

# Trieste Seminar Programme 2005

## JANUARY 2005

**Fernando Suncini, Univ. of Rosario, IBR-CONICET, ARGENTINA**, Metal dependent regulation in Salmonella

**Luca Quaroni, Elettra Sincrotrone, Trieste, ITALY**

Vibrational Spectromicroscopy at Elettra: Applications in the Life Science

## FEBRUARY 2005

**Giannino Del Sal, University of Trieste, ITALY**

Regulation of p53 and p73 functions by the prolyl-isomerase Pin1: keepPin' the family in good shape

**Per Venge, University of Uppsala, SWEDEN**

Eosinophilia, who cares?

**Annalisa Pastore, MRC, London, UK**

What structural biology can tell us about misfolding diseases

**Vincenzo Bronte, University of Padua, ITALY**

L-arginine metabolism in myeloid cells controls T lymphocyte responsiveness to the antigen

## MARCH 2005

**Gernot Achatz, University of Salzburg, AUSTRIA**

The IgE antigen receptor - a key regulator of the IgE response in vivo

**Alberto Bardelli, University of Torino, ITALY**

Dissecting oncogenic signaling pathways by mutational profiling of gene families in cancer genomes

**Susan Gasser, FMI, Novartis Research Foundation, Basel, SWITZERLAND**, Chromatin dynamics and silencing

**Fulvio Mavilio, MolMed SpA, Milan, ITALY**

Genetic modification of hematopoietic stem cells: from bench to bedside... and back

**Philip Hieter, UBC Michael Smith Labs, Vancouver, CANADA**, Yeast as a model for chromosome instability in eukaryotes

## APRIL 2005

**Simone Ferrari, University of Padova, ITALY**

Off the beaten pathway: pathogen-associated molecular patterns in plant innate immunity

**Michael Breitenbach, University of Salzburg, AUSTRIA**, Mitochondrial Functions in Yeast Aging and Apoptosis

**Xiaojiang Chen, Univ. Southern California, Los Angeles, USA**, Hexameric helicases and replication licensing: two heads are better than one

**Carl Zeiss SpA, Divisione Microscopia**

Seminario di Microscopia Confocale e Tecniche Correlate

**Irena Mlinaric-Rascan, University of Ljubljana, SLOVENIA**, In search of a serine protease involved in the apoptotic internucleosomal DNA cleavage

**Corrado Santocanale, Nerviano Medical Sciences, ITALY**, Initiation of DNA replication: a potential target for drug discovery in oncology

**Seppo Ylä Herttuala, University of Kuopio, FINLAND**, Therapeutic angiogenesis: basic aspects and clinical applications

## MAY 2005

**Andres Aguilera, University of Seville, SPAIN**

Transcription-Associated Recombination: A Connection with mRNP Biogenesis and DNA Replication

**Eduardo J. Patriarca, IIGB, CNR Naples, ITALY**

Rhizobium metabolism during the development of N-fixing root nodules

**Lila Castellanos-Serra, Center for Genetic Engineering and Biotechnology, Havana, CUBA**

1. Novel Methods for Proteome Analysis

2. Doing science in a developing country: the case of Cuban Biotechnology

**Leonard Fass, GE Healthcare, Europe**

Functional and Molecular Imaging: from Pre-Clinical to Clinical

**Albert-Laszlo Barabasi, University of Notre Dame, IN, USA**, Network Biology: From protein interactions to antibiotics

**Dennis McCance, Univ. of Rochester, NY, USA**

Retinoblastoma protein is required for keratinocyte differentiation

**Jean-Paul Borg, Marseille INSERM, FRANCE**

New signaling pathways associated to the tumor suppressor Scribble

## JUNE 2005

**Michael Neuberger, MRC, Cambridge, UK**

DNA deamination as a trigger in innate and adaptive immunity

**Kenneth R. Chien, Univ. of California San Diego, CA, USA**

Towards Gene and cell based therapy for cardiac diseases

**Steve C. West, London Res. Inst., Clare Hall Labs, UK**, Making Ends Meet: Double Strand Break

Repair in Human Cells

## JULY 2005

**Gennaro D'Urso, University of Miami, FL, USA**

DNA replication checkpoints in fission yeast

**Michael Linden, Mount Sinai School of Medicine, NY, USA**, Targeted gene addition by adeno-

associated virus (AAV) based vectors

## SEPTEMBER 2005

**Georg Weitzer, Vienna Biocenter (VBC), AUSTRIA**

Promotion of in vitro cardiomyogenesis by parietal endoderm secreted growth factors

**Bruce Chassy, University of Illinois, USA**

Food Safety and GMOs

**Aleksandra Trifunovic, Karolinska Ins Stockholm, SWEDEN**

Mitochondrial theory of aging: Dead or Alive?

**Constanze Breithaupt, Max-Planck, Martinsried, GERMANY**

Structural insights into autoantibody binding to Myelin Oligodendrocyte Glycoprotein

## OCTOBER 2005

**Giovanni Di Pasquale, NIH, NIDCR, Bethesda, USA**

The Adeno-Associated Virus (AAV) Gene Transfer Vector System: Biology and Applications

**Federico Bussolino, IRCC, Torino, ITALY**

Extracellular Tat interacts with gp120 on cell surface and facilitates HIV-1 infection

**Fabienne Beuron, Imperial College London, UK**

Conformational changes in a p97-adaptor complex: implications for its chaperone activities

**Guillaume Dighiero, Inst. Pasteur, Montevideo, URUGUAY**, Recent Progress on CLL Biology

## NOVEMBER 2005

**Olli Carpén, University of Turku, FINLAND**

Myotilin and palladin, regulators of actin cytoskeleton

**Silvo Conticello, MRC, Cambridge, UK**

Immunity through DNA deamination

## DECEMBER 2005

**Christopher Pearson, The Hospital for Sick Children, Toronto, CANADA**

**Peter Carmeliet, University of Leuven, BELGIUM**

**Félix A. Rey, Institut Pasteur, Paris, FRANCE**

Structural insights into the mechanism of membrane fusion catalyzed by viral envelope proteins

# Trieste Seminar Programme 2006

## JANUARY 2006

**Tommaso Villa, University of California, San Francisco, CA, USA** Quality control of RNA processing: identification of a novel splicing fidelity factor

