessive Form of Severe Combined Immunodeficiency; **Science 264**: 1599-1601 [PMID: 8202713]

1994 Mujeeb A, Bishop K, Peterlin BM, Turck C, Parslow TG, and James TL; NMR Structure of a Biologically Active Peptide Containing the RNA Binding Domain of HIV-1 Tat; **Proc Natl Acad Sci USA 91**: 8248-8252 [PMID: 8058789]

1994 Van Genderen C, Okamura RM, Fariñas I, Quo R-G, Parslow TG, Bruhn L, Grosschedl R; Development of Several Organs that Require Epithelial-Mesenchymal Tissue Interactions is Impaired in LEF-1 Deficient Mice; **Genes Devel 8**: 2691-2703 [PMID: 7958926]

1994 Zhu L, Hope TJ, Hall J, Davies A, Stern M, Muller-Eberhard U, Stern R, and Parslow TG; Molecular Cloning of a Mammalian Hyaluronidase Reveals Identity with Hemopexin, a Serum Heme-Binding Protein; **J Biol Chem 269**: 32092-32097 [PMID: 7798203]

1995 Elder ME, Hope TJ, Parslow TG, Umetsu DT, Wara DW, and Cowan MJ; Severe Combined Immunodeficiency with Absence of Peripheral Blood CD8+ T Cells Due to ZAP-70 Deficiency; **Cellular Immunol 165:** 110-117 [PMID: 7671314]

1995 Clever J, Sassetti C, and Parslow TG; RNA Secondary Structure and Binding Sites for Gag Gene Products in the 5' Packaging Signal of Human Immunodeficiency Virus Type 1; **J Virol 69**: 2101-2109 [PMID: 7884856]

1996 Mujeeb A, Parslow TG, Yuan Y-C, and James TL; Aqueous Solution Structure of a Hybrid Lentiviral Tat Peptide and a Model of its Interaction with HIV-1 TAR RNA; **J Biomolec Struct Dynam 13**: 649-660 [PMID: 8906885]

1996 Hunter JJ, Bond B, and Parslow TG; Functional Dissection of the Human Bcl2 Protein: Sequence Requirements for Inhibition of Apoptosis; **Molec Cell Biol 16**: 877-883 [PMID: 8622689]

1996 Hunter JJ and Parslow TG; A Peptide Sequence from Bax that Converts Bcl2 into an Activator of Apoptosis; **J Biol Chem 271**: 8521-8524 [PMID: 8621473]

1996 Clever JL, Wong ML, and Parslow TG; Requirements for Kissing-Loop-Mediated Dimerization of Human Immunodeficiency Virus RNA; **J Virol 70**: 5902-5908 [PMID: 8709210]

1996 Lee L, Hunter JJ, Mujeeb A, Turck C, and Parslow TG; Evidence for α-Helical Conformation of an Essential N-Terminal Region in the Human Bcl2 Protein; **J Biol Chem 271:** 23284-23288 [PMID: 8798527]

1997 Clever JL and Parslow TG; Mutant Human Immunodeficiency Virus Type-1 Genomes with Defects in Genomic RNA Packaging or Dimerization; **J Virol 71**: 3407-3414 [PMID: 9094610]

1997 Lochrie MA, Waugh S, Pratt DG, Clever J, Parslow TG, and Polisky B; In Vitro Selection of RNAs that Bind to the Human Immunodeficiency Virus Type-1 Gag Polyprotein; **Nucleic Acids Res 25**: 2902-2910 [PMID: 9207041]

1998 Mujeeb A, Clever JL, Billeci TM, James TL and Parslow TG; Structure of the Dimer Initiation Complex of HIV-1 Genomic RNA; **Nature Struct Biol 5**: 432-436 [PMID: 9628479]

1999 Clever JL, Eckstein DA and Parslow TG; Genetic Dissociation of the Encapsidation and Reverse Transcription Functions in the 5' R Region of Human Immunodeficiency Virus Type 1; **J Virol 73**: 101-109 [PMID: 9847312]

1999 Mujeeb A, Parslow TG, Zarrinpar A, Das C, and James TL; NMR Structure of the Mature Dimer Initiation Complex of HIV-1 Genomic RNA; **FEBS Lett 458**:387-392 [PMID: 10570946]

1999 Thumb W, Graf C, Parslow T, Schneider R, and Auer M; Temperature-Inducible β-Sheet Structure in the Transactivation Domains of Retroviral Regulatory Proteins of the Rev Family; **Spectrochim Acta 55**: 2729-2743 (1999)

2000 Clever JL, Taplitz RA, Lochrie MA, Polisky B, and Parslow TG; A Heterologous, High-Affinity RNA Ligand for Human Immunodeficiency Virus Gag Protein has RNA Packaging Activity; **J Virol 74**: 541-546 [PMID: 10590146]

