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Curriculum vitae

Since 2019	Deputy Director, Medical Systems Biology research area, MDC, Berlin
Since 2013	Professor (W3) in Epigenetic Regulation and Genome Architecture, Department of Biology, Humboldt-Universität zu Berlin
Since 2013	Program Leader (tenured), Epigenetic Regulation and Genome Architecture group, BIMSB at the MDC, Berlin
2012 – 2015	Professor in Cell Biology, Institute of Clinical Sciences (ICS), Imperial College London, UK
2012	Chair, Integrative Biology Section, Medical Research Council London Institute of Medical Sciences (MRC-LMS), London, UK
2011 – 2012	Honorary professor in Cell Biology, ICS, Imperial College London, UK
2010 – 2012	Joint head, Molecular Sciences, ICS, Imperial College, London, UK
2010 – 2011	Deputy chair, Epigenetics Section, MRC-LMS, London, UK
2008 – 2013	Program leader (tenured), Genome Function group, MRC-LMS, London, UK
2007 – 2011	Honorary reader in Cell Biology, ICS, Imperial College London, UK
2003	Visiting scientist, Duke University, Durham, NC, US
2002 – 2008	Program leader (tenure-track), Nuclear Organisation group, MRC-LMS, London, UK
2002 – 2007	Honorary senior lecturer, ICS, Imperial College London, UK
2000 – 2002	Group Head (Royal Society Dorothy Hodgkin Fellow), Nuclear Organisation group, MRC-LMS, London, UK.
1998 – 2000	Postdoctoral fellow (Royal Society Dorothy Hodgkin Fellow), Sir William Dunn School of Pathology, University of Oxford, UK
1997 – 2000	PhD (Hayward Junior Research Fellow), Oriel College, University of Oxford, UK

Research fields

Our group works on epigenetic regulation and 3D genome architecture in embryonic stem cells, neuronal precursor cells and neurons, on the following major topics:

- Long-range gene regulation through chromatin contacts, enhancer-promoter contacts
- Novel technologies for mapping chromatin contacts and their application to mapping long-range gene regulation in neuronal subtypes
- Mechanisms of gene silencing, poising, and activation, focused on Polycomb repression

Activities in the scientific community, honors, awards

Since 2019	Member, NeuroCure – Cluster of Excellence, Berlin
Since 2019	Vice chair, COST ACTION on 'International Nucleome Consortium' (CA18127)
2019	Strategy Advisory Board, VIB-KU Leuven Center, BDR, Leuven, Belgium
Since 2019	Editorial board member, Development Cell, Cell Press
Since 2018	Founding Member of the EU Flagship 'LifeTime' Initiative
Since 2018	Strategy Advisory Board, MRC Human Genetics Unit, University of Edinburgh UK
Since 2017	Advisory editorial board, Molecular Systems Biology, EMBO Press
Since 2015	Editor, and Senior academic editor, Journal Cell Biology, Rockefeller University Press
Since 2015	Editorial board, Molecular Cellular Biology, and J. Mol. Medicine, Springer
2012 – 2014	Committee member, British Cell Biology Society, UK
2009 – 2010	Chair, Management-Led Review on PhD Student Recruitment and Training, MRC-LMS, London, UK
2008 – 2012	Member, MRC-LMS Institute Operations and Planning Group, MRC-LMS, London, UK

Selected publications

Ferrai C, Torlai Triglia E, Risner-Janiczek JR, Rito T, Rackham OJ, de Santiago I, Kukalev A, Nicodemi M, Akalin A, Li M, Ungless MA*, Pombo A*. RNA polymerase II primes Polycomb-repressed developmental genes throughout terminal neuronal differentiation. Mol Syst Biol 2017; 13:946 | *corresponding authors

Barbieri M, Xie SQ, Torlai Triglia E, Chiariello AM, Bianco S, de Santiago I, Branco MR, Rueda D, Nicodemi M*, Pombo A*. Active and poised promoter states drive folding of the extended HoxB locus in mouse embryonic stem cells. Nat Struct Mol Biol 2017; 24:515-524 | *corresponding authors

Beagrie RA, Scialdone A, Schueler M, Kraemer DC, Chotalia M, Xie SQ, Barbieri M, de Santiago I, Lavitas LM, Branco MR, Fraser J, Dostie J, Game L, Dillon N, Edwards PA, Nicodemi M, Pombo A. Complex multi-enhancer contacts captured by genome architecture mapping. Nature 2017; 543:519-524 | *corresponding authors

Skourti-Stathaki K*, Torlai Triglia E, Warburton M, Voigt P, Bird A, Pombo A*. R-Loops Enhance Polycomb Repression at a Subset of Developmental Regulator Genes. Mol. Cell 2019; 73: 930-945 e934 | *corresponding authors

Beagrie RA, Pombo A. Gene activation by metazoan enhancers: Diverse mechanisms stimulate distinct steps of transcription. Bioessays 2016; 38:881-893

Pombo A, Dillon N. Three-dimensional genome architecture: players and mechanisms. Nat Rev Mol Cell Biol 2015; 16:245-257

Fraser J, Ferrai C, Chiariello AM, Schueler M, Rito T, Laudanno G, Barbieri M, Moore BL, Kraemer DC, Aitken S, Xie SQ, Morris KJ, Itoh M, Kawaji H, Jaeger I, Hayashizaki Y, Carninci P, Forrest AR, Consortium F, Semple CA, Dostie J, Pombo A*, Nicodemi M.* Hierarchical folding and reorganization of chromosomes are linked to transcriptional changes in cellular differentiation. Mol Syst Biol 2015; 11:852 | *corresponding authors

Dias JD, Rito T, Torlai Triglia E, Kukalev A, Ferrai C, Chotalia M, Brookes E, Kimura H*, Pombo A*. Methylation of RNA polymerase II non-consensus Lysine residues marks early transcription in mammalian cells. Elife 2015; 4 | *corresponding authors

Brookes E, de Santiago I, Hebenstreit D, Morris KJ, Carroll T, Xie SQ, Stock JK, Heidemann M, Eick D, Nozaki N, Kimura H, Ragoussis J, Teichmann SA, Pombo A. Polycomb associates genome-wide with a specific RNA polymerase II variant, and regulates metabolic genes in ESCs. Cell Stem Cell 2012; 10:157-170

Barbieri M, Chotalia M, Fraser J, Lavitas LM, Dostie J, Pombo A*, Nicodemi M*. Complexity of chromatin folding is captured by the strings and binders switch model. Proc Natl Acad Sci USA 2012; 109:16173-16178 | *corresponding authors