**Mike Myers, Cold Spring Harbor Laboratories, NY, USA** High throughput analysis of protein interactions: Identification of a novel polyUbiquitin binding domain

**Fabian Feiguin, University of Turin, Turin, ITALY** Molecular mechanisms of neurodegeneration in Alzheimer's disease

**Giordano Liberi, FIRG Institute of Molecular Oncology, Milan, ITALY** Sgs1 and Srs2 DNA repair helicases as regulators of genome integrity in eukaryotic cells

## FEBRUARY 2006

**Edouard Bertrand, Insitut de Génétique Moléculaire, Montpellier, FRANCE** Transport of single mRNPs in living cells

**Gaetano Finocchiaro, Besta National Institute of Neurology, Milan, ITALY** Stem cells and glioblastoma multiforme

**Michael Jantsch, Max F. Perutz Labs, University of Vienna, Vienna, AUSTRIA** RNA editing by adenosine deamination: novel targets, novel functions

**John Doorbar, National Institute for Medical Research, London, UK** Regulation of Productive Papillomavirus Infection

**Ed Louis, University of Nottingham, Queens Medical Centre, Nottingham, UK** Telomeres and Genome Stability in Yeast

**Paola Scaffidi, National Cancer Institute, NIH, Bethesda MD, USA** Nuclear architecture: building bulwarks against aging

## MARCH 2006

**Meng-Er Huang, CNRS Institut Curie, Orsay, FRANCE** A biological network in *Saccharomyces cerevisiae* prevents oxidative stress-induced genome instability - from point mutations to gross genome rearrangements

**Davide Gabellini, University of Massachusetts Medical School, MA, USA** FSHD: a paradigm for the role of non-coding DNA and alternative splicing in human disease

**Ramesh Pillai, Friedrich Miescher Institute for Biomedical Research, Basel, SWITZERLAND** MicroRNA-mediated translational inhibition and accumulation of the repressed mRNA in cytoplasmic P-bodies

**Carlo Petosa, EMBL Grenoble Outstation, Grenoble, FRANCE** Structural basis of lytic cycle activation in Epstein-Barr virus

**Peter J. Schwartz, Policlinico S. Matteo IRCCS, Pavia, ITALY** From molecular biology to clinical management: The case of the long QT syndrome

**Alessandro Quattrone, University of Florence, Florence, ITALY** A systems biology perspective on translation: from neural plasticity to colorectal cancer progression

**Fabio Mammano, Venetian Institute of Molecular Medicine (VIMM), Padova, ITALY** Connexins and deafness

**Hannes Klump, Hannover Medical School, Department of Hematology and Oncology, Hannover, GERMANY** Converting Embryonic Stem Cells into Blood - HOXB4 mediated Stem Cell Tuning

**Sally Roberts, University of Birmingham, Birmingham, UK** Modulation of keratinocyte structure and function by papillomavirus proteins

**Isabelle Richard, G n thion CNRS, Evry, FRANCE**

## APRIL 2006

**Yaqoub Ashhab, Palestine Polytechnic University, Hebron, PALESTINE** Recent gene duplication; mining EST database for new functional genes

**Paul Freemont, Faculty of Natural Sciences, Imperial College London, UK** Developing quantitative approaches to understand the spatial organisation of

the interphase nucleus- PML nuclear bodies and CBP

**Francesca Pasinelli, Fondazione Telethon, Milan, ITALY** Biomedical research charities and the role of Telethon in Italy

**Ingrid Hoffmann, German Cancer Research Center (DKFZ), Heidelberg, GERMANY** Centrosomes and the cell cycle

**Elia Stupka, Telethon Institute of Genetics and Medicine TIGEM, Naples, ITALY** How much (or little!) do we understand about genomes?

**Claudio Tuniz, Abdus Salam International Centre for Theoretical Physics, Trieste, ITALY** Dating human cells

**Carlin S. Long, University of Colorado Health Sciences Center, Chief, Cardiology Section, Denver Health Medical Center, Denver, CO, USA** Investigating cytokine modulation of myocardial remodeling with a cell culture model

**Tomas Lindahl, London Research Institute, Cancer Research UK Clare Hall Laboratories, London, UK** Repair of DNA damage generated by anticancer drugs

## MAY 2006

**Mathias Gautel, Schools of Medicine and Biomedical Sciences, Cardiovascular Division, London, UK** Titin as a giant signalling scaffold: implications for human disease

**Massimiliano Pagani Ospedale San Raffaele, Milan, ITALY** "Yomics" Ab libraries for functional proteomics

**Christian Mandl, Medical University of Vienna, AUSTRIA** Molecular studies on the Flavivirus Tick-borne Encephalitis Virus

**Andrea Nistri, International School for Advanced Studies ISAS/SISSA, Trieste, ITALY** Trigeminal ganglion neurons are an in vitro model to study molecular mechanisms of pain transduction

**Christopher Baum, Medizinische Hochschule MHH, Hannover, GERMANY** Retroviral transgenesis and oncogenesis

**Fulvio Parmigiani, University of Trieste, and Sincrotrone, Trieste, ITALY** Science with Free Electron Lasers

**Timothy Mather, Oklahoma Medical Research Foundation, Oklahoma, USA** The structure of unliganded thrombin: A cautionary tale

## JUNE 2006

**Sinisa Volarevic, University of Rijeka, School of Medicine, Rijeka, CROATIA** The response of mammalian cells to a defect in ribosome biogenesis

XI ICGEB Annual Symposium

**John A. Chiorini, NIDCR, Bethesda, MD, USA** Biology of the Adeno-Associated Virus and its gene therapy applications

**Vincenzo Costanzo, London Research Institute, Clare Hall Laboratories, England, UK** Maintenance of genome stability: Multiple roles for ATM, ATR and the Mre11 complex

## JULY 2006

**Adrian Thrasher, Institute of Child Health, London, UK** Successful Gene Therapy for Inherited Immunodeficiency

**Irtraud Meyer, UBC, Vancouver, CANADA** Predicting functional secondary-structures in pre-mRNAs and mRNAs

**Michael Breitenbach, University of Salzburg, AUSTRIA** Role of the mitochondrial proteins YGR076Cp and Mmi1p in yeast aging and apoptosis [Abstract]

