

CURRICULUM VITAE

Dr. GENOVEFFA FRANCHINI

National Cancer Institute/Center for Cancer Research

Vaccine Branch

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Citizenship

United States

Education/Training

1977 - M.D., University of Modena, Italy

Board Certification

1981 - Board of Hematology

Current Position

Chief, Animal Models and Retroviral Vaccines Section, Center for Cancer Research, National Cancer Institute

Description of Current Position

Dr. Genoveffa Franchini is a renowned Retrovirologist who has pioneered research on oncogenes and human retroviruses (HTLVs and HIVs). She has made numerous achievements in virology and translational approaches to prevent and treat human diseases caused by retroviruses. Her work has furthered the understanding of HTLV-1 pathogenesis, leading to the identification and characterization of new viral genes (*PNAS* 1992) and their function (*Nature Medicine* 2003). Recognition of her achievements includes an invitation to write the HTLV-1 chapter in the 2007 edition of the standard reference *Fields Virology*.

Her accomplishments in HIV vaccine development have secured patent rights to the U.S. Government on the use of poxvirus vectors alone or in combination with DNA. One of the vaccines developed, was tested in Dr. Franchini's laboratory clinical trials on 16,000 volunteers in Thailand. Dr. Franchini's laboratory genetically characterized SIV (*Nature* 1987), and defined the regulatory function of HIV-1/2 and SIV genes (*Science* 1986, 1990). She first demonstrated the importance of Vpr in HIV-1 infectivity in macrophages (*PNAS*, 1990) and the SIV fusion peptide (*Science*, 1989). Her work in immunological mechanisms furthered the understanding of vaccine efficacy and protection (*Nature Medicine*, 2005). In the therapeutic arena, Dr. Franchini provided the first proof of principle that vaccination provides transient benefit to SIV-infected macaques (*Nature Medicine*, 2001), and she pioneered strategies to down-modulate regulators of immune response in HIV-1-infected individuals.

Dr. Franchini serves the scientific field through editorial duties for peer-review journals, including *Journal of Virology*. She is an Associate Editor for *Blood*, *Mucosal Immunology*, and *AIDS Reviews*. She is in frequent demand to review manuscripts for prestigious journals including: *Journal of Clinical Investigation*, *Journal of Experimental Medicine*, *Journal of Immunology*, *Journal of Infectious Diseases*, *Journal of Virology*, *Nature Medicine*, *Nature Reviews Immunology*, and *Oncogene*. Dr. Franchini serves on search and thesis committees, has served ad hoc in several study sections and has chaired the HIV-Vaccine study session in the last year and half. She serves on scientific committees, faculties, and advisory and review boards in intramural and extramural capacities. She has a strong mentorship record with former fellows, and now serves in important scientific positions at Harvard University, Institut Pasteur, in private industry, and at respected education and research institutions throughout the United States, Europe, and South America.

Research Interests

HTLV-1 causes ATLL and a progressive myelopathy designated TSP/HAM. HIV-1 is the causative agent of AIDS. Both of these human retroviruses induce disease affecting CD4+ T cells. Major research interests are: (1) To investigate how HTLV-1 proteins subvert cellular and physiological pathways of T cells and lead to their transformation and (2) To develop strategies for preventive vaccines and therapeutic vaccines for HIV-1.

Positions Held

- 1997 - Present: Chief, Animal Models and Retroviral Vaccines Section, National Cancer Institute (NCI), National Institutes of Health (NIH), Bethesda, MD
- 1995 - 1996: Acting Chief, Laboratory of Tumor Cell Biology (LTCB), NCI, NIH, Bethesda, MD
- 1993 - 1996: Chief, Section on Animal Models and Retroviral Vaccines, LTCB, NCI, NIH, Bethesda, MD
- 1988 - 1992: Visiting Scientist, LTCB, NCI, NIH, Bethesda, MD
- 1986 - 1988: Guest Researcher, LTCB, NCI, NIH, Bethesda, MD
- 1982 - 1986: Visiting Associate, LTCB, NCI, NIH, Bethesda, MD
- 1979 - 1982: Fogarty Fellow, LTCB, NCI, NIH, Bethesda, MD
- 1977 - 1979: Postdoctoral Fellow, Hematology Institute, University of Modena, Italy

Memberships

- Member, Italian Society of Haematology - 1982-2015
- Member, Italian Society of Medicine - 1981-2015
- Member, American Society of Clinical Investigation (elected member) - 1990
- Member, International Retrovirology Association - 1980 - 2015
- Member, International Association for Comparative Research on Leukemia and Related Diseases – 1985 -2015
- Member, American Association of Physicians (elected member) - 2007
- Service Member, HIV/AIDS Vaccine Study Section, 2005
- Member, American Society of Hematology - 2008

Editorial work

- Associate Editor for AIDS Review – 1995 - 1998
- Associate Editor for Mucosal Immunology (Nature Publishing Group) – 2004 - 2015
- Associate Editor for Blood (American Association of Hematology), 2008 – 2015

Editorial Board Membership

- AIDS Research and Human Retroviruses
- AIDS Treatment Strategies
- Journal of AIDS
- Journal of Virology
- Vaccine
- Virology
- AIDS Abstracts

Honors & Awards:

- National Institute of Health Award of Merit, 2011
- National Cancer Institute Mentor of Merit Award, 2001, 2009
- Federal Technology Transfer Act Award, 1994-1997, 2001-2008, 2010-2014
- Outstanding Mentor Award, NCI Fellowship Office, 2001, 2004, 2009, 2010, 2011
- National Cancer Institute Director Award, 2011
- Dale McFarlin Award, 17th International Conference on Human Retrovirology: HTLV and Related Viruses
- Center for Retrovirus Research Distinguished Research Career Award, Center for Retrovirus Research of The Ohio State University 2016

Invited Guest Lectures/Presentations

Professorship; University of Kumamoto; Japan; 1994

Professorship; Pasteur Institute; Paris, France; 1994

Guest Lecturer, New Insights on HTLV-I Origin and Pathogenesis; Laboratory of Dr. Myron Essex; Harvard School of Public Health; Boston, MA; August 1995

Guest Lecturer, Insights on HTLV-I/II Natural History and Pathogenicity; Laboratory of Dr. Ronald C. Desrosiers; Harvard Medical School; Boston, MA; December 1995

Invited Participant, Symposium on Virological and Immunological Features of HIV-Infected Long Term Non-Progressors; Milan, Italy; May 1996

Invited Participant, International Agency For Research On Cancer Working Group on HTLV and HIV Monographs; Lyon, France; June 1996

