



## Personal information

Name **Ermanno Rizzi**  
Address Via F.Crispi 10, Vimercate (MB)- Italy  
Telephone Mobile phone: +39 349 5254855  
Work phone: +39 02 26 42 27 12  
E-mail [erizzi@telethon.it](mailto:erizzi@telethon.it), [ermanno.rizzi@itb.cnr.it](mailto:ermanno.rizzi@itb.cnr.it), [ermanno.rizzi@gmail.com](mailto:ermanno.rizzi@gmail.com)  
Nationality Italian  
Date of birth 16th October 1976

## Work experience

Dates (from – to) May 2015 – now  
Name and address of employer Telethon foundation, p.zza Cavour 1, 20121, Milan  
Type of business or sector Fundraising for biomedical research on rare genetic diseases  
Occupation or position held Research program manager  
Main activities and responsibilities Managing and coordination of research programs

Dates (from – to) December 2001 – May 2015  
Name and address of employer Institute for Biomedical Technologies, National Research Council  
ITB – CNR, via F.lli Cervi 93, 20090 Segrate (MI).  
Type of business or sector Next Generation Sequencing (NGS), NGS data analysis and custom array platform development.  
Occupation or position held Researcher  
Main activities and responsibilities NGS for genotyping, re-sequencing, de-novo sequencing, transcriptome analysis and ancient DNA sequencing. Evolutionary genomics studies by NGS.  
Microarray development for genotyping and gene expression studies.

## Stage experience

Dates (from – to) March 2005 – October 2005  
Name and address of employer 454 LifeSciences at Branford (CT - USA)  
Type of business or sector Ultramassive pyrosequencing by 454 GS20 platform  
Occupation or position held Researcher  
Main activities and responsibilities Sequencing projects

## Education

Dates (from – to) 18-20 April 2013  
Name of organisation providing education Scuola di Comunicazione della Ricerca Scientifica (CRS), at Turin Campus Cityheart Lingotto. Teacher: Dr.Maria Flora Mangano  
Principal subjects Communication of Scientific research

Dates (from – to) 2002 –2006  
Name of organisation providing education “Università degli Studi di Milano”, Milan - Italy

Principal subjects	Molecular Medicine
Title of qualification awarded	<b>PhD</b> Thesis title: Development of Microarray Platform for Detecting Toxic Cyanobacteria Supervisor: D.ssa Cristina Battaglia, Dr Gianluca DeBellis.
Dates (from – to)	1995 – November 2001
Name of organisation providing education	“Università Milano Bicocca”, Milan - Italy
Principal subjects	<b>Industrial Biotechnologies</b>
Title of qualification awarded	<b>Master’s Degree (Laurea)</b> Thesis title: Gene expression study of human cancer cell lines and their sensitivity to antitumoral drugs. Supervisor: D.ssa Gabriella Pezzoni, D.ssa Paola Ricciardi Castagnoli Thesis work site: Novuspharma s.p.a., (now Cell Therapeutics), Monza - Italy
Level in national classification	99/110
Dates (from – to)	1990 – 1995
Name of organisation providing education	Secondary School: Technical Industrial Public Institute (ITIS) “E. Molinari”
Principal subjects	Industrial Chemistry
Title of qualification awarded	“Diploma di Perito Chimico Industriale”
Level in national classification	50/60
<b>Personal skills and competences</b>	
<b>Mother tongue</b>	Italian
<b>Other languages</b>	
Reading skills	English very good
Writing skills	very good
Verbal skills	very good
<b>Social skills and competences</b>	Good social and communication skills.
<b>Driving licences</b>	Car driving license since 1995 Motorbike driving license since 2006
<b>Laboratory skills and competences</b>	Experience in molecular biology methodologies and techniques, including DNA, RNA and protein isolation, analysis and Next Generation Sequencing (NGS). Microarray development for genotyping and gene expression study. Experience in sequencing project management. Experience in cellular biology and cell line culturing.
<b>Bioinformatic skills and competences</b>	Experienced user of Microsoft Office and OpenOffice suites and molecular biology software for primer and probe design (Primer3), for sequence alignment (LaserGene DNASTar, CLC Workbench, 454 softwares). Some experience in Unix/Linux command line for sequence analysis. Familiarity with public databases of molecular biology tools and biomedical literature.
<b>Roles and responsibility</b>	Research Unit responsible of FIRB 2008 – Futuro in ricerca project: The parallel genetic history of humans and domesticated animals (cod n°: RBF08U07M).