**Pier Lorenzo Puri, Dulbecco Telethon Institute (DTI), Fondazione A. Cesalpino, Rome, ITALY** A DNA damage-induced transcription checkpoint to protect the genomic integrity in differentiation-committed cells

## SEPTEMBER 2006

**Masa Cemazar, University of Queensland, Brisbane, AUSTRALIA** Bioengineering novel cyclic peptides for treatment of multiple sclerosis

**Angus Lamond, University of Dundee, Wellcome Trust Biocentre, Dundee, UK** Time-lapse proteomics: a new approach for studying protein dynamics

**Marco E. Bianchi, DIBIT, San Raffaele Scientific Institute, Milan, ITALY** The nuclear functions of HMGB proteins

**Caterina Missero, Telethon Institute of Genetics and Medicine, Naples, ITALY** Regulation of gene transcription in stratified epithelia

**Giulio Innamorati, DIBIT, San Raffaele Scientific Institute, Milan, ITALY** Signal integration mediated by G protein coupled receptors: the examples associated to Nephrogenic Diabetes Insipidus and Ocular Albinism

**Galina Selivanova, Karolinska Institute, Stockholm, SWEDEN** Fighting cancer: small molecules reactivating the p53 tumor suppressor

## OCTOBER 2006

**Stefano Piccolo, University of Padua, ITALY** TGF-beta and vascular diseases

**Clotilde Thery, INSERM, Institut Curie, Paris, FRANCE** Exosomes and lactadherin: new tools to fight cancer?

**Claudio Scazzocchio (Host: C. Bruschi) Institut de G n tique et Microbiologie IGM, University of Paris-Sud, Orsay Campus, Paris, FRANCE** Nitrate assimilation in the ascomycetes: gene clustering, transcription factors and chromatin rearrangements [Abstract]

**Francesco Blasi (Host: F. Baralle) Molecular Genetics Unit - DIBIT, Universit  Vita-Salute San Raffaele, Milan, ITALY** Prep1: a homeodomain transcription factor and oncosuppressor essential for early development

**Francesca Demarchi (Host: M. Giacca) Laboratorio Nazionale del Consorzio Interuniversitario per le Biotecnologie LNCIB, Trieste, ITALY** Autophagy: self-eating to survive

**Zolt Toth, Institute of Clinical and Molecular Virology, Erlangen, GERMANY** RNA-binding of HCMV pUL69 and its role in mRNA export

## NOVEMBER 2006

**Silvia Priori, IRCCS Fondazione Salvatore Maugeri, Pavia, ITALY** Stress related arrhythmias: genetic predisposition and basic mechanisms

**Roland Kanaar, Erasmus MC-Daniel den Hoed Cancer Center, Rotterdam, THE NETHERLANDS** Dynamic organization of DNA damage repair machines and chromosomes

**Ian Hickson, Weatherall Institute of Molecular Medicine, University of Oxford, UK** Genomic instability and cancer: lessons from analysis of Bloom's syndrome

**Maria Rescigno, FIRG Institute of Molecular Oncology Foundation, IFOM-IEO Campus, Milan, ITALY** Dendritic cell-epithelial cell interactions in bacterial handling at mucosal surfaces

**Giovanni Boniolo, University of Padua and IFOM, Milan, ITALY** Is philosophy a good companion to molecular biology?

**Jennifer Fordham, Kings College London, London, UK** What is the function of the cardiac muscle cell membrane skeleton?

## DECEMBER 2006

**Aldo Ferrari, Swiss Federal Institute of Technology (ETH), Zurich, SWITZERLAND** Mechanisms of epithelial cell migration and cystogenesis

**Tayfun Ozelcik, Bilkent University, Ankara, TURKEY** X-chromosome inactivation and female predisposition to autoimmunity

**Giuseppe Legname, UCSF, San Francisco, CA, USA** Prion Biology and Disease

# Trieste Seminar Programme 2007

## JANUARY 2007

**Gaetano Finocchiaro, Besta National Institute of Neurology, Milan, ITALY**

Therapeutic targeting of glioblastoma cells with cancer stem-like properties

**Penny Jeggo, Genome Damage and Stability Centre, University of Sussex, Brighton, UK**

DNA non-homologous end joining: the process and clinical impact

Ugo Faraguna, The Center for Sleep and Consciousness, University of Wisconsin, Madison, USA

Sleep and Plasticity

**Alfredo Fusco, Naples Oncogenomic Center NOGEC, CEINGE, Biotechnology Avanzate, Naples, ITALY**

UbcH10 and CBX7 in thyroid carcinogenesis

**Cecilia Gelfi, Institute of Bioimaging and Molecular Physiology, Italian National Research Council CNR, Milan, ITALY**

The muscle proteome for biomarker discovery

## FEBRUARY 2007

**Luca Vangelista, Department of Biology and Genetics, University of Milan, Milan, ITALY**

IgE in tumor surveillance, an undercover part-time job?

**Mark Pook, Brunel University West London, School of Health Sciences and Social Care, London, UK**

Development of a GAA repeat expansion mutation-based mouse model of Friedreich ataxia

**Daniilo Porro, Department of Biotechnology and Biosciences, University of Milan "Bicocca", Milan, ITALY**

Industrial Biotechnology and the development of a sustainable economy: examples and perspectives at Milano Bicocca

**Ana Pombo, MRC Clinical Sciences Centre, Faculty of Medicine, Imperial College London, UK**

Functional organisation of chromosomes in the cell nucleus

**Elisa Messina, University of Rome "La Sapienza", Rome, ITALY**

Cardiac Stem Cells and Cardiospheres

## MARCH 2007

**Enrico Tongiorgi, BRAIN Centre for Neuroscience, University of Trieste, Trieste, ITALY**

BDNF mRNA splice variants trafficking in neurons: functions and mechanisms

**Albert Jordan, Center for Genomic Regulation CRG, Barcelona Biomedical Research Park, Barcelona, SPAIN**

Signaling to chromatin in the regulation of progesterone-responsive promoters

**Fabrizio Tagliavini, National Institute of Neurology "Carlo Besta", Milan, ITALY**

Therapeutic approach to prion diseases

**Hisao Masai, Department of Molecular and Developmental Biology, Institute of Medical Science, University of Tokyo, Tokyo, JAPAN**

Regulation of various chromosome transactions by Cdc7 kinase, a critical coordinator for the replication fork

## APRIL 2007

**Simona Perga, Neurobiology Unit, Bioindustry Park del Canavese, Torino, ITALY**

Membrane cholesterol composition and neuronal survival during aging

**Antonello Mallamaci, Laboratory of Cerebral Cortex Development, Neurobiology Sector, ISAS/ SISSA, Trieste, ITALY**

Molecular mechanisms controlling early cerebral cortex development

**Anil Chauhan, CBR Institute for Biomedical Research, Harvard Medical School, Boston, MA, USA**

The Metalloprotease ADAMTS13-Link between thrombosis and inflammation?

