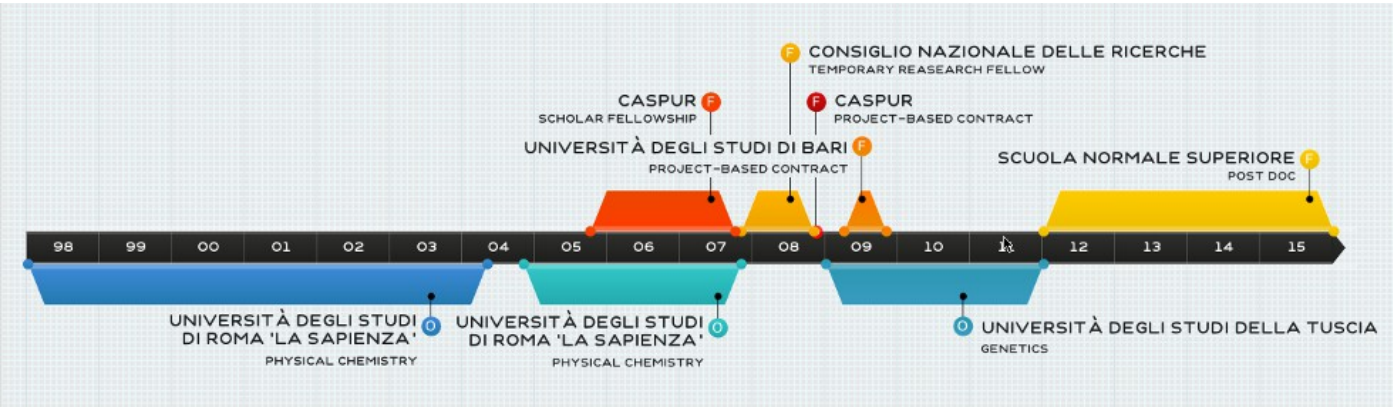
I. CURRICULUM VITAE OF GIORDANO MANCINI

NAME	PERSONAL INFORMATION
Giordano, MANCINI	• Born on 27TH June 1979 in Rome, Italy; Italian nationality • e-mail: giordano.mancini@sns.it • Married, one daughter
	PRESENT POSITION • Post Doc (RTD-A) Researcher, Scuola Normale Superiore, Center for Computational Chemistry and Cosmology • Associated to the Interuniversity Consortium on Materials Science and Technology (INSTM) • Associated to Istituto Nazionale di Fisica Nucleare (INFN)

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)
Università La Sapienza di Roma (Rome, Italy)	B. Sc./M. Sc in Chemistry	1998-2004
Università La Sapienza di Roma (Rome, Italy)/CASPUR	Ph. D. in Physical Chemistry	1994-2007
CNR/IMIP Bari, Italy (Post Doc researcher)		2007-2008
Università degli studi della Tuscia, Viterbo, Italy	Ph. D. in Genetics and Cellular Biology	2009-2012
Scuola Normale Superiore, Pisa, Italy, (Post Doc researcher)		2012-2013

Time line



A. Synopsis of research activity (updated March 2015)

Ph. D. Thesis in Physical Chemistry:
"A combined computational and XAS approach to the study of structural and dynamical properties of electrolitic aqueous solutions"

Ph. D, Thesis in Genetics and Cellular Biology:
"Second Generation Sequencing tools: from de novo genome assembly to quantitative genetics studied by dense SNP chips"

Publication activity

44 papers on peer-reviewed journals (13 as first and/or corresponding author), 2 book chapters; 540 citations; H-index: 15

Research grants
Awarded a national research grant (unit coordinator) for the project "Nanotubi di argilla per la progettazione di materiali intelligenti ecosostenibili". Bando "FIRB Futuro in Ricerca bando 2012".

Research Interests

- Genome Assembly with 2nd generation tools. Conference paper: "Status of the buffalo genome", Mancini G, Biagini T, Chillemi G, Strozzi F, Williams J, Schroeder SG, Zimin A. International Plant and Animal Genome Conference XX 2012
- Application of XAS spectroscopy and Classical Molecular Dynamics to the study of metallo-proteins.
  Featured publication: "Effects of the pathological Q212P mutation on human prion protein non-octarepeat copper-binding site", *Biochemistry*, 2012, DOI: 10.1021/bi300233n
- Quantitative genetics and genome wide association studies.
  Featured publication: Identification of a Short Region on Chromosome 6 Affecting Direct Calving Ease in Piedmontese Cattle Breed. Song Q, editor. *PLoS ONE,* 2012, DOI:10.1371/journal.pone.0050137
- DNA-enzyme and DNA-enzyme-drug complexes and, in particular, the structural modifications caused by drug binding and their effect of the enzyme functionality. Featured publication: Evidence of the crucial role of the linker domain on the catalytic activity of human topoisomerase I by experimental and simulative characterization of the Lys681Ala mutant, *Nucleic Acid Research,* 2009, DOI: 10.1093/nar/gkp669
- Graphical interfaces and immersive/interactive tools.

  Featured publication: Moka: Designing a Simple Scene Graph Library for Cluster-Based Virtual Reality Systems 2014. ISBN: 978-3-319-13968-5

Other interests and projects

Database development in the project "Computational investigation of alternative splicing and tissue-specific gene expression in disease-related genes: a combinatorial control of protein diversity and regulation". Funds were granted by TELETHON

B. Teaching

Teaching activity

- Lectures in "Programming Languages for Chemists", Scuola Normale Superiore (2013-2015)
- Lectures in "Computational modeling of Bio- and nano-sistems", Scuola Normale Superiore (2013-2014)
- Lectures in "Molecular Dynamics of Biological macromolecules", CASPUR (2011-2012)
- Lectures in "Computational Biology", Tor Vergata University (2010)

C. Programming skills and software

- Sys-admin level knowledge of GNU/Linux OS. Management of Beowulf clusters
- Programming Languages: Python [Pandas, Sci-kit Learn], C/C++, Fortran 77/90, AWK, R
- Database management system: MySQL
- Parallel programming with MPI/OpenMP. Basic knowledge of CUDA and OpenAcc
- Publishing software: GIMP, Blender, Inkscape

D. Schools

- Optimization of serial code: Corso CASPUR Novembre 2005
- Debugging of serial code: Corso: CASPUR Ottobre 2005
- "A two day course on MPI" Edimburgh Parallel Computing Centre (EPCC), Edimburgh, UK, May 2007
- "Understanding Molecular Simulations", Universeit Van Amsterdam (UVA), Amsterdam, NL, 08-19 Jan 2007
- Statistical methods for genome-enabled selection: Summer School, Università di Padova. Sept 2010
- INFN Efficiency in Scientific Computing School, Nov 2013
- 9 Measure shifts at various synchrotron radiation facilities in Europe between 2005 and 2015

E. Hobbies/other interests

- Historical (tabletop) wargames; medieval and modern history.
- Scuba diving
- Weightlifting