2000 Doria M, Salcini AE, Colombo M, Parslow TG, Pelicci PG and Di Fiore PP; The EH-Based Protein Network Participates in the Activation of the HIV-1 Rev Protein; **J Cell Biol 147**: 1379-1384 [PMID: 10613896]

2000 Fitch ME, Chang C-M and Parslow TG; The BH3 Domain is Required for Caspase-Independent Cell Death Induced by Bax and Oligomycin; **Cell Death Differ 7**: 338-349 [PMID: 10773818]

2000 Majeti R, Xu Z, Parslow TG, Olson JL, Daikh D, Killeen N and Weiss A; An Inactivating Point Mutation in the Inhibitory Wedge of CD45 Causes Lymphoproliferation and Autoimmunity; **Cell 103**: 1059-1070 [PMID: 11163182]

2002 Ly H and Parslow TG; A Bipartite Signal for Genomic RNA Dimerization in Moloney Murine Leukemia Virus; **J Virol 76:** 3135-3144 [PMID: 11884538]

2002 Bancroft CT and Parslow TG; Evidence for Segment-Nonspecific Packaging of the Influenza A Genome; **J Virol 76:** 7133-7139 [PMID: 12072513]

2002 Clever J, Miranda A, and Parslow TG; RNA Structure and Packaging Signals in the 5' Leader Region of the Human Immunodeficiency Virus Type-1 Genome **J Virol 76**: 12381-12387 [PMID: 12414982]

2003 Ly H, Xu L, Rivera M, Parslow TG and Blackburn E; A Role for a Novel "Trans-Pseudoknot" RNA-RNA Interaction in the Functional Dimerization of Human Telomerase; **Genes Devel 17**: 1078-1083 [PMID: 12730131]

2003 Ly H, Blackburn EH, and Parslow TG; Comprehensive Mutational Analysis of the Core Domain of Human Telomerase RNA; **Molec Cell Biol 23**: 6849-6856 [PMID: 12972604]

2004 Lin J, Ly H, Hussain A, Abraham M, Pearl S, Tzfati Y, Parslow TG, and Blackburn EH; A Universal Telomerase RNA Core Structure Includes Structure Motifs Required for Binding the Telomerase Reverse Transcriptase Protein; **Proc Natl Acad Sci USA 101**: 14713-14718 [PMID: 15371596]

2005 Ly H, Calado RT, Allard P, Baerlocher GM, Lansdorp PM, Young NS, and Parslow TG; Functional Characterization of Telomerase RNA Variants Found in Patients with Hematological Disorders; **Blood 105**: 2332-2339 [PMID: 15550482]

2005 Khan MA, Kao S, Miyagi E, Takeuchi H, Goila-Gaur R, Opi S, Gipson CL, Parslow TG, Ly H, and Strebel K; Viral RNA is Required for the Association of APOBEC3G with HIV-1 Nucleoprotein Complexes; **J Virol 79**: 5870-5874 [PMID: 15827203]

2005 Ly H, Schertzer M, Jastaniah W, Davis J, Yong S L, Ouyang Q, Blackburn EH, Parslow TG, and Lansdorp PM; Identification and Functional Characterization of Two Variant Alleles of the Telomerase RNA Template Gene (TERC) in a Patient with Dyskeratosis Congenita; **Blood 106:** 1246-1252 [PMID: 15886322]

2005 Liang Y, Hong Y, and Parslow TG; Cis-Acting Packaging Sequences in the Influenza Virus PB1, PB2, and PA Genomic RNA Segments; **J Virol 79**: 10348-10355 [PMID: 16051827]

2006 Regan JC, Liang Y, and Parslow TG; Defective Assembly of Influenza A Virus Due to a Mutation in the Polymerase Subunit PA; **J Virol 80**: 252-261 [PMID: 16352550]

2006 Ulyanov NB, Mujeeb A, Du Z, Tonelli M, Parslow TG, and James TL; NMR Structure of the Full-Length Linear Dimer of Stem-Loop 1 RNA in the HIV-1 Dimer Initiation Site; **J Biol Chem 281**: 16168-16177 [PMID: 16603544]

2007 Mujeeb A, Ulyanov N, Georgantis S, Smirnov I, Chung J, Parslow TG and James TL; Nucleocapsid Protein-Mediated Maturation of Dimer Initiation Complex of Full-Length SL1 Stemloop of HIV-1: Sequence Effects and Mechanism of RNA Refolding; **Nucleic Acids Res 35**:2026-2034 [PMID: 17341460]

2007 Gipson CL, Xin Z-T, Danzy SC, Parslow TG, and Ly H; Functional Characterization of Yeast Telomerase RNA Dimerization; **J Biol Chem 282**: 18857-18863 [PMID: 17491007]