**Antonio Paolo Beltrami, Interdepartmental Centre for Regenerative Medicine, University of Udine, Udine, ITALY**

Human Adult Pluripotent Stem Cells (hPSCs): isolation, characterization and perspectives

**Sebastian Amigorena, INSERM, Institut Curie, Section Recherche, Paris, FRANCE**

Antigen presentation by dendritic cells

**Isabelle Richard, G en ethon CNRS, Evry, FRANCE**

Therapeutical approaches by gene transfer in Limb-girdle muscular dystrophies

## MAY 2007

**Leo Eberl, Department of Microbiology, Institute of Plant Biology, University of Z urich, Z urich, SWITZERLAND**

Quorum-sensing in the genus Burkholderia: friends and foes talking the same language

**Cesare Montecucco, Venetian Institute of Molecular Medicine, Padua, ITALY**

Presynaptic enzymatic neurotoxins: what have they told us about neuroexocytosis?

**Ananda Chakrabarty, The University of Illinois at Chicago, Chicago, USA**

Development of potential anticancer and anti-retroviral drugs from bacteria

**Kuan-Teh Jeang, Laboratory of Molecular Microbiology, NIH, Bethesda, MD, USA**

Virus and cellular factors: what we have learned from HIV and HTLV

**Anil Mehta, Division of Maternal and Child Health Sciences, University of Dundee, Ninewells Hospital and Medical School, Dundee, UK**

3 Cancer Kinases Bind to CFTR. Why?

**Zoltan Ivics, Max Delbruck Center for Molecular Medicine, Berlin, GERMANY**

Relics from the past: molecular biology and applications of resurrected vertebrate transposons

**Alain Filloux, Laboratory of Engineering of Macromolecular Systems, IBSM - CNRS, Marseille, FRANCE**

Two-component signal transduction systems: a key to the adaptive potential of Pseudomonas aeruginosa

**Patrick Humbert, Cell Cycle and Cancer Genetics Laboratory, Peter MacCallum Cancer Centre, Melbourne, AUSTRALIA**

The Scribble polarity module in migration and cancer

**Michael Brodsky, University of Massachusetts Medical School, Worcester, MA, USA**

Regulation of apoptosis and telomere function by the Drosophila p53 pathway

## JUNE 2007

**Roberto Chiesa, Dulbecco Telethon Institute, Milan, ITALY**

Investigation of mutant prion protein toxicity in transgenic models

**Paul Lambert, McArdle Laboratory for Cancer Research, University of Wisconsin, USA**

Roles of Papillomaviruses in Human Cancers: Lessons Learned in Mice

**Harald zur Hausen, German Cancer Research Centre, Heidelberg, GERMANY**

Infectious Causes of Human Cancers

**John Doorbar, Division of Virology, National Institute for Medical Research, London, UK**

The Biology of Papillomavirus Infection and Disease

**James Scott, National Heart and Lung Institute, Imperial College, London, UK**

Whole-genome association in the metabolic syndrome identifies novel risk factor genes for sub-phenotypes

**Jean-Baptiste Sibarita, Compartmentation and Cellular Dynamics, Institut Curie, CNRS, Paris, FRANCE**

Tools for the analysis of cellular and intra-cellular activity at high spatial and temporal resolution

## **./.. JUNE 2007**

**Tim McKinsey, Gilead Colorado, Inc., Univ. of Colorado at Boulder and Univ. of Colorado Cardiovascular Institute, Denver, Colorado, USA**

Regulation of Cardiac Growth by Histone Deacetylase Kinases

**Zivko Nikolov, Biological and Agricultural Engineering, Chemical Engineering, Texas A&M University, Texas, USA**

Expression and Purification of Proteins from Transgenic Plant Systems

**George Lomonosoff, Department of Biological Chemistry, John Innes Centre, Norwich, UK**

Exploiting Cowpea mosaic virus in bio- and nano-technology: 101 uses of a plant virus

**Monica Gostissa, HHMI Children's Hospital / CBR Institute, Harvard Medical School, Boston (MA), USA**

Role of the Double Strand Break Response in suppression of oncogenic translocations in B cell lymphomas

## **JULY 2007**

**Rhona H. Borts, Department of Genetics, University of Leicester, Leicester, UK**  
Sex and the Single Yeast

**Nigel Shipston, Independent Consultant (former Head of GMP Process Development, Angel Biotechnology Ltd), UK**

GMP Manufacturing of a Recombinant Protein Therapeutic: Challenges and Points to Consider

**Matija Peterlin, Rosalind Russell Med. Research Center, Univ. of California at San Francisco (UCSF)**

**San Francisco, CA, USA**

The impact of HIV on eukaryotic biology: from AIDS to APOBEC and APECEC

**Serena Zacchigna, Center for Transgene Technology and Gene Therapy, Flanders Interuniversity Inst. for Biotechnology (VIB), Univ. of Leuven, Leuven, BELGIUM**

Conserved functions of VEGF at the neuro-muscular interface from Drosophila to humans

**Opher Gileadi, The Structural Genomics Consortium, University of Oxford, Botnar Research Centre, Oxford, UK**

Structure of the human RecQ-like DNA helicase

## **AUGUST 2007**

**Narendra Tuteja, Plant Molecular Biology Laboratory, ICGEB New Delhi, INDIA**

Unwinding salt intolerance: a new pathway to plant stress tolerance

## **SEPTEMBER 2007**

**Valentina Bonetto, Dulbecco Telethon Institute and "Istituto di Ricerche Farmacologiche Mario Negri", Milan, ITALY**

Proteomic approaches to study molecular mechanisms at the basis of amyotrophic lateral sclerosis

