Welcome to the International Workshop on Viruses, Genes and Cancer - 2010. This is the second edition of the workshop whose title and content reflect the wealth of knowledge that is continuously being mined from investigations of the interactions between human retroviruses and host cells. The program includes a series of keynote lectures that provide a foundation for brief presentations addressing the pathogenesis of the human T-cell leukemia viruses (HTLV) and human immunodeficiency virus (HIV), and the molecular mechanisms of cancer. To foster further collaborative research in the fields of viral and molecular oncology, this year’s edition also includes a poster session (fuelled by traditional Venetian ‘cicchetti’).

We wish to thank all of the participants for contributing to the workshop, and hope you will enjoy an intellectually stimulating scientific experience and pleasant stay in Venice.

The organizing committee
Genoveffa Franchini, Donna D’Agostino, Umberto Bertazzoni, Vincenzo Ciminale, Luigi Chieco-Bianchi

Photo kindly provided by F. Ferruzzi
WEDNESDAY - SEPTEMBER 29, 2010

13.00 - 14.00  REGISTRATION

14.00 - 14.30  OPENING REMARKS
Luigi Chieco-Bianchi  
University of Padova, Italy
Gian Antonio Danielli  
President, Istituto Veneto di Scienze, Lettere ed Arti, Venezia

14.30 - 17.15  STATE OF THE ART LECTURES
chairs  
Alberto Amadori  
Istituto Oncologico Veneto-IRCCS, Padova, Italy
Umberto Bertazzoni  
University of Verona, Italy

lectures  
Robert C. Gallo  
Institute of Human Virology, University of Maryland School of Medicine, Baltimore, USA
Concepts and progress report on an antibody-based vaccine for HIV
Stephen P. Goff  
Columbia University, New York, USA
XMRV replication in prostate cell lines: Transcription and restriction
Neal S. Young  
National Heart, Lung and Blood Institute, Bethesda, USA
Telomerase genes in human diseases

BREAK

Carlo M. Croce  
Ohio State University, Columbus, USA
Causes and consequences of microRNA dysregulation in cancer
Paolo M. Comoglio  
Institute for Cancer Research and Treatment, Candiolo, Italy
Invasive growth: a genetic program driven by the MET oncogene

WORKSHOP: HTLV REGULATION AND PATHOGENESIS
17.20 - 18.00  SESSION I - TAXONOMY OF THE HTLV FAMILY
chair  
Genoveffa Franchini  
National Cancer Institute, Bethesda, USA
Luiz Alcantara  
National Cancer Institute, Bethesda, USA

presentations  
Antoine Gessain  
Institut Pasteur, Paris, France
HTLV: an expanding virus family
William M. Switzer  
Centers for Disease Control and Prevention, Atlanta, USA
Doubling the Diversity of HTLV: Discovery and distribution of HTLV-3 and HTLV-4

20.30 - 23.00  SOCIAL DINNER
THURSDAY - SEPTEMBER 30, 2010

09.00 - 10.15  SESSION II - VIRUS ENTRY

chairs  
William M. Switzer  
Centers for Disease Control and Prevention, Atlanta, USA  
Luc Willems  
University of Liège, Belgium

presentations  
Marc Sitbon  
Institut de Génétique Moléculaire, Montpellier, France  
Retroviral receptor binding domains as new surface markers of cell metabolism  
Kathryn S. Jones  
National Cancer Institute, SAIC-Frederick, USA  
Dendritic cells in HTLV-1 transmission and pathogenesis  
Charles R. Bangham  
 Imperial College School of Medicine, London, UK  
HTLV-1: Mechanisms of persistence and cell-to-cell spread in the host  
Maria-Isabel Thoulouze  
Institut Pasteur, Paris, France  
HTLV-1 transmission at the virological synapse: Key role of ‘viral biofilms’  
Genoveffa Franchini  
National Cancer Institute, Bethesda, USA  
The HTLV-I orf-I gene regulates virus transmission and persistence

10.15 - 11.30  SESSION III  
STRUCTURAL PROTEINS / CELLULAR RESTRICTION FACTORS

chairs  
Kathryn S. Jones  
National Cancer Institute, SAIC-Frederick, USA  
Claudine Pique  
Institut Cochin, Paris, France

presentations  
Hung Y. Fan  
University of California - Irvine, USA  
MuLV glycosylated gag facilitates MuLV and HIV release through lipid rafts