2008 Liang Y, Huang T, Ly H, Parslow TG, and Liang Y; Mutational Analyses of Packaging Signals in the Influenza Viral PA, PB1, and PB2 Genomic Segments; **J Virol 82**: 229-236 [PMID: 17959657]

2011 Kumar N, Liang Y, Parslow TG, and Liang Y; Receptor Tyrosine Kinase Inhibitors Block Multiple Steps of Influenza A Virus Replication; **J Virol 85**: 2818-2827 [PMID: 21209112]

2011 Makarova N, Zhao C, Zhang Y, Bhosle S, Suppiah S, Rhea JM, Kozyr N, Arnold RS, Ly H, Molinaro RJ, Parslow TG, Hunter E, Liotta D, Petros J, and Blackwell JL; Antibody Responses Against Xenotropic Murine Leukemia Virus-Related Virus Envelope in a Murine Model; **PLoS Pathog 6**: e18272 [PMID: 21494670]

2011 Kumar N, Sharma NR, Ly H, Parslow TG, and Liang Y; Receptor tyrosine kinase inhibitors that block replication of influenza A and other viruses; **Antimicrob Agents Chemother 55**: 5553-5559 [PMID: 21930873]

2012 Liang Y, Danzy S, Dao LD, Parslow TG, and Liang Y; Mutational Analyses of the Influenza A Virus Polymerase Subunit PA Reveal Distinct Functions Related and Unrelated to RNA Polymerase Activity; **PLoS One 7**: e29485 [PMID: 22238617]

2014 Hill CE, Burd EM, Kraft CS, Ryan EL, Duncan A, Winkler AM, Cardella JC, Ritchie JC, and Parslow TG; Laboratory Test Support for Ebola Patients Within a High-Containment Facility; **Lab Med 45**: e109-11 [PMID: 25184220]

2014 Byrareddy S, Kallam B, Arthos J, Cicala C, Nawaz F, Hiatt J, Kersh EN, McNicholl JM, Hanson D, Reimann KA, Brameier M, Walter L, Rogers K, Mayne AE, Dunbar P, Villinger T, Little D, Parslow TG, Santangelo PJ, Villinger F, Fauci AS, and Ansari AA; Targeting α4β7 Integrin Reduces Mucosal Transmission of Simian Immunodeficiency Virus and Protects Gut-Associated Lymphoid Tissue from Infection; **Nature Med 20**: 1397-1400 [PMID: 25419708]

2016 Ducatman BS and Parslow TG; Benchmarking Academic Anatomic Pathologists: The Association of Pathology Chairs Survey; **Acad Pathol 3**

2016 Byrareddy SN, Arthos J, Cicala C, Villinger F, Ortiz KT, Little D, Sidell N, Kane MA, Yu J, Jones JW, Santangelo PJ, Zurla C, McKinnon LR, Arnold KB, Woody CE, Walter L, Roos C, Noll A, Van Ryk D, Jelicic K, Cimbro R, Gumber S, Reid MD, Adsay V, Amancha PK, Mayne AE, Parslow TG, Fauci AS, and Ansari AA; Sustained Virologic Control in SIV+ Macaques After Antiretroviral and α4β7 Antibody Therapy; **Science 354**: 197-202 [*see also Berg J; **Science 365**: 991 (2019)*]

2017 Parslow TG, Adsay NV, Krasinskas AM, and Roback JD; Impacts of New Concepts and Technologies on the Practice of Diagnostic Pathology – An Emory Perspective; **Arch Pathol Lab Med 141**: 325-328 (*introductory essay to special two-issue journal section cited below)*

2018 Mrak RE, Parslow TG, and Tomaszewski JE; Outsourcing of Academic Clinical Laboratories: Experiences and Lessons from the Association of Pathology Chairs Laboratory Outsourcing Survey; **Acad Pathol 5**

2018 Mrak RE, Parslow TG, and Ducatman BS; Benchmarking Subspecialty Practice in Academic Anatomic Pathology: The 2017 Association of Pathology Chairs Survey; **Acad Pathol 5**

SYMPOSIUM VOLUMES AND JOURNAL SECTIONS EDITED:

2009 Ansari A, Jabbar A, Parslow TG, and Ahmed R. (eds.); Immunology and Pathogenesis of Viral Hemorrhagic Fevers; **Annals New York Acad of Sci 1171** (S1): E4-E93

2017 Parslow TG, Adsay NV, Krasinskas AM, and Roback JD (eds.); Impacts of New Concepts and Technologies on the Practice of Diagnostic Pathology – An Emory Perspective; **Arch Pathol Lab Med 141**: 325-395

2017 Parslow TG, Adsay NV, Krasinskas AM, and Roback JD (eds.); Impacts of New Concepts and Technologies on the Practice of Diagnostic Pathology – An Emory Perspective; **Arch Pathol Lab Med 141**: 490-550

TEXTBOOKS EDITED:

1994 Stites DP, Terr AI, and Parslow TG (eds.) Lange Series -- *Basic and Clinical Immunology* (Eighth edition). Los Altos, CA: Lange Medical Publishers.