**Alison McBride, National Institutes of Health, Bethesda, Maryland, USA**

Hitchhiking on chromosomes; how papillomavirus genomes persist

**Marco Crescenzi, Dept. of Environment and Primary Prevention, Higher Institute of Health, Rome, ITALY**

Re-entry into the cell cycle of non-proliferating cells: cardinal role of cell cycle inhibitors

**Javier Martinez, Institute of Molecular Biotechnology, IMBA, Vienna, AUSTRIA**

Finding new players in RNA silencing and processing

## **OCTOBER 2007**

**Alain Nicolas, Institut Curie, Centre de Recherche CNRS, Université Pierre et Marie Curie, Paris, FRANCE**

Initiation and targeting of meiotic recombination

**Luis Antonio Parada, Cell Biology and Stem Cells Unit, CIC bioGUNE, Derio, SPAIN**

Cellular organization of the genome during carcinogenesis

**Mark Mercola, Neuroscience and Aging Research Center, Burnham Institute for Medical Research, La Jolla, California, USA**

Discovery of Natural and Synthetic Molecules that Regulate Stem Cell Cardiogenesis

**Peter Juvan, Centre for Functional Genomics and Bio-Chips, Institute of Biochemistry, Faculty of Medicine, Univ. of Ljubljana, Ljubljana, SLOVENIA**

Bioinformatic approaches in microarray data analysis

**Francesco Ceconi, Dulbecco Telethon Institute and Department of Biology, University of Rome "Tor Vergata", Rome, ITALY**

Role of autophagy and apoptosis in the development of the mammalian nervous system

**Lia Crotti, Fondazione IRCCS, Policlinico San Matteo, Pavia, ITALY**

The Long QT Syndrome: from clinical questions to research

**Henrik Daa Schroeder, Odense University Hospital, University of Southern Denmark, Odense, DENMARK**

Booster Therapy? Effect of FA1/dlk1 and ADAM 12 on muscle regeneration

## **NOVEMBER 2007**

**Reuven Agami, Division of Tumor Biology, The Netherlands Cancer Institute, Amsterdam, THE NETHERLANDS**

miRNA genetic screens reach dead end

**Ruedi Aebersold, Institute of Molecular Systems Biology, Zurich, SWITZERLAND**

Quantitative proteomics and Systems Biology

**Frank Hirth, MRC Centre for Neurodegeneration Research, King's College London, Inst. of Psychiatry, Dept. of Neuroscience, London, ENGLAND**

Genetics of brain development and disease in Drosophila

## **DECEMBER 2007**

**Stefano Geuna, Department of Clinical and Biological Sciences, University of Turin Medical School, San Luigi Gonzaga Hospital, Turin, ITALY**

Regenerating the peripheral nerve: the tissue engineering approach to nerve reconstruction

after trauma and disease

**Joseph Guglielmo, Department of Clinical Pharmacy, University of California UCSF, San Francisco, CA, USA**

From Drug Discovery to Personalized Medicine

**Massimo Loda, Dana-Farber Cancer Institute, Boston, USA**

Fatty Acid Synthase as a Metabolic Oncogene

# Trieste Seminar Programme 2008

## January 2008

**Guido Poli** - (Host: M. Giacca)

San Raffaele Scientific Institute, DiBIT, Milan, **ITALY**  
Second Life: The Non-Toxic Anti-HIV Properties of Pertussis Toxin

## February 2008

**Ralph Knöll** - (Host: G. Faulkner)

Cardiovascular Mol. Genetics, Heart Center Göttingen, Univ., Göttingen, **GERMANY**  
Novel Z-disc proteins and cardiomyopathy

**Xavier Darzacq** - (Host: A. Marcello)

Ecole Normale Supérieure, CNRS UMR, Paris, **FRANCE**  
Transcriptional kinetics in living cells

**Jean-Luc Souciet** - (Host: C.V. Bruschi)

Université Louis Pasteur et CNRS, Institut de Botanique, Strasbourg, **FRANCE**  
Eukaryotic genome evolution: effect of spontaneous duplications, deletions and reciprocal translocations in *Saccharomyces cerevisiae*

**Richard Festenstein** - (Host: F. Pagani)

MRC Clinical Sciences Centre, Imperial College London, London, **UK**  
Epigenetic regulation of Frataxin expression in Friedreich's ataxia - pause for thought?

## March 2008

**Luis Galletta** - (Host: F. Pagani)

Istituto Giannina Gaslini, Genoa, **ITALY**  
Pharmacotherapy of cystic fibrosis basic defect

**Vesna Todorovic** - (Hosts: M. Giacca, M. Lusic)

NYU School of Medicine, Cell Biology Department, New York, NY, **USA**  
Long form of latent TGF-beta binding protein 1 (Ltbp-1L) is essential for proper cardiac development

**Silvia Giordano** - (Host: G. Del Sal, LNCIB)

Institute for Cancer Research and Treatment, Candiolo, Torino, **ITALY**  
Targeting Met in cancer and metastasis: a matter of addiction and sensitivity

## April 2008

**Thomas Petes** - (Host: C.V. Bruschi)

Department of Molecular Genetics and Microbiology, Duke University, Durham, N.C., **USA**  
Genetic regulation of genome stability in yeast

**Takashi Suzuki** - (Host: F. Feiguin)

Max Planck Institute of Neurobiology, Martinsried, **GERMANY**  
A novel axon guidance receptor regulates photoreceptor axon targeting in *Drosophila*

**René F. Ketting** - (Host: A. Dhir)

Hubrecht Institute, Dev. Biology and Stem Cell Research, Utrecht, **THE NETHERLANDS**  
RNA silencing in germ cells

**Massimo Levrero** - (Host: G. Del Sal, LNCIB)

Department of Internal Medicine, University "La Sapienza", Rome, **ITALY**  
Molecular pathogenesis of HCC: viruses, candidate genes and control circuits

**Tim R. Crook** - (Host: G. Del Sal, LNCIB)

Laboratory of Cancer Genetics and Epigenetics, Institute of Cancer Research, London, **UK**

**Kelly Perkins** - (Hosts: M. Giacca, M. Lusic)

Sir William Dunn School of Pathology, University of Oxford, Oxford, **UK**  
Turning Full Circle; Transcription-dependent HIV-1 gene looping is dictated by pre-mRNA processing signals

