

# Curriculum Vitae

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## Personal Information

Name	Andrea
Surname	Calabria
Date of birth	21/01/1982

## Education and Training

Ph.D.	Computer Science, Università degli Studi Milano Bicocca, Italy; 2007 – 2010. Thesis available online: <a href="http://boa.unimib.it/handle/10281/19219">http://boa.unimib.it/handle/10281/19219</a>
School Management Course	BioMed Grid School on EGEE Grid Environment, ITB-CNR , Italy; May 2008 “Management and valorization of research results, technological transfer”; November - December 2007, Università degli Studi di Milano, Italy.
Master of Science Stage	Computer Systems Engineering, Politecnico di Milano, Italy; 2003 - 2006 Gene expression analysis on Affymetrix microarrays, Max Delbruck Center for Molecular Research (MDC), Berlin, Germany; 17-31 July 2006
Degree	Computer Systems Engineering, Politecnico di Milano, Italy; 2000 - 2003

## Work Experience

Researcher (Bioinformatics Unit Supervisor)	<i>Università degli Studi di Milano</i> , Italy; November 2009 - presently. Main activities: Data-warehousing and data-mining tools development; sequencing data analysis; biostatistics and epidemiological studies with machine learning methods; information systems design and implementation; system administration support; research grant writing. Funding: Hypergenes.
Researcher	<i>National Research Council (CNR), Institute for Biomedical Technologies (ITB)</i> , Segrate (MI), Italy; December 2006 - October 2009. Main activities: Studying of biobank integration and grid environment solutions. Studying of genotyping techniques: statistical analysis and technological approaches (databases, information systems, data-warehousing, data-mining). Funding: LITBIO, BioinfoGRID.

## Personal Skills and Competences

Languages	English (TOEFL certificate), French (scholar lessons)
Informatics	Competences in Computer Science and Engineering are theoretical and practical in Information Systems, Artificial Intelligence and Bioinformatics: <ul style="list-style-type: none"><li>• <i>Databases</i>: MySQL and PostgreSQL</li><li>• <i>Information systems</i>: ERP/CRM open source solutions like Compiere, Adempiere, OpenBravo; LIMS systems</li><li>• <i>Programming languages</i>: C, C++, Java, Visual Basic, Python, Perl; other languages: Bash, Lisp, Matlab, R, Stata; web design and implementation: Asp, Php, Jsp, and servlet, JavaScript &amp; ZK;</li><li>• <i>Operating systems</i>: Windows, Macintosh (OSX), Linux (Debian, RedHat)</li><li>• <i>Bioinformatics</i>: linkage analysis, genotyping, sequencing, copy number variations (CNV), statistical analysis, gene expression;</li><li>• <i>Infrastructures</i>: networking, security; distributed environments: grid computing (GLite), clusters (PBS/Torque); virtual environments.</li><li>• <i>Web systems</i>: PHP CMS, ECM;</li><li>• <i>Problem solving and optimization algorithms</i>: artificial intelligence, machine learning, soft computing methods.</li></ul>

## Academic Lectures

### Bioinformatics

- Lesson title: “Human Linkage Analysis”, presented to students of the Doctorate in Molecular Medicine, *Università degli Studi di Milano*, Milano, Italy; April, 13, 2010.
- Lesson title: “Post GWAS Analysis”, presented to students of the Graduate School of Nephrology and Medical Genetics, *Università degli Studi di Milano*, Milano, Italy; January, 31, 2011.
- Lesson title: “Statistical Analysis for Genetic Linkage Studies”, presented to students of the Graduate School of Nephrology, *Università degli Studi di Milano*, Milano, Italy; April, 18, 2011.
- Lesson title: “Target sequencing: from study design to data analysis”, presented to students of the School of Doctorate in Molecular Medicine, *Università degli Studi di Milano*, Milano, Italy; May, 3, 2011.

## Scientific Publications

1. C. Mele, P. Iatropoulos, R. Donadelli, **A. Calabria**, R. Maranta, P. Cassis, S. Buelli, S. Tomasoni, R. Piras, M. Krendel, S. Bettoni, M. Morigi, M. Delledonne, C. Pecoraro, I. Abbate, MR. Capobianchi, F. Hildebrandt, E. Otto, F. Schaefer, F. Macchiardi, F. Ozaltin, S. Emre, T. Ibsirlioglu, A. Benigni, G. Remuzzi, M. Noris; PodoNet Consortium; "MYO1E mutations and childhood familial focal segmental glomerulosclerosis"; *N Engl J Med* 2011 Jul 28;365(4):295-306.
2. **A. Calabria**, D. Di Pasquale, M. Gnocchi, P.A. Cozzi, A. Orro, G.A. Trombetti, L. Milanese. Grid Based “Genome Wide Studies on Atrial Flutter”; *Journal of Grid Computing*, 2010 Sept, DOI: 10.1007/s10723-010-9163-y
3. E. Mosca, R. Alferi, I. Merelli, F. Viti, **A. Calabria**, L. Milanese. “A multilevel data integration resource for breast cancer study”; *BMC Syst Biol* 2010 Jun 3;4:76.
4. **A. Calabria**, E. Mosca, F. Viti, I. Merelli and L. Milanese; “SNPRanker: a tool for identification and scoring of SNPs associated to target genes”; *Journal of Integrative Bioinformatics*, 7(3):138, 2010. Online Journal: [http://journal.imbio.de/index.php?paper\\_id=138](http://journal.imbio.de/index.php?paper_id=138) , DOI:10.2390/biecoll-jib-2010-138
5. L. Volpi, G. Roversi, E.A. Colombo, N. Leijsten, D. Concolino, **A. Calabria**, M.A. Mencarelli, M. Fimiani, F. Macchiardi, R. Pfundt, E.F.P.M. Schoenmakers, L. Larizza, “Targeted Next-Generation Sequencing Appoints C16orf57 as Clericuzio-Type Poikiloderma with Neutropenia Gene”; *The American Journal of Human Genetics* 2010, DOI:10.1016/j.ajhg.2009.11.014
6. F. Viti, E. Mosca, I. Merelli, **A. Calabria**, R. Alferi, and L. Milanese; “Ontological enrichment of the Genes-to-Systems Breast Cancer database”; *Metadata and Semantic Research*, SpringerLink, part 2, pp 171-182, September 2009, DOI 10.1007/978-3-642-04590-5.
7. L. Milanese, **A. Calabria**, D. Di Pasquale, M. Gnocchi, A. Orro, G. Trombetti; “A HPC and Grid enabling framework for genetic linkage analysis of SNPs”, *Nuovo Cimento C*, Vol 32, Issue 2, pp 249-252, April 2009, DOI:10.1393/ncc/i2009-10414-8