11.30 - 11.45  BREAK

11.45 - 12.30  SESSION IV - VIRAL ACCESSORY GENES

chairs  
Vincenzo Ciminale, University of Padova, Italy  
Paolo Bernardi, University of Padova, Italy

presentations  
Marc Sitbon  
Institut de Génétique Moléculaire, Montpellier, France  
Retroviral receptor binding domains as new surface markers of cell metabolism  
Kathryn S. Jones  
National Cancer Institute, SAIC-Frederick, USA  
Dendritic cells in HTLV-1 transmission and pathogenesis  
Charles R. Bangham  
 Imperial College School of Medicine, London, UK  
HTLV-1: Mechanisms of persistence and cell-to-cell spread in the host  
Maria-Isabel Thoulouze  
Institut Pasteur, Paris, France  
HTLV-1 transmission at the virological synapse: Key role of ‘viral biofilms’  
Genoveffa Franchini  
National Cancer Institute, Bethesda, USA  
The HTLV-I orf-I gene regulates virus transmission and persistence  
Anna Hryniewicz, University of Białystok, Poland  
Requirement of the HTLV p12 and p30 genes for infectivity of human dendritic cells and macaques but not rabbits  
Vibeke Andresen, University of Bergen, Norway  
Suppression of HTLV-I replication by Tax –mediated re-routing of the p13 viral protein to the nuclear speckles  
Izabela Bialuk  
Medical University of Białystok Mickiewicza, Poland  
Orf I polymorphism and virus level in HTLV-I infected patients
12.30 - 13.15  
SESSION V - THE HBZ GENE  
chairs  
Donna M. D’Agostino  
University of Padova, Italy  
Renaud Mahieux  
Ecole Normale Supérieure de Lyon, France  
presentations  
Jean-Michel Mesnard  
Université Montpellier, France  
What sense can we make out of antisense transcription in complex retroviruses?  
Masao Matsuoka  
Institute for Virus Research, Kyoto University, Japan  
Molecular pathogenesis by the HTLV-1 bZIP factor gene  
Isabelle Lemasson  
East Carolina University, Greenville, USA  
Transcriptional regulation by the HTLV-1-encoded protein HBZ  
13.15 - 14.15  
LUNCH  
14.15 - 15.00  
SESSION VI - THE TAX PROTEIN (1)  
chairs  
Franco Buonaguro  
Istituto Nazionale Tumori, Naples, Italy  
Claudio Casoli  
University of Milan, Italy  
presentations  
Claudine Pique  
Institut Cochin, Paris, France  
Cellular factors that modulate Tax post-translational modifications and NF-kappaB activation  
Susan J. Marriott  
Baylor College of Medicine, Houston, USA  
Disruption of the cellular response to DNA damage by the HTLV-1 Tax oncoprotein  
Jennifer K. Nyborg  
Colorado State University, Fort Collins, USA  
Tax promotes acetylation-dependent nucleosome eviction from the HTLV-1 promoter  
15.00 - 16.00  
SESSION VII - THE TAX PROTEIN (2)  
chairs  
Susan J. Marriott  
Baylor College of Medicine, Houston, USA  
Daniela Saggioro  
Istituto Oncologico Veneto-IRCCS, Padova, Italy  
presentations  
Chou-Zen Giam  
Uniformed Services University of the Health Sciences, Bethesda, USA  
Too much of a good thing: HTLV-1 Tax, NF-kappaB activation, and cellular senescence  
Françoise Bex  
Université Libre de Bruxelles, Belgium  
Move or die: the fate of the Tax protein of human T-cell leukemia virus  
Umberto Bertazzoni  
University of Verona, Italy  
Mechanisms of HTLV-1 and HTLV-2 Tax protein regulation of signal transduction  
Masahiro Fujii  
Niigata University, Japan  
Functional differences between Tax1 and Tax2 play key roles in HTLV-1 pathogenesis  
16.00 - 16.15  
BREAK  
16.15 - 17.15  
SESSION VIII - VIRAL EXPRESSION AND PATHOGENESIS (1)  
chairs  
Toshiki Watanabe  
University of Tokyo, Japan  
Roberto S. Accolla  
University of Insubria, Varese, Italy  
presentations  
Donna M. D’Agostino  
University of Padova, Italy  
MicroRNA expression in HTLV-1-transformed T-cells  
Vincenzo Ciminale  
University of Padova, Italy  
Control of ROS production and T-cell turnover by the p13 protein of HTLV-1
17.15 - 18.15  SESSION IX - VIRAL EXPRESSION AND PATHOGENESIS (2)