**Massimo Pandolfo** - (Host: F. Pagani)

Service de Neurologie, Hôpital Erasme - Université Libre de Bruxelles, Brussels, **BELGIUM**  
Friedreich ataxia: linking chromatin to mitochondria to the patient. What we understand of the pathogenesis of a hereditary neurodegenerative disease and how we try to treat it

## May 2008

**Fabrizio d'Adda di Fagagna** - (Host: G. Del Sal, LNCIB)

IFOM Foundation, The FIRC Institute of Molecular Oncology, Milan, **ITALY**  
The role of cellular senescence in cancer and aging

**Wouter de Laat** - (Hosts: M. Giacca, M. Lusic)

Dept. of Cell Biology and Genetics, Erasmus MC, Rotterdam, **THE NETHERLANDS**  
New strategies to uncover folding and structural variation in our genome

**Roberta Benetti** - (Host: G. Del Sal, LNCIB)

LNCIB, Trieste, **ITALY**  
Epigenetic control of telomeric and subtelomeric regions in mammals

**Giorgio Inghirami and Roberto Piva** - (Hosts: M. Giacca, C. Schneider, LNCIB)

Dept. of Biomedical Science and Human Oncology, University of Turin, **ITALY**  
Anaplastic lymphoma kinase: from lymphoma to solid tumours

**Joaquin Espinosa** - (Host: F.E. Baralle)

Mol. Cellular and Dev. Biology, University of Colorado at Boulder UCB, CO, **USA**  
Mechanisms of regulatory diversity within the p53 tumor suppressor network

**Dimitris Kioussis** - (Hosts: M. Giacca and G. Legname, SISSA)

Division of Molecular Immunology, MRC Nat. Inst. for Medical Research, London, **UK**  
Common Regulatory Mechanisms in enteric lymphoid and neuronal organogenesis

**Ernesto Guccione** - (Host: G. Del Sal, LNCIB)

European Institute of Oncology, Milan, **ITALY**  
Histone methylation: regulator of chromatin activity and transcription factor binding

**Colin Sharpe** - (Host: F. E. Baralle)

School of Biology, Inst. of Biomed. & Biomolecular Science, Univ. of Portsmouth, **UK**  
The regulation of retinoid signaling

**Lucia Sironi** - (Host: Silvia Onesti, Sincrotrone Trieste)

EMBL, Heidelberg, **GERMANY**  
From spindle assembly checkpoint to microtubule dynamics in living cells

**Jørgen Kjems** - (Host: A. Marcello)

Department of Molecular Biology, University of Aarhus, Aarhus, **DENMARK**  
RNA therapeutics

**Klaus Foerstemann** - (Host: M. Bhuvanagiri)

Gene Centre Munich, Ludwig-Maximilians University LMU, Department of Chemistry and Pharmaceutics, Munich, **GERMANY**  
Biology of microRNAs in *Drosophila*

## June 2008

**Guido Tarone** - (Host: M. Giacca)  
Department of Genetics, Biology and Biochemistry, University of Turin, **ITALY**  
Melusin, a stress regulated protein controlling compensatory heart hypertrophy

**Claudio Cuello** - (Host: F.E. Baralle)  
McGill Faculty of Medicine, Montreal, Quebec, **CANADA**  
The impact of intracellular and extracellular Abeta amyloid peptide in Alzheimer's neuropathology

## July 2008

**Jernej Ule** - (Host: A. D'Ambrogio)  
MRC Laboratory of Molecular Biology, Cambridge, **UK**  
The role of alternative splicing in neuronal function

**Martin Kupiec** - (Host: C. Bruschi)  
Dept. of Molecular Microbiology and Biotechnology, Tel Aviv University, **ISRAEL**  
Genome stability, vertical and horizontal views

**Elias Polykandriotis** - (Host: M. Giacca)  
University of Erlangen Medical Center, Erlangen, **GERMANY**  
Early and late angiogenic phenomena in a bioartificial neovascular assembly

**Elisabetta Traggiai** - (Hosts: O. Burrone, F. Benvenuti)  
Laboratory of Immunology and Rheumatic Disease, Institute G. Gaslini, Genoa, **ITALY**  
B cell polyclonal activation in protective and autoimmune responses

## September 2008

**Roland Kanaar** - (Host: C. Bruschi)  
Erasmus Medical Center, Dept. Radiation Oncology, Rotterdam, **THE NETHERLANDS**  
Mechanisms of genome maintenance

## October 2008

**Peter J. McHugh** - (Host: A. Vindigni)  
University of Oxford, John Radcliffe Hospital, Oxford, **UK**  
Interstrand crosslinks: extreme DNA damage and its repair

**Roberto Latini** - (Host: M. Giacca)  
Lab di Farmacologia Clinica Cardiovascolare, Istituto "Mario Negri", Milan, **ITALY**  
Pentraxin 3, myocardial infarction and heart failure

**Wendy Bickmore** - (Host: A. Marcello)  
Chromosomes and Gene Expr. Section, MRC Human Genetics Unit, Edinburgh, **UK**  
Spatial organisation of the genome and gene expression

**Anne E. Griep** - (Host: L. Banks)  
University of Wisconsin School of Medicine and Public Health, Madison, **USA**  
Role of Dlg-1 and Scrib in development of the mouse ocular lens

**Marco Spadaro** - ((Hosts: D. Ripandelli, M. Giacca)  
Studio Associato Leone & Spadaro, Rome, **ITALY**  
Short Course in Intellectual Property: Protecting Inventions

**Thomas Helleday** - (Host: A. Vindigni)  
Radiation Oncology and Biology, Univ of Oxford, **UK**  
Recombination repair in bypass of replication blocks in mammalian cells

**André Furger** - (Host: A. Muro)  
University of Oxford, Genetics Unit, Department of Biochemistry, Oxford, **UK**  
3' end formation and the polycistronic dilemma

**Dror Minz** - (Host: V. Venturi)  
Institute for Soil, Water and Env. Sciences, Volcani Research Center, Bet-Dagan, **ISRAEL**  
Studies on soil microbial community and structure

**Benoit Chabot** - (Host: F. Pagani)  
Dépt. de Microbiologie et d'Infectiologie, Université de Sherbrooke, Québec, **CANADA**  
A convergence of splicing connections in apoptosis and cancer