Guest Lecturer, HIV-I Vaccine Development; University of Vienna Medical School; Vienna, Austria; September 1996

Guest Lecturer, HTLV-II Pathogenesis; University of Padova; Padova, Italy; September 1996

Guest Speaker, Evaluation of a NYVAC-SIV Vaccine in the Macaque Model; Institute of Human Virology, University of Maryland; Baltimore, MD; February 1997

Invited Participant, International Meeting on Herpes Virus; Pisa, Italy; May 1997

Invited Participant, 10th Symposium on Molecular Biology of Hematopoiesis; Hamburg, Germany; July 1997

Invited Speaker, XIX Symposium of the International Association for Comparative Research on Leukemia and Related Diseases; Mannheim/Heidelberg, Germany; July 1997

Invited Participant, 15th Annual Symposium on Nonhuman Primate Models for AIDS; Seattle, WA; September 1997

Guest Lecturer, 1997-1998 External Seminar Series; John P. Robarts Research Institute; London, Ontario, Canada; October 1997

Invited Participant, Invitation of Foreign Scientists to Japanese Institutes, Japan Health Sciences Foundation, Kagoshima, Japan, 1998

Lecturer, Second National Hematology Blood Transfusion Meetings, Vietnam Society Hematology Blood Transfusion, Ho Chi Minh City, Vietnam, 1998

Invited Lecturer, Primate Evaluations of AIDS Vaccines Workshop, National Institute of Allergy and Infectious Diseases, NIH, Bethesda, MD, 1998

Invited Lecturer, V International Symposium on HTLV in Brazil and IX Meeting of Hematology and Hemotherapy of Ceara; Fortaleza, Brazil, 1998

Lecturer, 12th World AIDS Conference, Geneva, Switzerland, 1998

Invited Lecturer, 17th UICC International Cancer Congress, Rio de Janeiro, Brazil, 1998

Invited Lecturer, Lindsley F. Kimball Research Institute, New York, NY, 1998

- Invited Lecturer, 9th International Conference on Human Retrovirology: HTLV, Kagoshima, Japan, 1999
- Invited Lecturer, U.S. Military HIV Research Program, Henry M. Jackson Foundation for the Advancement of Military Medicine, Rockville, MD, 1999
- Invited Lecturer, International Symposium on HIV, Leukemia, and Opportunistic Cancers; Marrakech, Morocco, 1999
- Invited Lecturer, XXVI Congress of Polish Pediatricians, Mikolajki, Poland, 1999
- Invited Participant, Immune Based Interventions in HIV Infection and Treatment: A Promising Approach Seminar, NIH AIDS Interest Group, Bethesda, MD, 1999
- Invited Participant, HIV Therapeutic Vaccines in the HAART Era NIH Seminar, Boston, MA, 1999
- Invited Participant, MHC Typing Issues and Breeding of Genetically Defined Nonhuman Primates for AIDS Vaccine Studies Workshop, NIH, Office of AIDS Research, Bethesda, MD, 1999
- Invited Participant and Speaker, Immune Reconstitution: Facts and Challenges, Clinical Research Institute of Montreal; Montreal, Quebec, Canada, 1999
- Invited Participant and Speaker, 12th Colloque Des Cent Gardes, Paris, France, 1999
- Invited Participant and Speaker, 7th Conference on Retroviruses and Opportunistic Infections, San Francisco, CA, 2000
- Invited Participant, UCSF AIDS Research Institute and Vaccine Research of Chiron Corporation Think-Tank Session on HIV Immunization Strategies, San Francisco, CA, 2000
- Invited Speaker, Wistar Institute Lecture Series, Philadelphia, PA 2000
- Invited Participant, HIV Therapeutic Vaccines in the HAART Era NIAID Workshop, Rockville, MD 2000
- Invited Lecturer, III Meeting on Pathogenesis, Diagnosis, and Treatment of HIV Infection, Division of Infectious and Tropical Diseases, IRCCS Policlinico San Matteo; Vienna, Austria, 2000
- Invited Speaker, IX Annual Meeting of the Canadian Association for HIV Research; Montreal, Canada, 2000
- Participant, HIV/AIDS Vaccine Development Workshop, Paris, France, 2000
- Invited Participant and Lecturer, Viruses in the Etiology of Human Cancers Meeting, Heidelberg, Germany, 2000
- Invited Speaker, American Association of Immunologists and Clinical Immunology Society Joint Annual Meeting: Immunology 2000, Seattle, WA, 2000
- Invited Speaker, AIDS Vaccine Evaluation Group & HIV Vaccine Trials Workshop, Washington, DC, 2000
- Invited Speaker, Rationale and Prospectives of Immune Intervention in HIV Workshop, Paris, France, 2000
- Invited Speaker, AIDS Research Institute and Center for AIDS Research (UCSD) Lecture Series, San Diego, CA, 2000
- Invited Lecturer, Mt. Sinai School of Medicine Lecture Series, New York, NY, 2000
- Invited Speaker, Mid-Atlantic SIV Interest Group Re-educating the Immune System in Primate Immunodeficiency Virus Infection Meeting, Frederick, MD, 2000
- Speaker, Symposium on Nonhuman Primate Models for AIDS, Madison, WI, 2000

Keynote Speaker, Structured Treatment Interruptions Workshop; Chicago, IL, 2000

Lecturer, XIV Convegno Nazionale AIDS e Sindromi Correlate, Milan, Italy, 2000

Chairperson, Viral Diseases in Hematology Session, Part of the 2000 American Society of Hematology Education Program, San Francisco, CA, 2000

Invited Participant, Immune-Based Therapies & HIV Disease Meeting, Forum for Collaborative HIV Research, Center for Health Services Research & Policy, George Washington University Medical Center Washington, DC, 2000

Lecturer, Adult AIDS Clinical Trials Group Retreat, Therapeutic Immunology Subcommittee, Immunology Research Agenda Committee, NIH, Washington, DC, 2000

Speaker, Lecture Series of the Department of Microbiology and Immunology, School of Medicine, University of North Carolina at Chapel Hill, 2000

Lecturer, 6th Glasgow Virology Workshop, Glasgow, Scotland, 2001

Lecturer, University of Rome; Rome, Italy, 2001

Lecturer, University of Padova; Padova, Italy, 2001

Speaker, Wistar Institute Seminar Series, Philadelphia, PA, 2001

Speaker, Children's Hospital of Philadelphia Seminar Series, Philadelphia, PA, 2001