chairs  Cynthia A. Pise-Masison  
National Cancer Institute, Bethesda, USA

Emanuele Cozzi  
Consortium for Research in Organ Transplantation and Padova General Hospital, Padova, Italy

presentations  Eric Wattel  
CNRS, Center Léon Bérard, Lyon, France

Clonal persistence of HTLV-1 in vivo

Luc Willems  
University of Liège, Belgium

Influence of viral expression on the fate of BLV-infected cells in sheep

Ali Bazarbachi  
American University of Beirut Medical Center, Lebanon

Targeting Tax and leukemia initiating cells in ATL

Lee Ratner  
Washington University School of Medicine, St. Louis, USA

Transgenic models of HTLV-1-associated neoplasia

18.35 - 21.00  POSTER SESSION WITH LIGHT REFRESHMENTS AT THE HOTEL ARTIGIANELLI

FRIDAY - OCTOBER 1, 2010

08.30 - 09.30  SESSION X - VIRAL EXPRESSION AND PATHOGENESIS (3)

chairs  Graham P. Taylor  
Imperial College Healthcare, London, UK

Rüdiger Hehlmann  
Universität Heidelberg, Germany

presentations  Madeleine Duc Dodon  
INSERM U758 Virologie Humaine, Ecole Normale Supérieure de Lyon, France

Human T cell development in the thymus of HTLV-1 infected HIS (Human Immune System) mice

Gerold Feuer  
SUNY Upstate Medical University, Buffalo, USA

Evaluating HTLV leukemogenesis and accessory gene functions in humanized SCID mice

Renaud Mahieux  
Ecole Normale Supérieure de Lyon, France

Highly active antiretroviral treatment against STLV-1 infection combining reverse transcriptase and HDAC inhibitors

Olivier Hermine  
Hôpital Necker-Enfants Malades, Paris, France

Treatment of HTLV-1-related lymphoproliferation

09.30 - 10.30  SESSION XI - VIRAL EXPRESSION AND PATHOGENESIS (4)

chairs  Steven Jacobson  
National Institute of Neurological Disorders and Stroke, Bethesda, USA

Beatrice Macchi  
University of Rome Tor Vergata, Italy

presentations  Yoshihisa Yamano  
St. Marianna University School of Medicine, Kawasaki, Japan

HTLV-1 infected CD4+CD25+CCR4+ T-cells disregulate balance of inflammation and tolerance in HTLV-1 associated neuroinflammatory disease
Steven Jacobson  
*National Institute of Neurological Disorders and Stroke, Bethesda, USA*  
Inhibition of immune activation as a therapeutic strategy in HTLV-I associated myelopathy / tropical spastic paraparesis: From bench to bedside

Becca Asquith  
*Imperial College, London, UK*  
What determines CD8+ T cell efficiency?

Edward L. Murphy  
*University of California - San Francisco, USA*  
Increased all-cause and cancer mortality in HTLV-II infection

---

**WORKSHOP: HIV PATHOGENESIS**

**10.30 - 11.00 SPECIAL LECTURE**

*chair*  
Mauro Bendinelli  
*University of Pisa, Italy*

*lecture*  
Max Essex  
*Harvard University, Boston, USA*  
The Mochudi Project: Prevention of HIV infection in the absence of a vaccine

**11.00 - 11.15 BREAK**

**11.15 - 12.15 SESSION I**

*chairs*  
Mauro Pistello  
*University of Pisa, Italy*  
Nancy Miller  
*Division of AIDS, NIH, Bethesda, USA*

*presentations*  
Mario Stevenson  
*University of Massachusetts Medical School, Boston, USA*  
Cellular antagonists of HIV replication