Research Unit responsible of FIRB 2012 – Futuro in ricerca project: The genetic history of Italy as traced by genomic analysis of humans and domesticated animals (cod n°: RBF126B8I).

Research Unit responsible of PNRA project (11/03/2013, n°417): Structure, function, and development of Biological Soil Crusts (BSC) in polar regions: a contribution to understand the ecological role of BSC at the planetary scale (WHYCRUST).

### **Editorial Boards or reviewer of Scientific journal**

Editorial board of the scientific journals:

- *Diseases* (ISSN 2079-9721),
- *Conference Papers in Science* (ISSN 2356-6094)
- *Dataset Papers in Science* (ISSN 2314-8497).

Reviewer for the scientific journal *PlosOne* (ISSN 1932-6203)

Lead Guest Editor for *International Journal of Genomics* (ISSN 2314-436X)

### **Conferences, seminars and lessons, as invited speaker**

24-27 September 2014. Pisa. XIII Congress of the Italian Federation of Life Sciences (FISV). Presentation title: "Genomic Integration Sites (IS) analysis of virus-based vectors for gene therapy: the Integrome"

06, May 2014. University of Ferrara, Ferrara. Title of seminar: "Next Generation sequencing (NGS): procedure ed applicazioni".

25, September 2013. NGS Milano Meeting, Milan. Presentation title: "Ancient Population study by next generation sequencing".

06-07, August 2013. Francisc I. Rainer Institute of Anthropology – Romanian Academy, Bucharest. Title of seminar: "The application of NGS to ancient and forensic DNA samples".

25, October 2012. "Making Sense of Next Generation Sequencing" – Parco Tecnologico Padano, Lodi. Presentation title: "Ancient DNA: analysis by Next Generation Sequencing".

17, July 2012. NGS Milano Meeting, Milan. Presentation title: "Ancient DNA study by next generation sequencing".

23, April 2012. Sant'Orsola Hospital, Bologna. Lesson: "Arricchimento genico e Next Generation sequencing: strategie ed applicazioni".

04, February 2012. Workshop: "A day with ancient DNA", Florence. Presentation title: "Ancient DNA study by amplicon next generation sequencing".

03, May 2011. Dottorato in Medicina Molecolare Università degli Studi di Milano. Lesson: "High resolution profiling of retroviral integration sites in HPC by Ultradeep sequencing".

10, November 2010. Scuola di bioscienze e biotecnologie, Università di Camerino, Camerino (MC). Lesson title: "Next Generation Sequencing"

March 2008. Dottorato in Medicina Molecolare Università degli Studi di Milano. Lesson title: "Next Generation sequencing"

16, January 2007. Roche Diagnostic, Monza (MI). Title of seminar: "Sequenziamento del DNA. Applicazioni del GS20".

2-4 April 2007. Cortona Procarioni, Cortona (AR). Title of presentation: "High-throughput DNA sequencing using 454 platform: technology and applications".

January 2003. Corso di laurea in "Tecnico della prevenzione nell'ambiente e nei luoghi di lavoro", Facoltà di Medicina e Chirurgia dell'Università degli Studi di Milano. Lesson title: "Molecular biology methodologies for protein analysis".

#### as participant

18-22 October 2014, San Diego (CA-USA). American Society of Human Genetics (ASHG) 2014 Meeting. Exploring the Y-Chromosome Variation of Modern Panamanians. Achilli, V. Battaglia, V. Grugni, U. A. Perego, H. Lancioni, M. Tribaldos, A. Olivieri, I. Cardinali, E. Rizzi, A. Raveane, M. R. Capodiferro, S. R. Woodward, J. M. Pascale, R. Cooke, N. Myres, A. Torroni, J. Motta, O. Semino

10-13 September 2014. Corvara (South Tyrol, Italy). 20th International Cave Bear Symposium (ICBS 2014).