Chairperson, Immune Reconstitution and Surrogate Markers in HIV/AIDS Workshop, Institute of Human Virology, Baltimore, MD, 2001

Invited Speaker, HIV Immune Based Therapies Symposium, Boston, MA, 2001

Lecturer, Pathogenesis, Diagnosis, and Therapy of HIV Infections (organized by Policlinico San Matteo IRCCS, Pavia, Italy), Venice, Italy, 2001

Lecturer, 10th International Conference on Human Retrovirology: HTLV and Related Viruses, Dublin, Ireland, 2001

Lecturer, Mahidol University, Bangkok, Thailand, 2001

Lecturer, Blood Transfusion Hematology Center, Ho Chi Minh City, Vietnam, 2001

Participant, International Society for Experimental Hematology Meeting, Tokyo, Japan, 2001

Participant, AIDS Vaccine 2001, Philadelphia, PA, 2001

Speaker, XXI International Symposium on Leukemia, Lymphoma, and AIDS: Pathogenesis and Treatment Padova/Venice, Italy, 2001

Invited Participant, Antigen Presenting Cells in HIV Pathogenesis and Therapy Meeting (NIH Office of AIDS Research and NCI), Warrenton, VA, 2001

Participant, 19th Annual Symposium on Nonhuman Primate Models for AIDS, San Juan, PR, 2001

Speaker, Cornell Medical Center Academic Lecture Series, New York, NY, 2001

Lecturer, University of Texas Health Science Center Lecture Series, San Antonio, TX, 2002

Invited Speaker, Post Challenge Evaluations in NHP Models, Bethesda, MD, 2002

Invited Speaker, Viral Regulatory and Accessory Genes for AIDS Vaccine Development Meeting; Bethesda, MD, 2002

Participant, 9th Conference on Retroviruses and Opportunistic Infections, Seattle, WA, 2002

Invited Speaker, HIV Therapies: Bench to Bedside, Palm Springs, CA, 2002

Speaker, Symposium on HIV/AIDS, Palm Springs, CA, 2002

Speaker, 3rd Workshop on Structured Treatment Interruptions, Montreal, Canada, 2002

Invited Lecturer, AIDS Clinical Trials Unit Seminar Series, Case Western Reserve University, Cleveland, OH, 2002

Doctoral Thesis Defense Committee Member, McGill University, Montreal, Canada, 2002

Invited Speaker, Cleveland HIV Immunology Symposium; Cleveland, OH, 2002

Invited Speaker, Weekly Research Meeting on Intramural HIV/AIDS Program, NIAID, Bethesda, MD, 2002

Invited Speaker, Therapeutic Vaccines against HIV and Cancers, Annecy, France, 2002

Invited Lecturer, Emory University Vaccine Center at Yerkes, Atlanta, GA, 2002

Lecturer, VII International Symposium on HTLV in Brazil, Belem, Para, Brazil, 2002

Invited Lecturer, 2002 International Meeting of the Institute of Human Virology, Baltimore, MD, 2002

Invited Lecturer, Lecture Series, Division of Viral Products, Center for Biologics Evaluation and Research, FDA, Bethesda, MD, 2002

Invited Lecturer, Aaron Diamond AIDS Research Center, New York, NY, 2002

Invited Speaker, Laboratory of Molecular Immunoregulation, NCI, Lecture Series, Frederick, MD, 2002

Invited Participant, Vaccine Research Center (NIH) Scientific Retreat, Annapolis, MD, 2002

Invited Lecturer, Vaccine Research Center (NIH) Lecture Series, Bethesda, MD, 2002

Speaker, 2002 Workshop on Pathogenesis by Non-Acute Retroviruses, Indian Wells, CA, 2002

Invited Speaker, Vaccine Research Center (NIH), Bethesda, MD, 2003

Invited Participant, Office of AIDS Research (NIH) FY 2005 HIV/AIDS Vaccine Research and Development Planning Workshop; Bethesda, MD, 2003

Speaker, HIV and Cancer Virology Faculty and Vaccine Working Group Meeting: Future Vaccines for Papilloma and AIDS Viruses, Bethesda, MD, 2003

Invited Speaker, U.S. - Japan Cooperative Medical Science Program, 15th Joint Meeting of the AIDS Panels Okinawa, Japan, 2003

Lecturer, HIV and AIDS Malignancy Branch, NCI (NIH), Bethesda, MD, 2003

Invited Speaker, Keystone Symposium on HIV Vaccine Development, Banff, Alberta, Canada, 2003

Invited Participant, HIV Therapeutic Vaccines: Moving the Field Forward, Washington, DC, 2003

- Participant, Retroviruses Meeting, Cold Spring Harbor, NY, 2003
- Participant, International Conference on Human Retrovirology: HTLV, San Francisco, CA, 2003
- Invited Speaker, Metabolism Branch, NCI, Seminar Series, Bethesda, MD, 2003
- Participant, 32nd Annual Meeting of the International Society for Experimental Hematology, Paris, France, 2003
- Invited Participant, Adult AIDS Clinical Trials Group Meeting, Washington, DC, 2003
- Invited Speaker, HIV & AIDS Malignancy Branch, NCI Seminar Series, Bethesda, MD, 2003
- Invited Speaker, International Meeting of the Institute of Human Virology, Baltimore, MD, 2003
- Invited Speaker, AIDS: Pandora's Box, Catania, Italy, 2003
- Invited Participant, 2nd Annual Vaccine Research Center Scientific Training Retreat, Annapolis, MD, 2003
- Invited Participant, Transatlantic Cooperation on Combating Bioterrorism Symposium, Washington, DC, 2003
- Participant, 1st International Workshop on HIV Persistence during Therapy; Saint Martin, French West Indies, 2003
- Invited Participant, "Assessment of Future Developments of Immune Based Therapies in HIV Infection," NIAID, Lansdowne, VA, 2004
- Invited Speaker, NIAID Immune Therapy/Cytokine Symposium, Bethesda, MD, 2004
- Invited Speaker, Molecular Microbiology and Immunology Department and Infectious Diseases Department Seminar Series, Johns Hopkins University, Baltimore, MD, 2004
- Invited Speaker, Molecular, Cellular and Developmental Biology Seminar Series, Ohio State University, Columbus, OH, 2004
- Lecturer, Trans-NIH/FDA Intramural Biodefense Symposium, NIAID, Bethesda, MD, 2004
- Invited Presenter, Office of AIDS Research Advisory Council Meeting, NIH, Bethesda, MD, 2004
- Participant, "Molecular Mechanisms of HIV Pathogenesis," a Keystone Symposium, Whistler, British Columbia, Canada, 2004
- Invited Participant, Orthopox Research Group Meeting, NIAID, Bethesda, MD, 2004
- Invited Lecturer, Therapeutic Vaccines Mini-symposium, Part of Basic Aspects of Vaccines National Symposium, Bethesda, MD, 2004
- Invited Speaker, "Therapeutics in HTLV-1-Associated Neurologic Disease" Workshop, Montego Bay, Jamaica, 2004
- Invited Speaker, NIAID/NIH Biodefense Clinical Research Workshop, Bethesda, MD, 2004
- Invited Mini-symposium Co-chair/Speaker, 12th International Congress of Immunology/4th Annual Conference of FOCIS, Montreal, Canada, 2004
- Invited Speaker, McGill University Continuing Medical Education Seminar Series, Montreal, Canada, 2004
- Invited Speaker, "Animal Models for HIV Therapeutic Vaccines Meeting," Pearl River, NY, 2004