Anna Aldovini  
*Harvard Medical School, Boston, USA*  
HIV-mediated modulation of cell death pathways in primary CD4+ T cells

Barbara Felber  
*National Cancer Institute at Frederick, USA*  
Posttranscriptional regulation is essential for retrovirus and retroelement expression

Anna Cereseto  
*Università di Trento, Italy*  
A cellular factor that binds the HIV-1 integrase

---

**SESSION II**

*chairs*  
Arnaldo Caruso  
*University of Brescia, Italy*  
Luigi Chieco-Bianchi  
*University of Padova, Italy*

*presentations*  
Andrea Cerutti  
*Cornell University, New York, USA*  
Nef-trafficking intercellular highways for HIV evasion of antibody production

Olivier Schwartz  
*Institut Pasteur, Paris, France*  
Immunological & virological aspects of HIV cell-to-cell transmission

Anita De Rossi  
*University of Padova, Italy*  
What children can teach us about HIV

Volker Erfle  
*National Research Center of Environment & Health, Munich, Germany*  
Does HIV-1 harbour an oncogene?: The example of HIV nef and astrocytes

Guido Poli  
*San Raffaele Scientific Institute, Milan, Italy*  
Transcriptional control of HIV latency and replication in monocytic cells

---

**13.30 - 14.30 LUNCH**
14.30 - 15.30  **SESSION III**  
**chairs**  
Paola Zanovello  
*University of Padova, Italy*  
Gene M. Shearer  
*National Cancer Institute, Bethesda, USA*  
**presentations**  
Mario Clerici  
*University of Milan, Italy*  
**Immune correlates of protection to HIV infection**  
Alan Landay  
*Rush University Medical Center, Chicago, USA*  
**Immune activation inflammation and aging in HIV pathogenesis**  
Guido Silvestri  
*University of Pennsylvania, Philadelphia, USA*  
**AIDS pathogenesis: a matter of target cell restriction?**  
Leonid Margolis  
*Eunice Kennedy Shriver National Institute of Child Health and Human Development, Bethesda, USA*  
**HIV interactions with other viruses in human tissues**

**WORKSHOP: MOLECULAR GENETICS AND THERAPY OF CANCER**  
15.30 - 16.45  **SESSION I**  
**chairs**  
Eva Klein  
*Karolinska Institute, Stockholm, Sweden*  
Giancarlo Vecchio  
*Università ‘Federico II’, Naples, Italy*  
**presentations**  
Riccardo Dalla-Favera  
*Columbia University, New York, USA*  
**The genome of B cell lymphoma**  
Pier Giuseppe Pelicci  
*IFOM–IEO Campus, Milan, Italy*  
**Regulation of self renewal in cancer stem cells**  
Stefano Piccolo  
*University of Padova, Italy*  
**MicroRNAs and metastasis**

16.45 - 17.00  **BREAK**

17.00 - 18.40  **SESSION II**  
**chairs**  
Riccardo Dalla-Favera  
*Columbia University, New York, USA*  
Corrado Tarella  
*Ospedale S. Giovanni Battista, University of Turin, Italy*  
**presentations**  
Vincenzo Bronte  
*Istituto Oncologico Veneto–IRCCS, Padova, Italy*  
**Tumor-induced tolerance and immune suppression depend on C/EBPβ transcription factor**  
Stefano Indraccolo  
*Istituto Oncologico Veneto–IRCCS, Padova, Italy*  
**The Notch pathway in the regulation of tumor dormancy**  
George Klein  
*Karolinska Institute, Stockholm, Sweden*  
**Awakening of dormant tumor cells by inflammation**  
Marco A. Pierotti  
*Istituto Nazionale di Tumori, Milan, Italy*  
**Target mutation: The dark side of the targeted therapies**

18.40 - 18.50  **CLOSING REMARKS**  
Vincenzo Ciminale  
*University of Padova, Italy*  
**Adjourn**  
**Dinner on your own**
Istituto Veneto di Scienze, Lettere ed Arti
San Marco 2945
30124 Venezia
telefono +39 0412407711
fax +39 0415210598
ivsla@istitutoveneto.it
www.istitutoveneto.it