

# Curriculum Vitae

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## Personal Information

Name	Andrea Calabria
Office Address	Via Olgettina, 58, DIBIT2 5 A3, 20132 Milano, Italy
Office Telephone	+39 02 2643 9301
E-Mail	calabria.andrea NO-SPAM-AT hsr.it (institutional)

## 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>
Summer 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 Degree	Computer Systems Engineering, Politecnico di Milano, Italy; 2003 - 2006 Computer Systems Engineering, Politecnico di Milano, Italy; 2000 - 2003

## Work Experience

Postdoc Bioinformatics	<i>HSR-TIGET</i> , Italy; November 2011 – presently. Main activities: NGS pipeline design for gene therapy clinical trials; biostatistics data analysis and data mining of integration loci and time series; research grant writing.
Research Assistant (Bioinformatics Unit Supervisor)	<i>Università degli Studi di Milano</i> , Italy; November 2009 – October 2011. Main activities: Data-warehousing and data-mining tools development; biostatistics and epidemiological studies with machine learning methods; information systems design and implementation; system administration support; research grant writing.
Research Fellow	<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 in European and National projects. Studying of genotyping techniques: statistical analysis and technological approaches (databases, information systems, data-warehousing, data-mining).

## 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>Biostatistics and Stochastic simulations</i></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: "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.
- 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: "Human Linkage Analysis", presented to students of the Doctorate in Molecular Medicine, *Università degli Studi di Milano*, Milano, Italy; April, 13, 2010.

## Awards

- Travel Grant from *The American Society of Gene & Cell Therapy* (555 East Wells Street, Suite 1100 Milwaukee, WI 53202) for the conference ASGCT 16<sup>th</sup> Annual Meeting, May 15-18, 2013, Salt Lake City, UT.

## Scientific Publications

1. Biffi A, Montini E, Lorioli L, Cesani M, Fumagalli F, Plati T, Baldoli C, Martino S, **Calabria A**, Canale S, Benedicenti F, Vallanti G, Biasco L, Leo S, Kabbara N, Zanetti G, Rizzo WB, Mehta NA, Cicalese MP, Casiraghi M, Boelens JJ, Del Carro U, Dow DJ, Schmidt M, Assanelli A, Neduva V, Di Serio C, Stupka E, Gardner J, von Kalle C, Bordignon C, Ciceri F, Rovelli A, Roncarolo MG, Aiuti A, Sessa M, Naldini L., "Lentiviral Hematopoietic Stem Cell Gene Therapy Benefits Metachromatic Leukodystrophy.", *Science*. 2013 Jul 11 (PMID: 23845948)
2. Aiuti A, Biasco L, Scaramuzza S, Ferrua F, Cicalese MP, Baricordi C, Dionisio F, **Calabria A**, Giannelli S, Castiello MC, Bosticardo M, Evangelio C, Assanelli A, Casiraghi M, Di Nunzio S, Callegaro L, Benati C, Rizzardi P, Pellin D, Di Serio C, Schmidt M, Von Kalle C, Gardner J, Mehta N, Neduva V, Dow DJ, Galy A, Miniero R, Finocchi A, Metin A, Banerjee P, Orange J, Galimberti S, Valsecchi MG, Biffi A, Montini E, Villa A, Ciceri F, Roncarolo MG, Naldini L., "Lentiviral Hematopoietic Stem Cell Gene Therapy in Patients with Wiskott-Aldrich Syndrome", *Science*. 2013 Jul 11 (PMID: 23845947)
3. Merelli I, **Calabria A**, Cozzi P, Viti F, Mosca E, Milanese L., "SNPranker 2.0: a gene-centric data mining tool for diseases associated SNP prioritization in GWAS", *BMC Bioinformatics*. 2013;14 Suppl 1:S9. doi: 10.1186/1471-2105-14-S1-S9
4. Salvi E, Kutalik Z, Glorioso N, Benaglio P, Frau F, Kuznetsova T, Arima H, Hoggart C, Tichet J, Nikitin YP, Conti C, Seidlerova J, Tikhonoff V, Stolarz-Skrzypek K, Johnson T, Devos N, Zagato L, Guarrera S, Zaninello R, **Calabria A**, Stancanelli B, et al, "Genomewide Association Study Using a High-Density Single Nucleotide Polymorphism Array and Case-Control Design Identifies a Novel Essential Hypertension Susceptibility Locus in the Promoter Region of Endothelial NO Synthase"; *Hypertension*, 2012 Feb;59(2):248-55.
5. 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.
6. **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
7. 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.

8. **A. Calabria**, E. Mosca, F. Viti, I. Merelli and L. Milanesi; "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
9. L. Volpi, G. Roversi, E.A. Colombo, N. Leijsten, D. Concolino, **A. Calabria**, M.A. Mencarelli, M. Fimiani, F. Macciardi, 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
10. F. Viti, E. Mosca, I. Merelli, **A. Calabria**, R. Alferi, and L. Milanesi; "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.
11. L. Milanesi, **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

## Public resources

- Scopus: Author ID 35097150900
- ORCID: <http://orcid.org/0000-0003-3515-3384>
- Google Scholar: <http://scholar.google.it/citations?user=fQ5zJJYAAAAJ&hl=en>

Milano, August, 22, 2013

Ai sensi del D.Lgs 196 del 30/06/2003, autorizzo il trattamento dei miei dati personali per le vostre esigenze di selezione e ricerca del personale e dichiaro di essere informato dei diritti di cui all'articolo 7 della predetta legge"