Invited Speaker/Oral Abstract Session Co-chair, AIDS Vaccine 2004, Lausanne, Switzerland, 2004

Invited Speaker, Department of Genito - Urinary Medicine & Communicable Diseases Seminar Series, Imperial College, London, UK, 2004

Speaker, International Poxvirus and Iridovirus Symposium, Oxford, UK, 2004

Invited Speaker, "Immunomodulating Drugs for the Treatment of HIV/AIDS," Poiano/Costermano/Lake Garda, Italy, 2004

Invited Speaker, 3rd Heinrich F. C. Behr Symposium & LEOPOLDINA Conference "Microbes and Malignancy," Heidelberg, Germany, 2004

Invited Participant, Vaccine Research Center (NIH) Scientific Training Retreat, Richmond, VA, 2004

Co-chair/Speaker, HTLV Session, International Meeting of the Institute of Human Virology, Baltimore, MD, 2004

Invited Speaker, 2nd International Symposium on Oncovirology, Salvador, Bahia, Brazil, 2004

Lecturer, Microbiology Seminar Series, University of Texas Southwestern Medical Center, Dallas, TX, 2004

Invited Speaker, 8th International Symposium on HTLV in Brazil, Sao Paulo, Brazil, 2005

Invited Participant, "Vaccines for Hepatitis-C Virus" Workshop, NIAID, Bethesda, MD, 2005

Invited Lecturer, Pathogenesis Seminar Series, Center for AIDS Research, Seattle Biomedical Research Institute, Seattle, WA, 2005

Invited Speaker, Department of Microbiology and Immunology Seminar Series, Uniformed Services University of the Health Sciences, Bethesda, MD, 2005

Invited Speaker, "HIV Vaccines: Current Challenges and Future Prospects," a Keystone Symposium, Banff, Canada, 2005

Invited Speaker, Orthopox Research Group Fifth Annual Meeting, NIH, Bethesda, MD, 2005

Invited Speaker, NCI Immunology Faculty Seminar Series; Bethesda, MD, 2005

Invited Speaker, Biodefense Forum, Ft. Detrick, MD, 2005

Invited Speaker, NIAID Grand Rounds, Bethesda, MD, 2005

Invited Speaker, "HIV: Bridging the Sciences—Vaccine Research and Drug Development," Atlanta, GA, 2005

Invited Speaker, 10th German and 16th Austrian HIV Conference, Vienna, Austria, 2005

Invited Speaker/Session Co-chair, "T cell Turnover and Homeostasis in HIV Infection" Workshop, Bethesda, MD, 2005

Co-organizer/Speaker, HTLV Symposium, Montego Bay, Jamaica, 2005

Co-organizer/Speaker, Symposium of the International Association for Comparative Research on Leukemia and Related Diseases, Munich, Germany, 2005

Co-organizer, Symposium Chair, AIDS Vaccine 2005, Montreal, Canada, 2005

Participant, 23rd Annual Symposium on Nonhuman Primate Models for AIDS; Portland, OR, 2005

Invited Speaker, Emerging and Re-emerging Viral Infections and Biodefense, Rome, Italy, 2005

Co-organizer/Speaker, Dead Sea Colloquium on HIV and Cancer Vaccine Research, Amman, Jordan, 2005

Invited Speaker, Gene Therapy and Vaccines Seminar Series, University of Pennsylvania School of Medicine, Philadelphia, PA, 2006

Invited Speaker, NIAID Poxvirus Workshops, Bethesda, MD, 2006

Invited Speaker, Palm Springs Symposium on HIV/AIDS; Palm Springs, CA, 2006

Invited Speaker, HIV Research Program Seminar Series, Henry M. Jackson Foundation, Rockville, MD, 2006

Co-organizer/Speaker, "HIV Vaccines," A Keystone Symposium, Keystone, CO, 2006

Invited Speaker, International Workshop on Viral Oncology, Padova, Italy, 2006

Invited Speaker, "Infectious Basis of Cancer: Insights and Therapeutic Opportunities," Mayo Clinic, Rochester, MN, 2006

Invited Speaker, Regulatory T cells and HIV/AIDS Workshop, Cincinnati, OH, 2006

Invited Speaker, 3rd International Conference on Innovative Therapies for Lymphoid Malignancies, Palermo, Italy, 2006

Invited Speaker, 5th National Congress of the Italian Society for Infectious and Tropical Diseases, Catania, Italy, 2006

Invited Speaker, 20th National Congress on AIDS & Related Diseases, Rome, Italy, 2006

Invited Speaker, "Innate Immunity & Novel Vaccines" Symposium, Miami, FL, 2007

Invited Speaker, University of Alabama Center for AIDS Research Lecture Series, 2007

Invited Speaker, HIV Winter Symposium, Miami, FL, 2007

Speaker/Co-organizer, "Viruses, Genes and Cancer," Venice, Italy, 2007

Session Chair, 13th International Conference on Human Retrovirology, Hakone, Japan, 2007

Invited Speaker, "Translating Basic HIV Immunology in Novel Interventions" Workshop, Sydney, Australia, 2007

Invited Speaker, 13th International Conference of Immunology; Rio De Janeiro, Brazil, 2007

Invited Speaker, "Challenges in HIV Vaccines" Satellite Symposium, Rio De Janeiro, Brazil, 2007

Invited Speaker, "HIV/AIDS Research at the NCI: a Record of Sustained Excellence," Bethesda, MD, 2007

Invited speaker, Rush University, Chicago, "CTLA-4 Blockade in SIV Infection," 2008