## November 2008

**Bettina Schmid** - (Host: F. Feiguin)  
Adolf-Butenandt-Institute, Department of Biochemistry, Muenchen, **GERMANY**  
Zebrafish as a model to study neurodegenerative diseases

**Deirdre Scadden** - (Hosts: A. Kula, A. Marcello)  
Department of Biochemistry, University of Cambridge, Cambridge, **UK**  
Proteins that bind inosine-containing dsRNA

**Igor Stagljar** - (Host: A. Vindigni)  
Centre for Cellular and Biomolecular Research, Univ. of Toronto, ON, **CANADA**  
Membrane protein complexes and functional pathways: from yeast to humans

**Luca Bini** - (Host: A. Vindigni)  
Faculty of Mathematics, Physics and Natural Sciences, University of Siena, **ITALY**  
Proteomics to unravel biological complexity

**Dimitris Thanos** - (Hosts: M. Giacca, M. Lusic)  
Institute of Mol. Biol., Biomedical Research Foundation, Academy of Athens, **GREECE**  
Mechanisms of stochastic gene expression of complement factor H can ruin your kidneys and make you go blind

## December 2008

**Kurt Giles** - (Hosts: M. Giacca, G. Legname (SISSA))  
Institute for Neurodegenerative Diseases, Univ. of California, S. Francisco CA, **USA**  
The molecular basis of human prion diseases

**Ana Eulalio** - (Host: M. Giacca)  
Max Planck Institute for Development Biology, Tuebingen, **GERMANY**  
Mechanisms of microRNA-mediated gene silencing

**Carlo Pedone** - (Host: M. Giacca)  
Institute of Biostructure and Bioimaging (IBB), CNR, Naples, **ITALY**  
Molecular pharmaceuticals and diagnostics in Naples

**Paul Barlow** - (Host: M. Giacca)  
Biomolecular NMR Unit, University of Edinburgh, Edinburgh, **SCOTLAND**  
Why the wrong kind of complement factor H can ruin kidneys and make you go blind

**Raffaella Giavazzi** - (Host: M. Giacca)  
Mario Negri Institute for Pharmacological Research, Dept. of Oncology, Milan, **ITALY**  
Angiogenesis inhibitors in cancer treatment: strategies for combination with chemotherapy

# Trieste Seminar Programme 2009

## January 2009

**Laura Ciapponi** (Host: F. Feiguin)  
University of Rome "La Sapienza", Dept. of Genetics and Molecular Biology, Rome, ITALY  
Terminin: a Drosophila telomere protection complex functionally analogous to human shelterin

## February 2009

**Matteo Curtarello** (Host: A. Marcello)  
Department of Histology, Microbiology and Medical Biotechnologies, University of Padua, Padua, ITALY  
Immunomodulatory effect of Human Herpesvirus 8 glycoprotein vOX2 in monocytes-macrophages

**Penny Jeggo** (Host: A. Vindigni)  
University of Sussex, Department of Biochemistry, Brighton, UK  
The impact of higher order DNA structure on Double strand break repair

**Steve Diggle** (Host: S. Pongor)  
Institute of Infection, Immunity and Inflammation Centre for Biomolecular Sciences, University of Nottingham, UK  
Quorum sensing and the social evolution of bacterial virulence

**Timo Glatter** (Host: A. Vindigni)  
Institute for Molecular Systems Biology, Swiss Federal Institute of Technology, Zürich, SWITZERLAND  
Analyzing signaling networks using mass spectrometry

**Carlo Tacchetti** (Host: A. Marcello)  
Centre of Cell Oncology Ultrastructure, MicroSCoBiO Research Center, Dept. of Exp. Medicine, Univ. of Genoa, ITALY  
Correlative Light/EM microscopy (CLEM): two is better than one

**Gianluigi Condorelli** (Host: M. Giacca)  
Department of Medicine, National Research Council CNR Rome, Rome, ITALY  
Signaling circuits controlling myocardial function

## March 2009

**Stephen C. West** (Host: M. Giacca)  
Cancer Research UK, London Research Institute, Clare Hall Laboratories, South Mimms, Herts, UK  
Defects in DNA strand break repair and links to human disease

**Paul Freemont** (Host: M. Giacca)  
Division of Molecular Biosciences, Department of Life Sciences, Imperial College London, London, UK  
Understanding the functional and structural specificity of the mammalian chaperone p97/VCP

**John Doorbar** (Host: L. Banks)  
Division of Virology, National Institute for Medical Research, London, UK  
Regulation and De-Regulation of the Human Papillomavirus Life Cycle

## April 2009

**Silvano Sozzani** (Hosts: O. Burrone, F. Benvenuti)  
University of Brescia, Department of Biomedical Sciences and Biotechnology, Brescia, ITALY  
Regulation of dendritic cell migration by chemokines and inflammatory signals

**Erik Storkebaum** (Host: M. Giacca)  
Developmental and Molecular Genetics Section, Katholieke Universiteit Leuven, Brussels, BELGIUM  
VEGF: once regarded as a specific angiogenic factor, now implicated in neuroprotection, vascular regulation and synaptic plasticity

**Andrea Graziani** (Host: M. Giacca)  
Department of Pharmacy, University of "Piemonte Orientale", Novara, ITALY  
The Ghrelin puzzle: one gene, two peptides, three hormones, ..how many receptors?

**Pier Lorenzo Puri** (Host: G. Del Sal)  
Laboratory of Gene Expression, Dulbecco Telethon Institute, Rome, ITALY  
Epigenetic Control of gene expression in muscle progenitors in response to extrinsic and intrinsic cues

**Michela Cesco Gaspere** (Host: O. Burrone)  
Immunology Dept, University College Medical School, London, UK  
Gene-modified T cells for cancer immunotherapy

**John McLauchlan** (Host: A. Marcello)  
University of Glasgow, MRC Virology Unit, Glasgow, Scotland, UK  
Replication of the Hepatitis C Virus Genome

## May 2009

**Juan Burrone** (Host: O. Burrone)  
MRC Centre for Developmental Neurobiology, King's College London, London, UK  
The synapse: from vesicles to networks

**Massimiliano Gnecci** (Host: M. Giacca)  
Department of Cardiology, Fond. IRCCS Policlinico San Matteo and University of Pavia, Pavia, ITALY  
Mesenchymal stem cells repair ischemic hearts through paracrine mechanisms

