



Maria Arroz, M.D., Clinical Pathologist

Director of Flow Cytometry Laboratory at CHLO, Hospital S. Francisco Xavier, Lisbon, Portugal, 2009 until present

Director of Clinical and Reference Laboratories at The National Institute of Health, Department of Health Promotion and Chronic Diseases, Lisbon, Portugal, 2008-2009

Director of Flow Cytometry Laboratory at Hospital Egas Moniz, Lisbon, Portugal, 1993-2008

Director of the European Clinical Cytometry Courses, 2005-2009

Board member of the European Society for Clinical Cell Analysis (ESCCA), 2008

Board member of the European Working Group on Clinical Cell Analysis (EWGCCA) Foundation 2001-2006

Editor of Clinical Cytometry Journal

Advisor to the Subcommittee of Flow Cytometry of Leukemic Cells and to the Subcommittee of Flow Cytometric Cell Counting of the Clinical and Laboratory Standards Institute (CLSI), USA.

Publications:

Brent L. Wood, **Maria Arroz**, David Barnett, Joseph DiGiuseppe, Bruce Greig, Steven J. Kussick, Teri Oldaker, Mark Shenkin, Elizabeth Stone and Paul Wallace “2006 Bethesda International Consensus Recommendations on the Immunophenotypic Analysis of Hematolymphoid Neoplasia by Flow cytometry: Optimal Reagents and Reporting for the Flow Cytometric Diagnosis of Hematopoietic Neoplasia”. Cytometry Part B 2007; 72B, Supplement 1:S14-22.

János Kappelmayer, **Maria Arroz**, Bruno Brando, Ingmar A. Heijnen, Ellen Kuiper-Kramer, Stefano Papa, Jan Philippé, Frank W. Preijers, Gregor Rothe, and Jan W. Gratama “Clinical Cytometry in Europe, 2007”. Cytometry Part B 2008; 74B:45-46.

Claude Lambert, **Maria Arroz**, Lydia Campos, Marie-Christine Béné, Bernard Chatelain, János Kappelmayer, Stefano Papa, Jan W. Gratama “Clinical Cytometry in Europe, 2009”. Cytometry Part B 2009; 76B:408-409.

L. M. Borrego, **M. J. Arroz**, P. Videira, C. Martins, H. Guimarães, G. Nunes, A. L. Papoila e H. Trindade “Regulatory cells, cytokine pattern and clinical risk factors for asthma in infants and young children with recurrent wheeze”, 2009. Clinical and Experimental Allergy; 39:1160-1169.

Maria Arroz. “Global Cytometry Networking: The Dream Becomes Reality” Cytometry Part B 2010; 78B:411.



Derek Davies

Derek Davies runs the flow cytometry facility at the London Research Institute, part of Cancer Research UK, and provides a service to 50 Laboratories looking at cell cycle, developmental biology, immunology, cell signalling and stem cell biology.

He has a particular interest in novel technology and development of techniques that are suitable for all forms of cytometry. Recent developments have been in the field of apoptosis, cell proliferation and identification of stem cell subsets.

He sits on the Cytometry Committee of the Royal Microscopical Society, is an administrator of the European Cytometry Network and is a founder member and Chairman of flowcytometryUK. He is also an ISAC councillor.

Dr. Joerg Fuchs

Characterization of plant chromosomes by banding, fluorescent in situ hybridization and immunostaining techniques;

Structure and function of chromosomal domains and their dynamic epigenetic modification in correlation to nuclear processes such as replication and transcription;

Mechanisms of chromosome and karyotype evolution, genome plasticity;

Application of flow cytometry for ploidy analyses and nuclear DNA content measurements, including the analysis of intraspecific genome size variation.

Publications:

Fuchs, J.; Brandes, A.; Schubert, I. (1995) Telomere sequence localization and karyotype evolution in higher plants. *Plant Sys Evol* 196: 227-241.

Fuchs, J.; Houben, A.; Brandes, A.; Schubert, I. (1996) Chromosome 'Painting' in plants - a feasible technique? *Chromosoma* 104: 315-320.

Fuchs, J.; Lorenz, L.; Loidl, J. (2002) Chromosome associations in budding yeast caused by integrated tandemly repeated transgenes. *J Cell Sci* 115: 1213-1220.

Fuchs, J.; Demidov, D.; Houben, A.; Schubert, I. (2006) Chromosomal histone modification patterns--from conservation to diversity. *Trends Plant Sci* 11: 199-208.

Lermontova, I.; Fuchs, J.; Schubert, V.; Schubert, I. (2007) Loading time of the centromeric histone H3 variant differs between plants and animals. *Chromosoma* 116: 507-510.



Prof. Dr. Stanislav Komárek

Stanislav Komárek was born on 6 August 1958 in Jindřichův Hradec, South Bohemia, and took a degree in biology at the Faculty of Science of Charles University, Prague. He was briefly employed at the Institute of Parasitology of the Czechoslovak Academy of Sciences in České Budějovice, after which he opted for exile in Austria. He lived there as an émigré from 1983 to 1990, working in Vienna first at the Museum of Natural History, later at the Austrian

Ministry of Agriculture and ultimately at the Institute of Zoology of Vienna University. After the November Revolution of 1989 he decided to return home and has since lectured at the Charles University, Science Faculty, and acquired the title of Professor of the Philosophy and History of Science in 2001. His main research interest is in philosophy and history of biology, biological aesthetics according to Adolf Portmann and the relation of nature and culture.