Invited speaker, "Negative Regulatory Cells in HIV/SIV Infection" Symposium, Palm Springs, CA, 2008

Chairperson and Speaker, Keystone Meeting on HIV Vaccine and Pathogenesis, Banff, Canada, 2008

Participant, Cold Spring Harbor, NY, 2008

Invited Speaker, X Simposio Internacional Sobre HTLV NO BRASIL, "Novel Functional insights on the HTLV-1 P13 II and P12 I Proteins" Rio de Janeiro, Brazil, 2008

Invited Speaker, 3o Simposio somber avancos na patogenia e manejo da AIDS, “The immune response and factors that affects HTLV-1 genetic regulation: prospects for HIV vaccine” Bahia, Brazil, 2008

Invited Speaker, Journal of Medicine and The Royal Swedish Academy of Sciences’ 5th Key Symposium Mucosal Immunity and Novel HIV-vaccine Concepts, “Can we use monkeys for human HIV vaccine models?” Stockholm, Sweden, 2008

Organizer, Vaccine Branch Fall HIV/AIDS and Cancer Think Tank Meeting, NIH, Bethesda, MD, 2008

Invited Speaker/Participant, The Cleveland Immunopathogenesis Consortium, “Defining the Pathogenesis of Immune Deficiency in Chronic HIV Infection” Cleveland, OH, 2008

Chairperson, Special Emphasis Panel/Scientific Review Group 2009/01 VACC meeting, Study Session, 2008

Invited Speaker/Participant, 50th ASH Annual Meeting, San Francisco, CA, 2008

Participant, 2009 NCI Intramural Scientific Investigators Retreat, Bethesda, MD, 2009

Participant/Invited Guest, “25 Years after Discovering HIV as the Cause of AIDS.” Symposium honoring Dr. Robert C. Gallo, Baltimore, MD, 2009

Invited Speaker/Participant, 14th International Conference on Human Retrovirology: HTLV and Related Retroviruses, Salvador Bahia, Brazil, 2009

Participant, 21st Retroviral Pathogenesis Conference, Lucca, Italy, 2009

Organizer, Vaccine Branch Fall HIV/AIDS and Cancer Think Tank Meeting. NIH, Bethesda, MD, 2009

Invited Speaker, DIADS/HVTN Seminar Series, NIH, Bethesda, MD, 2010

Invited Speaker, EIB seminar schedule, 2010

Invited Speaker, University of Padova, Italy, 2010

Invited Speaker, University of Naples, Italy, 2010

Invited Speaker, Palm Springs Symposium on HIV/AIDS, Palm Springs, CA, 2010

Invited Speaker, Cleveland Immunopathogenesis Consortium, Cleveland, OH, 2010

Invited Speaker, Rush Medical Center, Chicago, IL, 2010

Invited Speaker, Immune Activation in HIV Pathogenesis Models and Targets Meeting, Potomac, MD, 2010

Invited Participant, Army-US Military HIV Research Program Scientific Retreat Williamsburg, VA, 2010

Invited Speaker, Cold Spring Harbor, NY, 2010

Invited Speaker, New Insights Into Mucosal Transmission of HIV/SIV and Its Prevention by Vaccines and Other Modalities Meeting, Bethesda, MD, 2010

Invited Speaker, FOCIS 10th Annual Meeting, Boston, MA, 2010

Invited Speaker, IHV Meeting, Venice, Italy, 2010

Co-Organizer; Virus, Genes and Cancer Meeting, Venice, Italy, 2010

Invited Speaker, 12th Annual International Meeting of the Institute of Human Virology of the University of Maryland School of Medicine, Calabria, Italy, 2010

Organizer, Vaccine Branch Fall HIV/AIDS and Cancer Think Tank Meeting, NIH, Bethesda, MD, 2010

Invited Speaker, University of Maryland, Baltimore, MD, 2010

Participant, RV144 Meeting and Correlates of Protection Workshop, Seattle, WA, 2010

Invited Speaker, Keystone Symposium, Mucosal Biology: A Fine Balance between Tolerance and Immunity, Vancouver, Canada, 2011

Invited Speaker, Kyoto Symposium, Kyoto Japan, 2011

Invited Participant, AMEH Annual Meeting, Cancun Mexico, 2011

Invited Participant, Ruprecht Lab Annual Clade C Program Project Meeting, 2011

Chairperson, HTLV-I Meeting, Leuven, Belgium, 2011

Invited Speaker, Internal Medicine of Medical University of Bialystok, Poland, 2011

Invited Speaker, VGTI, Vaccine and Gene Therapy Institute, Port St. Lucie, FL, 2011

Invited Speaker, SIMPAIDS, Bahia, Brazil, 2011

Invited Speaker, Workshop on HTLV-I and HIV-1 Databases, Bahia, Brazil, 2011

Invited Speaker, AIDS Vaccine Meeting, Bangkok, Thailand, 2011

Invited Speaker, XXV IACRLRD Symposium Tokyo, Japan, 2011

Invited Speaker, Annual Non-Human Primate AIDS Meeting, Seattle, WA, 2011

Invited Speaker, Robert Gallo's Laboratory, Baltimore, MD, 2011

Organizer, Vaccine Branch Fall HIV/AIDS and Cancer Think Tank Meeting, NIH, Bethesda, MD; 2011

Invited Speaker, Advance Topic Lecture, Memorial Sloan-Kettering Cancer Center, New York, NY, 2011

Invited Speaker, 1º Congresso Brasileiro de HIV/AIDS e virus relacionados, Bahia, Brazil, 2011

Invited Speaker, 2012 Palm Springs Symposium on HIV/AIDS, Palm Springs, CA, 2012

Abstract Reviewer, AIDS 2012 Meeting, Bethesda, MD, 2012

Invited Speaker, HIV Cells of Macrophage/Dendritic Lineage and other Reservoirs, Stresa, Italy, 2012

Invited Speaker, AIDS 2012 Vaccine Meeting, Boston, MA, 2012

Invited Speaker, IHV Meeting, Baltimore, MD, 2012

Co-Organizer; Virus, Genes, and Cancer Meeting, Venice, Italy, 2012

Organizer, Vaccine Branch Fall HIV/AIDS and Cancer Think Tank Meeting, NIH, Bethesda, MD; 2012