**Thomas Hofman** (Hosted Seminar: G. Del Sal - CIB)  
Cellular Senescence, German Cancer Research Centre (DKFZ) Heidelberg, GERMANY  
Regulation of DNA damage-induced cell death by HIPK2

## June 2009

**Lavinia Albéri** (Host: M. Giacca)  
The Johns Hopkins Institute for Cell Engineering, Department of Neurology, Baltimore MD, USA  
Activity dependent Notch signaling requires Arc/Arg 3.1 and it regulates synaptic plasticity

**Adeyemi Adesokan** (Host: D. Ripandelli)  
Department of Genetics, Harvard Medical School, Boston MA, USA  
From Local to Global genomics: The Bioweather Map Initiative

**Gioacchino Natoli** (Host: G. Del Sal, LNCIB)  
Department of Experimental Oncology, European Institute of Oncology, Campus IFOM-IEO, Milan, ITALY  
The epigenomic and the control of inflammatory gene expression

## June 2009

**Stephane Heymans** (Host: M. Giacca)

Cardiovascular Res. Institute Maastricht (CARIM), Dept. of Cardiology, Maastricht, THE NETHERLANDS  
A protective role for the matricellular proteins osteonectin and osteoglycin against heart failure

**Balaji Prakash** (Hosts: S. Onesti - SISSA, M. Giacca)

Department of Biological Sciences & BioEngineering, Indian Institute of Technology, Kanpur, INDIA  
Bacterial adaptation to stress: Structure-function relationships in Rel proteins

**Alan Bittles** (Host: F. Baralle)

Centre for Human Genetics, Biomed. and Health Sciences Edith Cowan Univ., Joondalup, AUSTRALIA  
Consanguinity and the global burden of disease

**Rafael Garcia-Mata** (Host: L. Banks)

Department of Cell and Developmental Biology, University of North Carolina, Chapel Hill, NC, USA  
The secret life of Rho proteins: Rho signaling in the nucleus and regulation of Rho degradation by GDIs

**Fulvio Mavilio** (Host: G. Del Sal - CIB)

Dept. of Biomedical Sciences, Univ. of Modena and Reggio Emilia, Institute S, Raffaele, Milan, ITALY  
Understanding the interactions between retroviruses and the human genome

## July 2009

**Giacinto Scoles** (Host: M. Giacca)

International School for advanced studies (SISSA), Trieste, ITALY  
Towards Single Cell Proteomics Using Protein Nanoarrays

**Francesco Zanuttin** (Host: ICS-Unido)

CBM, Nanomedicine Group, Trieste, ITALY  
Proposal for innovative nano-medicine approach to "orphan" diseases

**Davide Mazza** (Host: A. Marcello)

LRBGE-National Cancer Institute, The National Institutes of Health, Bethesda, MD, USA  
Towards the validation of in-vivo binding rates measurements by quantitative fluorescence microscopy techniques

**Andrés Aguilera** (Host: C. Bruschi)

Centro Andaluz de Biología Molecular y Medicina Regenerativa, CABIMER, Sevilla, SPAIN  
Genomic instability linked to specific deficiencies in nucleotide excision repair and mRNA biogenesis

**Enrico Di Cera** (Host: A. Vindigni)

Department of Biochemistry and Mol. Biophysics, Washington University,  
School of Medicine, St. Louis, MO, USA  
Engineering thrombin for anticoagulant activity in vivo

## September 2009

**Mark Wade** (Host: M. Giacca)

Gene Expression Lab-Wahl, The Salk Institute for Biological Studies, La Jolla, CA, USA  
Hits and misses: targeting the mdmX oncogene in cancer therapy

**Lena Claesson-Welsh** (M. Giacca)

Uppsala University, Dept. of Genetics and Pathology, Rudbeck Laboratory, Uppsala, SWEDEN  
VEGF signaling; overview with focus on vascular permeability

## October 2009

**Alberto Auricchio** (Host: F. Pagani)

Department of Pediatrics, "Federico II" University, and TIGEM, Napoli, ITALY  
AAV-mediated gene transfer to the retina and liver for human inherited diseases

**Mariano Garcia-Blanco** (Host: F. E. Baralle)

Dept. of Mol. Genetics and Microb., Duke Univ. Medical Center, Durham, North Carolina, USA  
Dengue virus host factors: new analysis of an old RNA pathogen

**Karl Münger** (Host: L. Banks)

The Channing Laboratory, Brigham and Women's Hospital, Boston, MA, USA  
Perturbation of host cellular regulatory networks by human papillomaviruses

**Hermann Schätzl** (Host: G. Legname, SISSA)

Institute of Virology, Technische Universität, München, GERMANY  
Prion infections: from molecular biology to therapy and prophylaxis

**Denise P. Barlow** (Host: A. Kula)

Research Center for Mol. Med., Austrian Academy of Science and Univ. of Vienna, AUSTRIA  
Regulation of Imprinted Gene clusters by Macro Non-coding RNAs

**Bernard Dujon** (Host: C. Bruschi)

Institut Pasteur, Dept. « Génomes et Génétique », Univ. P. et Marie Curie, Paris, FRANCE  
Comparative genomics of protoplast Saccharomycetaceae

## November 2009

**Adelaida Sarukhan** (Host: F. Benvenuti)

Istituto Clinico Humanitas, Milan, ITALY  
On the mechanisms of immune regulation

## December 2009

**Alberto R. Kornblihtt** (Host: M. Giacca)

Eukaryotic Molecular Biology Group, School of Sciences, Univ. of Buenos Aires, ARGENTINA  
Chromatin structure and alternative splicing

**Maria Fátima BOSCH TUBERT** (Host: M. Giacca)

Centre de Biologia Animal i de Teràpia Gènica, Univ. de Barcelona, Barcelona, SPAIN  
Gene therapy approaches for diabetes mellitus

**Dmitrij Frishman** (Host: S. Pongor)

Computational Genomics, Technical University of Munich, GERMANY  
Protein evolution

**Denise P Barlow** (Host: M. Giacca)

CeMM Center for Molecular Medicine of the Austrian Academy of Science, Vienna, AUSTRIA  
Regulation of Imprinted Gene clusters by Macro Non-coding RNAs