Publications:

Komárek, S.: Mimicry, Aposematism and Related Phenomena in Animals and Plants: Bibliography 1800-1990. Prague: Vesmír, 1998, 296 pp.

Komárek, S.: Mimicry, Aposematism and Related Phenomena: Mimitism in Nature and the History of Its Study. Muenchen: LINCOM, 2003., 167 pp.

Komárek, S.: Emanuel Rádl: ein Fixstern am Himmel der Biologiegeschichte. In: Emanuel Rádl Scientist and Philosopher. Prague: OIKOYMENH, 2005. pp. 138-142.

Komárek, S.: Nature and Culture: The World of Phenomena and the World of Interpretations. Muenchen, LINCOM, 2009, 294 pp.



Romaric Lacroix, M.D., Ph.D.

Dr. Lacroix is working in the hematology laboratory of the Hospital de la Conception in Marseille. He recently got an associate professor position in the Prof. Françoise Dignat-George group at Aix-Marseille University where he is responsible for the microparticles research advancement. During his PhD, he described the plasminogenolytic activities of the endothelial microparticles. He is an expert on flow cytometry analysis for detection and measurement of microparticles.

Publications:

1. **Lacroix R**, Sabatier F, Mialhe A, Basire A, Pannell R, Borghi H, et al. Activation of plasminogen into plasmin at the surface of endothelial microparticles: a mechanism that modulates angiogenic properties of endothelial progenitor cells in vitro. *Blood*. 2007; 110:2432-9.

2. Thomas GM, Panicot-Dubois L, **Lacroix R**, Dignat-George F, Lombardo D, Dubois C. Cancer cell-derived microparticles bearing P-selectin glycoprotein ligand 1 accelerate thrombus formation in vivo. *Journal of Experimental Medicine*. 2009; 206: 1913-27.

3. Dejouvencel T*, Doeuvre L*, **Lacroix R**, Plawinski L, Dignat-George F, Lijnen HR, et al. Fibrinolytic cross-talk: a new mechanism for plasmin formation. *Blood*. 2010; 115: 2048-56. (**co-first authors*)

4. **Lacroix R**, Robert S, Poncelet P, Dignat-George F. Overcoming limitations of microparticle measurement by flow cytometry. *Semin Thromb Hemost*. 2010; 36: 807-18.

5. **Lacroix R**, Robert S, Poncelet P, Kasthuri RS, Key NS, Dignat-George F. Standardization of platelet-derived microparticle enumeration by flow cytometry with calibrated beads: results of the International Society on Thrombosis and Haemostasis SSC Collaborative workshop. *J Thromb Haemost*. 2010; 8: 2571-4.



Kelly Lundsten

Kelly Lundsten is academically trained in neuroscience with a focus on neural progenitors and fate choice. She has done stints with INSERM/CNRS, NIMH/NIH, Celera Genomics and Molecular Probes/Invitrogen which all aided in generating an expertise in fluorescence chemistry and applications including advanced techniques in microscopy, small animal in-vivo imaging and flow cytometry.



Dr. Alysson R. Muotri, Ph.D.

Dr. Muotri earned a BSc in Biological Sciences from the State University of Campinas in 1995 and a Ph.D. in Genetics in 2001 from University of Sao Paulo, in Brazil. He moved to the Salk institute as Pew Latin America Fellow in 2002 for a postdoctoral training with Dr. Fred H. Gage on the fields of neuroscience and stem cell biology. He then became an Assistant Professor at University of California in San Diego since 2008. His research focuses on human brain development and evolution, exploring mobile elements as generators of neuronal diversity. Dr. Muotri's lab is also interested on modeling neurological diseases, such as Autism Spectrum Disorders, using human induced pluripotent stem cells. He received several awards, including the prestigious NIH Director's New Innovator Award and the Emerald Foundation Young Investigator Award.

Research Interests

The complexity of the human brain, with thousands of neuronal types, permits the development of sophisticated behavioral repertoires, such as language, tool use, self-awareness, symbolic thought, cultural learning and consciousness. From such dynamic complexity emerged extraordinary technological and artistic masterpieces in a relatively short cultural history. Moreover, brain complexity has a creative purpose. Understanding what produces neuronal diversification during brain development has been a longstanding challenge for neuroscientists and may bring insights on the evolution of human cognition.

The Muotri lab explores mobile elements as generators of diversity during neuronal differentiation. These mobile elements may be part of a conserved genetic core process responsible for evoking facilitated complex non-random phenotypical variation in which selection may act. They use animal models, neural stem cells, human and other primates' pluripotent cells and several molecular tools to investigate fundamental mechanisms of brain development, evolution and mental disorders, such as Autism Spectrum Disorders.