Invited Speaker, Keystone, Keystone, CO, 2013

Invited Speaker, GeoVax Advisory Board Meeting, Atlanta, GA 2013

Invited Speaker, HIVRAD-SAB Meeting Emory University, Atlanta, GA, 2013

Invited Speaker, HTLV-I Annual Meeting, Montreal, Canada; 2013

Invited Speaker, HU Annual SAB meeting; Seattle, WA 2013

Co-Chair, Stadtman Virology Search, Bethesda, MD, 2014

Invited Speaker, NIAID, Lecture, Bethesda, MD, 2014

Invited Speaker, Palm Springs, HIV Infection: Towards a Cure, 2014

Invited Speaker, Keystone Bnaff Spring, Canada, 2014

Invited Participant, CDC, Poxvirus Program Review Panel, Atlanta, GA, 2014

Invited Speaker, AIDS Vaccine Research Subcommittee (AVRS), Washington, DC, 2014

Invited Board Member, HU VDC SAB Meeting, Seattle, WA, 2014

Participant, IVH Annual Meeting, Baltimore, MD, 2014

Invited Speaker, Cent Gardes Conference HIV Vaccines, 2014

Invited Speaker, 32nd Symposium on Non-human primate models for AIDS, Portland, OR, 2014

Invited Speaker, 3rd Conference on Translational Medicine on Pathogenesis and Therapy of Immune- Mediated Diseases, Milan, Italy, 2014

Invited Speaker, 2014 ISSNAF Annual Event - Young ISSNAF Career Symposium, Washington, DC, 2014

Invited Speaker, Kunming Institute of Zoology/Kunming Primate Research Center, Kunming, Yunnan, China, 2014

Organizer, Vaccine Branch Fall HIV/AIDS and Cancer Think Tank Meeting, NIH, Bethesda, MD, 2014

Invited Speaker, Yerkes National Primate Research Center, Emory University School of Medicine, 2014

Invited Speaker, 2014 Palm Springs Symposium on HIV/AIDS, 2014

Invited Speaker, HIV R4P, Cape Town International Convention Center, Cape Town, South Africa, 2014

Invited Speaker, Cent Gardes Conference on HIV Vaccines, Les Pensieres Conference Center Veyrier du Lac, Annecy, France, 2014

Invited Speaker, Italian Society of Immunology, Clinical Immunology and Allergology, Milan, Italy, 2014

Invited Member, Scientific Advisory Board (SAB) meeting, Seattle, WA, 2014

Participant, HIV Vaccine - Keystone Symposia, Banff, Alberta, Canada, 2014

Invited Speaker, 2015 Keystone Symposia on Viruses and Human Cancer, Big Sky, MT, 2015

Invited Speaker, Rush University Medical Center, Chicago, IL, 2015

Invited Speaker, 17th International Conference on Human Retrovirology: HTLV & Related Viruses, Trois-Ilets, Martinique, France, 2015

Speaker, HIV Vaccine - Keystone Symposia, Banff, Alberta, Canada, 2015

Invited Member, VDC SAB Meeting, Seattle, WA 2015

Invited Speaker, Cancer: Inflammation and Immunity, Network Italiano per la Bioterapia dei Tumori, Finalborgo, Italy, 2015

Invited Speaker, XXVII International Symposium of the International Association for Comparative Research on Leukemia and Related Diseases, Paris, France, 2015

Invited Speaker, 2015 Workshop on Tumor Viruses, University of Padua, Padua, Italy, 2015

Invited Speaker, 17th Annual International Meeting, Institute of Human Virology at the University of Maryland School of Medicine, Baltimore, MD, 2015

Invited Speaker, Cleveland Immunopathogenesis Consortium, BBC, Case Western, Cleveland, OH, 2015

Award Recipient, Center for Retrovirus Research Distinguished Research Career Award, Center for Retrovirus Research of The Ohio State University, Columbus Ohio, 2016

Invited Member, SAB Emory, Atlanta, GA, 2015

Participant, RAS Initiative Symposium, Frederick, MD, 2015

Invited Speaker, U.S. – Japan Cooperative Medical Sciences Program AIDS Panel Meeting, Bethesda, MD, 2016

Invited Speaker, Keystone Symposium on HIV Vaccines, Olympic Valley, California, 2016

Speaker, HERN Conference, Romania, 2016

Invited Speaker, IARC Meeting – Emerging Issues in Oncogenic Virus Research, Manduria, Italy, 2016

Patent Material >\$8M in royalties to date (to NIH):

Patent 5223423: "Characterization of Replication Competent Human Immunodeficiency Type 2 Proviral Clone." Issued 6/29/93.

Patents 5420030, 5576000, 5869313: "Molecular Clones of HIV-1 viral strains MN-ST1 and BA-L and uses thereof." Issued 5/30/95, 11/19/96, 2/9/99, respectively.

Patent 5833975: "Recombinant Poxvirus-HTLV, Compositions and Uses." Issued 11/10/98.

Patent 5766598: A Recombinant Attenuated ALVAC Canarypoxvirus Expression Vectors Containing Heterologous DNA Segments Encoding Lentiviral Gene. Issued 6/16/98.

Patent 5863542: A Immunodeficiency Recombinant Poxvirus. Issued 1/26/99.

Patent 7094408: A Improved Immunogenicity Using a Combination of DNA and Vaccinia Virus Vector Vaccines. U.S. Issued 8/22/06.

Patent application 10/495532: A Novel Chimeric Rev, Tat, and Nef Antigens. DHHS E-158-2000/0-US-03.

U.S. Provisional Patent Application No. 60/404,580 filed 19 Aug 2002 (DHHS Reference No. E-173-2001/0-US-01); PCT Application No. PCT/US03/25958 filed 19 Aug 2003 (DHHS Reference No. E-173-2001/0-PCT-02): "HTLV-1 p30II and p12I Proteins as Therapeutic Targets in HTLV-1 Infected Individuals."

Patent application PCT/US03/35499: "Smallpox Vaccine Regimen." DHHS E-249-2002/0-PCT-1. Also known as Patent application 60/559,906; DHHS E-138-2004/0-US-01.

Patent application 10/048,072 filed 25 January 2002 (DHHS Reference No. E-212-1999/2-PCT-06) SLW Reference No. 1662.018US1 "Immunotherapy in HIV Infected Persons Using Vaccines After Multi-Drug Treatment."

Patent application 10/513257: "Immunotherapy Regimens in HIV-Infected Patients." DHHS E-128-2002/0-US-03. Docket 1662.013US1. Also known as Patent application 10/048,072; DHHS E-212-1999/2-PCT-06.

U.S. Patent Application No. 11/364873 filed 27 Feb 2006: "HIV Tev Compositions and Methods of Use."

U.S. Patent Application No. 61/081,994, filed 18 July 2008: "HTLV-II Vector and Methods of Use."