1996 Stites DP, Terr AI, and Parslow TG (eds.) Lange Series -- *Medical Immunology* (Ninth edition). Stamford CT: Appleton and Lange.

2001 Parslow TG, Stites DP, Terr AI, and Imboden JB (eds.) Lange Series -- *Medical Immunology* (Tenth edition). Stamford CT: Appleton and Lange.

CHAPTERS AND REVIEWS (excluding those in the textbooks noted above):

1986 LeBoit PE and Parslow TG; Pathology: Lymphocyte Gene Rearrangments – A New Technique in the Diagnosis of Lymphoma; **West J Med 145**: 370-71 [PMID: 18750066]

1987 LeBoit P and Parslow TG; Gene Rearrangements in Lymphoma: Applications to Dermatopathology; **Am J Dermatopathol 9**: 212-218 [PMID: 2888416]

1990 Parslow TG; Immunoglobulin Genetics. In: Lange Series -- *Basic and Clinical Immunology* (Seventh edition), edited by Stites DP and Terr AI. Los Altos CA: Lange Medical Publishers; the same chapter also appears in an abbreviated version of this book entitled *Basic Human Immunology*

1993 Parslow TG; Post-Transcriptional Regulation of Human Retroviral Gene Expression. In: *Molecular Biology of Human Retroviruses*, edited by Cullen BR. Oxford: IRL/Oxford Press

1994 Parslow TG and Hope TJ; Structure and Expression of the HIV-1 Genome. In: *The AIDS Knowledge Base* (Second Edition), edited by P.T. Cohen, et al. Little, Brown and Co.

1999 Parslow TG and Elder ME; Pathobiology of Immunodeficiency Disorders. In: *Cellular and Molecular Pathogenesis*, edited by Sirica A. New York: Raven Press

PATENTS ISSUED:

"Enhanced Production of Recombinant Proteins in Myeloma Cells," US Patent Number 4,889,802; TG Parslow and KR Yamamoto, inventors; issued 26 December 1989

RECENT GRANT SUPPORT (grants completed since 2005)

As Co-Investigator:

NIH RO1 AI-098628 – GUT HOMING CELLS IN SIV INFECTION
17 May 2012 through 30 April 2017 (NCE through 30 April 2019
(P.I.: Aftab Ansari)
This project was aimed at understanding the mechanism by which a primatized IgG monoclonal antibody that blocks the T-cell gut-homing receptor α4β7 integrin protects macaques from transmission and pathogenesis of simian immunodeficiency virus (SIV). (T.G. Parslow was a Co-I at 10% effort)

As Principal Investigator or Program Director:

NIH RO1 AI-067704 – MECHANISMS OF GENOMIC RNA PACKAGING IN INFLUENZA VIRUS
1 Jul 2006 through 30 Jun 2012 (grant years 1-5 plus NCE)
$ 225,000 annual direct costs over 5-year term
This project was aimed at elucidating the cis- and trans-acting factors responsible for packaging the eight RNA segments of the influenza A genome into viral particles, in the hope of identifying novel approaches to antiviral therapy.

NIH R13 AI-068352 -- HIV PATHOGENESIS
1 Jan 2006 through 31 Dec 2006 (grant year 1)
This grant provided partial support for the 2006 Keystone Symposium on HIV Pathogenesis, including travel subsidies and fellowships for new investigators. Dr. Parslow organized this meeting, together with Drs. John Coffin and Julie Overbaugh.

NIH RO1 AI-040317 -- GAG PROTEIN/RNA INTERACTIONS IN THE HIV LIFECYCLE
1 July 2001 through 30 June 2006 (grant years 6-10)
Using virologic and molecular biologic methods, we explored the roles played by the HIV Gag protein in genomic RNA packaging, viral assembly, reverse transcription, and other aspects of the HIV lifecycle.

NIH RO1 AI-036636 -- STRUCTURE-BASED STUDIES OF RNA BINDING PROTEINS FROM HIV
1 April 2001 through 31 March 2006 (grant years 6-10)
We used the combination of NMR spectroscopy and targeted mutagenesis to understand the structural basis of interactions between important RNA-binding proteins and their specific RNA targets in HIV. Our efforts focused mainly on RNA elements involved in genomic packaging and dimerization, and their interactions with the HIV nucleocapsid protein.

NIH T32 GM07618 – MEDICAL SCIENTIST TRAINING PROGRAM (UCSF)
1 July 2001 through 30 June 2006
Dr. Parslow served as Director of the UCSF MSTP for 10 years, and during that period was responsible for two successive renewals of this NIH training grant.