Awards and Honors: NIH Director's New Innovator Award, 2009; Emerald Foundation Young Investigator Award, 2009; Rett Syndrome Research Foundation Postdoctoral Fellowship, 2006; Top 5 Brazilian Young Scientist, 2005; Pew Latin America Postdoctoral Fellowship, 2002; Young Geneticist Brazilian Society of Genetics, 2001; CAPES/COFECUB International Fellowship, 2001.

Publications:

Marchetto, M. C. N., Carromeu, C., Acab, A., Yu, D., Yeo, G., Yangling, M., Gage, F. H. &

Muotri, A. R. A model for neural development and treatment of Rett syndrome using human induced pluripotent stem cells. *Cell*, 143(4): 527-39 (2010).

Muotri, A. R., Marchetto, M. C. N., Coufal, N. G., Oefner, R., Yeo, G., Nakashima, K. & Gage, F. H. L1 retrotransposition in neurons is modulated by MeCP2. *Nature*, 468(7322): 443-6 (2010).

Massirer, K., Carromeu, C., Oliveira, K. & Muotri, A. R. Maintenance and differentiation of neural stem cells. *WIREs SysBioMed*. Online ePub Jun 21 (2010).



Prof. Alberto Orfao, M.D., Ph.D.

Alberto Orfao was born on 15 July 1960. He received his M.D. Degree at both the University of Salamanca, Spain (1984) and the Nova University of Lisbon, Portugal (1985) and obtained the Ph.D. Degree at the University of Salamanca in 1987. He is currently Full Professor of the Department of Medicine and the Director of the General Cytometry Service at the University of Salamanca, as well as one of the Principal Investigators at the Cancer Research Center of Salamanca. He leads the Spanish National DNA Bank since its creation in 2004. His main research interest is in translational medicine, mainly focused on hematological malignancies and the relationship between immune system and cancer. At present he has published more than 400 scientific papers and has co-authored 25 patents. He has received more than 30 awards including the Berend Howen and the Wallace Coulter awards of the International Society for Laboratory Hematology and the International Society for Clinical Cytometry.

Publications:

- MATUTES E, PICKL WF, VAN`T VEER M, MORILLA R, SWANSBURY J, STROBL H, ATTARBASCHI A, HOPFINGER G, ASHLEY S, BENE MC, PORWIR A, **ORFAO A**, LEMEZ P, SCHABATH R, LUDWIG WD. Mixed phenotype acute leukemia (MPAL): clinical and laboratory features and outcome in 100 patients defined according to the WHO 2008 classification. *Blood*. 117: 3163-3171, 2011.

IF: 10.56

- PAIVA B, PEREZ-ANDRES M, VIDRIALES MB, ALMEIDA J, DE LAS HERAS N, MATEOS MV, LOPEZ-CORRAL L, GUTIERREZ NC, BLANCO J, ORIOL A, HERNANDEZ MT, DE ARRIBA F, DE COCA AG, TEROL MJ, DE LA RUBIA J, GONZALEZ Y, MARTIN A, SUREDA A, SCHMIDT-HIEBER M, SCHMITZ A, JOHNSEN HE, LAHUERTA JJ, BLADE J, SAN MIGUEL JF, **ORFAO A**: Competition between clonal plasma cells and normal cells for potentially overlapping bone marrow niches is associated with a progressively altered cellular distribution in MGUS vs myeloma. *Leukemia*, 25: 697-706, 2011.

IF: 8.97

- PAIVA B, MARTINEZ-LOPEZ J, VIDRIALES MB, MATEOS MV, MONTALBAN MA, FERNANDEZ-REDONDO E, ALONSO L, ORIOL A, TERUEL AI, DE PAZ R, GARCIA-LARAÑA J, BENGOCHEA E, MARTIN A, DIAZ MEDIAVILLA J, PALOMERA L, DE ARRIBA F, BLADE J, **ORFAO A**, LAHUERTA JJ, SAN MIGUEL JF: Comparison of immunofixation, serum free light chain and immunophenotyping for response evaluation and prognostication in multiple myeloma. *Journal of Clinical Oncology*, 29: 1627-1633, 2011.

IF: 18. 97

- ALMEIDA J, NIETO WG, TEODOSIO C, PEDREIRA CE, LÓPEZ A, FERNANDEZ-NAVARRO P, NIETO A, RODRIGUEZ-CABALLERO A, MUÑOZ-CRIADO S, JARA-ACEVEDO M, ROMERO A, **ORFAO A**: CLL-like B-lymphocytes are systematically present at very low numbers in peripheral blood of healthy adults. *Leukemia*. 25: 718-722, 2011.

IF: 8.97

- BENE MC, NEBE T, BETTELHEIM P, BULDINI B, BUMBEA H, LACOMBE F, LEMEZ P, MARINOV I, MATUTES E, MAYNADIE M, OELSCHLAGEL U, **ORFAO A**, SCHABATH R, SOLENTHALER M, TSCHURTSCHENTHALER G, VLADAREANU AM, ZINI G, FAURE GC, PORWIT A: Immunophenotyping of acute leukemia and lymphoproliferative disorders: a consensus proposal of the European LeukemiaNet Work Package 10. *Leukemia*, 25: 567-574, 2011.

IF: 8.97