U.S. Patent Application No. 11/523,867, filed 20 September 2006: "DNA vaccines against poxvirus."

U.S. Patent Application No. 61/447,499, filed 28 February 2011: "Cervicovaginal vaccination with papillomavirus pseudovirions for protection against mucosatropic infections"

U.S. Patent Application No. E-055-2013/0 Filed 2013 "Combined Cell Based Gp96-ig-siv/hiv, Recombinant Gp120 Protein Vaccination For Protection From Siv/hiv". Patent pending; PCT/US2012/026256 (PC application).

Employee Invention Report: "A Method to Develop B cell Epitope-Based Effective Vaccine Modalities for Smallpox for Both Immune-Competent and Immune-Compromised Individuals."

Employee Invention Report: "An Alternatively Spliced Tat V1 Rev Protein (Tev) Product as a Component of an HIV Vaccine."

US Patent Application No, 61925154: RAS pathways as marker of protection against HIV and means to improved vaccine efficacy, filed 8 January 2015

Licenses: FY 2014

Vertex Pharmaceuticals Incorporated

E-143-1989/1 titled "HIV Chronically Infected Human T Cell Clone",
E-062-1990/0 titled "Molecular Clones of HIV 1 and Uses Thereof",
B-003-1998/0 titled "HIV-1p24 Monoclonal Antibody (183-H12-5C)",
B-005-1999/0 titled "Novel Infectious Clones of HIV DNA for Easy Mutational Changes",
B-026-1999/0 titled "CEM-SS HIV susceptible Cell Line NIH AIDS Reference Reagent #776", and
E-172-2002/0 titled "Cytokine-Induced Expression of HIV-1 in a Chronically Infected Promonocyte Cell Line".

Immune Design Corporation

E-041-2011/1 titled "C8166-45 Cell Line".

Competitive Funding:

Competitive supplemental funding FY 2000:
\$20,000 to organize an HTLV-I conference
\$300,000: NYVAC-SIV vaccine combined with immunomodulatory molecule after HAART failure.

Collaborative Project Award II: \$414,721: Ability of intrarectal administration of multi-epitope synthetic peptide HIV/SIV vaccine to induce mucosal T-cell immunity and protection against mucosal transmission of SHIV. PI #1: Genoveffa Franchini (NCI). PI #2: Jay A. Berzofsky (NCI).

Bench-to-Bedside Award: \$210,000. PI (basic science): Genoveffa Franchini (NCI). PI (clinical investigator): Ashish Jain (NIAID).

OAR Discretionary Funds (FY 2000): \$440,000. Phase I clinical trial with NYVAC HIV as immunotherapy in HIV-I-infected individuals treated with HAART. Investigators: Genoveffa Franchini (NCI), Gene Shearer (NCI), Robert Yarchoan (NCI).

IATAP (FY 2002): \$250,000. Investigators: Genoveffa Franchini, Marjorie Robert-Guroff, Carl C. Baker (all NCI).

NIAID Intramural Biodefense Research Award: \$997,100: Prevention and treatment of complications of smallpox vaccination in a macaque model of acquired immunodeficiency. Investigators: Genoveffa Franchini (NCI), Mike Bray (NIAID), Hana Golding (FDA), Dorothy Scott (FDA).

Competitive supplemental funding FY 2005: \$15,000 to organize an HTLV-1 conference.

NIH/NIAID 1R21 AI073234-01; 3/15/07-02/28/09; \$150,000: Induction of mucosal SIV immunity in non human primates by secreted Hsp-Gp96. Evaluate gp96-vaccines for SIV and study the optimal dose of SIV gp-96 vaccines for induction of systemic and mucosal immunity. PI: E. Podack (University of Miami).

NIH/NIAID 1R21 AI073234-01; 3/15/07-02/28/09; \$150,000: Induction of mucosal SIV immunity in non human primates by secreted Hsp-Gp96. Evaluate gp96-vaccines for SIV and study the optimal dose of SIV gp-96 vaccines for induction of systemic and mucosal immunity. PI: E. Podack (University of Miami).

Competitive supplemental funding FY 2009:
\$25,000 to organize an HTLV-I Conference

OAR Awarded: \$145,000. PI #1: Genoveffa Franchini (NCI) PI #2 Chris Buck (NCI), PI #3 John Schiller (NCI).

HPV Pseudovirus vaccine against mucosal HIV/SIV transmission 2010

OAR/NCI Awarded: \$1,500,000, FY 2010/2011. PI #1: Genoveffa Franchini (NCI). Dissection of the immune correlates of HIV vaccine protection in the macaque model

(NCI)RRS: Awarded 196,00.00.FY 2014.Genoveffa Franchini (NCI). Testing the effect of IGF-1 and RAS activation in vaccine protection against HIV/SIV

Reviewer For:

AIDS; AIDS Research and Human Retroviruses; AIDS Reviews; American Journal of Pathology; Annals of Neurology; Antiviral Chemistry and Chemotherapy; Blood; Cancer Genetics and Cytogenetics; Cancer Research; Carcinogenesis; Cell Immunology; Cellular and Molecular Life Sciences; Clinical and Diagnostic Laboratory Immunology; Clinical Infectious Diseases; DNA and Cell Biology; European Journal of Immunology; FEBS Letters; Immunogenetics; Immunology Letters; International Journal of Cancer; Journal of Acquired Immune Deficiency Syndromes; Journal of AIDS and Human Retrovirology; Journal of AIDS Research; Journal of Biological Chemistry; Journal of Clinical Investigation; Journal of Experimental Medicine; Journal of General Virology; Journal of Human Virology; Journal of Immunological Methods; Journal of Immunology; Journal of Infectious Diseases; Journal of Investigative Dermatology; Journal of Leukocyte Biology; Journal of the National Cancer Institute; Journal of Virology; Leukemia; Leukemia Research; Molecular and Cellular Biology; Molecular Biology of the Cell; Molecular Therapy; Molecular Pharmacology; Mucosal Immunology; National Cancer Institute Monographs; Nature Medicine; Nature Reviews Immunology; Oncogene; PLoS Pathogens; Proceedings of the National Academy of Sciences of the United States of America; Science; Vaccine; Viral Immunology; Virology; World AIDS Conference Abstracts

Committees and Programs:

HIV Drug Resistance Program Search Committee, NCI
Tenure Track and Search Committees, NIAID
Tenure Track Committee, HIV and AIDS Malignancies Branch, NCI
Ph.D. Dissertation Examiner, Microbiology and Tumobiology Center of the Karolinska Institute
Howard Hughes Medical Institute-NIH Research Scholars Program
Senior Scientist Search Committee, Laboratory of Genomic Diversity, NCI
Italian University Grants System Program
AIDS and Related Research Study Section 1, Molecular and Cellular Biology of HIV and Related Viruses, NIAID
Dana-Farber Cancer Institute External Advisory Board: Vaccination against Intrapartum HIV Clade C Transmission
Intramural Advisory Board, NCI
Office of AIDS Research Coordinating Committee on Vaccine Research, NCI
Ad Hoc Subcommittee on Vaccinia Immunization, NIH
Promotion and Tenure Review Panel, DCEG, NCI
Board of Scientific Counselors, NIAID
Tenure-Track Search Committee, Hematology Branch, NHLBI
Office of AIDS Research HIV Vaccine Research & Development Planning Workshops, NIH
Intramural AIDS Targeted Antiviral Program application-review committee, NIH
Special Emphasis Panel, "HIV Research and Design," NIAID Scientific Review Program
HIV and Cancer Virology Faculty, NCI
Vaccine Working Group, NCI
Attenuated Vaccinia Interagency Working Group
Scientific Review Program, Division of Extramural Activities, NIAID
NIH Academy Preceptor
HTLV Advisory Group, NCI
AIDS Vaccine Research Working Group, NIH
HIV/AIDS Vaccine Study Section, Center for Scientific Research, NIH; chair
Recombinant DNA Advisory Committee, Office of Biotechnology Activities, NIH
Animal Research Advisory Committee, NIH
Tenure/Tenure-Track Search Committee, Laboratory of Molecular Microbiology, NIAID; chair

Medical Research Council, Triage, Infections and Immunity Board, grant proposal reviewer
 New York Academy of Medicine, preceptor
 American Academy of Allergy Asthma & Immunology Summer Fellowship Program, preceptor
 Infectious Disease Society of American fellowship program, preceptor
 NIH/Johns Hopkins University graduate program, thesis committee member
 HIV & AIDS Malignancy Branch, NCI, Viral Oncogenesis Principal Investigator Recruitment Committee; Chair
 Steering Committee, Center of Excellence in HIV/AIDS and Cancer Virology, NCI; cochair
 Integrated Preclinical/Clinical AIDS Vaccine Development Program peer review, NIAID
 International Association for Comparative Research on Leukemia and Related Diseases, Committee member
 External Scientific Advisory Board, HIVRAD, Emory Vaccine Center, Yerkes National Primate Research Center
 External Advisory Board of the GeoVax Vaccine Development, Smyrna Georgia

Mentorship: Former Laboratory Members and Current Affiliations:

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Ali, Mir	Technician, NCI
Alonzo, Norma C.	Patent Advisor, U.S. Patent and Trademark Office
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Berneman, Zwi	Professor of Hematology; Head of the Laboratory of Experimental Hematology, University of Antwerp. Chief, Division of Hematology, Antwerp University Hospital
Boeri, Enzo	Researcher, Scientific Institute San Raffaele, Milan, Italy
Casareto, Luca	Bioinformatics Specialist, Informax, Inc.
Cereseto, Anna	Professor, University of Trento, Italy
Di Giglio, Laura	Researcher, Merck
Dundr, Miroslav	Assistant Professor, Rosalind Franklin University of Medicine & Science
Edghill-Smith, Yvette	Program assistant, Leader, NIAID
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Fu, Kaisong	Clinical medicine
Gessain, Antoine	Director, Oncogenic Virus Epidemiology and Pathophysiology, Institut Pasteur, France
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Giuliani, Laura	Assistant Professor, University of Rome, Italy
Harrod, Robert L.	Associate Professor, Southern Methodist University
Hel, Zdenek	Associate Professor, University of Alabama
Hryniwicz, Anna	Professor, Medical University, Bialystok, Poland
Johnson, Julie M.	Research Scientist, Martek Biosciences
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Koralnik, Igor J.	Associate Professor; Director, HIV/Neurology Center, Beth Israel Deaconess Medical Center
Marcon, Luisa	Researcher, University of Rome, Italy; Assistant Professor, Brown Medical School
Moniuszko, Marcin	Chief, Department of Regenerative Medicine and Immune Regulation Medical University of Bialystok, Poland
Mulloy, James C.	Associate Professor, Cincinnati Children's Hospital Medical Center
Nacsá, Janos	
Nicot, Christophe	Full Professor, University of Kansas
Rivadeneira, Emilia	Physician, Mt. Sinai Medical Center
Silic-Benussi, Micol	Research scientist, University of Padova, Italy
Stevceva, Liljana	Medical Officer, NIAID
Takemoto, Shigeki	Physician, Kochi Medical School, Japan
Trindade, Christopher	Senior Medical Scientist for Gilead M. D.
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Cecchinato Valentina	Researcher, Bellinzona, Switzerland

Jean- Michel Heraud	Director of the Laboratorie Natcional OMS Institute Pasteur de Madagascar
Fukumoto Risaku	Researcher, Navy Medical University (Bethesda MD)
Valerio Valeri	University of Firenze /Corporate Affiliation, Italy
Shari Gordon	Senior Scientist, GSK, North Carolina, USA
Poonam Pegu	Postdoc, Military HIV Research Program (MHRP)
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Claudio Fenizia	Second Postdoc Epigenetic of Muscle Mass, Department of Bioscience, University of Milan
Martina Focchi	Second postdoc at the San Raffaele institute (HSR)
Nancy Van Prooyen	Researcher, Department of Microbiology and Immunology
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Adriano Boasso	Research Fellow, Faculty of Medicine, Department of Medicine, Imperial College, London.
Izabela Bialuk	Researcher, Medical University of Bialystok, Department of General and Experimental Pathology
Luiz Carlos Alcantara	Researcher, Fundação Oswaldo Cruz, Centro de Pesquisas Gonçalo Moniz, Fiocruz, Brazil

BIBLIOGRAPHY

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5. Franchini, G., Even, J., Sherr, C.J., and Wong-Staal, F.: Onc sequences (v-fes) of Snyder-Theilen feline sarcoma virus are derived from noncontiguous regions of a cat cellular gene (c-fes). *Nature* 1981 290:154-157.
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- human T cell leukemia virus (HTLV-IIIMo). In Gallo, R.C., Essex, M., and Gross, L. (Eds.): ***Human T Cell Leukemia/Lymphoma Virus.*** Cold Spring Harbor, Cold Spring Harbor Laboratory Press, 1984, pp. 189-195.
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