Retroviruses CSH – Meeting, Cold Spring Harbor, NY. "New Insights in the role of nuclear pore basket nucleoporins in chromatin remodelling and HIV integration". Lelek M, Souque P, Casartelli N, Rizzi E, Severgnini M, Pellin D, Zimmer C, Charneau P, Di Nunzio F.

Ancient DNA: applications in human evolutionary history, Chicheley Hall (UK), Royal Society, 20-21 November 2013.

Ancient DNA: the first three decades, London (UK), Royal Society, 18-19 November 2013.

Italian Genetic Association (AGI) meeting, Cortona (AR), 25-27 September 2013.

BITS 2013, 21-23 May 2013, Udine. "A bioinformatic approach for NGS paired ends to analyze and visualize Structural Variations in human breast cancer". A Consiglio, A Tulipano, E Rizzi, G De Caro, G Grillo, F Licciulli, P Pelucchi, V Tria, R Rolland, G De Bellis, I Zucchi, A Gisel, S Liuni.

British Society for Gene and Cell Therapy (BSGCT), London (UK), 17-19 April 2013. Self-inactivating and wild-type MLV vectors share the same integration profile in human CD34 + hematopoietic progenitor cells but not in human epidermal keratinocytes. Arianna Moiani, Alessia Cavazza, Annarita Miccio, Julia Suerth, Ermanno Rizzi, Marco Severgnini, Danilo Pellin, Gianluca De Bellis, Christopher Baum, Fulvio Mavilio.

22nd European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), London, 31 March-03 April, 2012. "ICESp009, a mega-carrying conjugative genetic element in *Streptococcus pyogenes*". M. Del Grosso, R. Camilli, Rizzi E, A. Pietrelli, G. Barbabella, G. De Bellis, A. Pantosti.

ESHE 2011, Lipsia, Germany, 23-24 September 2011. "Genomic Selection and Next-Generation Sequencing for genetic characterization of ancient human remains from Italy". Rizzi E, Lari M, Balsamo C, Ghirotto S, Corti G, Tassi F, Ronchitelli A, Fischetti A, De Bellis G, Barbujani G, Caramelli D.

Interscience Conference on Antimicrobial Agents and Chemotherapy (ICACC), Boston, 12-15 September 2010. "Whole genome sequence of a macrolide-resistant serotype 11A *Streptococcus pneumoniae* invasive isolate". Camilli R, Bonnal RJP, Iacono M, Del Grosso M, Rizzi E, Mulas L, Iannelli F, Marchetti M, Corti C, Superti F, De Bellis G,

Oggioni MR, Pantosti A.

SMBE 2010, Lyon, France. "High-Resolution Profiling of Retroviral Integration Sites in Human Multipotent Hematopoietic Progenitors by Ultradeep Sequencing". Rizzi E, Cattoglio C, Pellin D, Maruggi G, Corti G, Miselli F, Sartori D, Guffanti A, Di Serio C, Ambrosi A, De Bellis G, and Mavilio F.

ISSCR 2010, San Francisco, California (USA), 16-19 June, 2010. "Retroviral integration profiling to discover new regulatory networks in neural stem cells". Poletti V, Cattoglio C, Pellin D, Ambrosi A, Di Serio C, Rizzi E, De Bellis G and Mavilio F.

12° American Society of Gene Therapy (ASGT) Annual Meeting, San Diego (USA), 27-30 May, 2009. "Cell-specific transcriptional regulatory domains attract gamma-retroviral integration in the human genome". C. Cattoglio, B. Felice, D. Cittaro, D. Pellin, A. Ambrosi, Rizzi E., G. De Bellis, C. Bonini, G. Maruggi, F. Miselli, M. Schmidt, L. Luzi, A. Recchia, F. Mavilio.

3rd Roche EMEA Meeting, Lisbon, 2009. "Evaluation of human gene variants detection in amplicon pools by GS-FLX parallel Pyrosequencer". Rizzi E, Bonnal R, Bordoni R, Carrera P, Benedetti S, Cremonesi L, Stenirri S, Colombo A, Montrasio C, Bonalumi S, Albertini A, Bernardi LR, Ferrari M, De Bellis G.

3rd Roche EMEA Meeting, Lisbon, 2009. "A transcriptional sketch of a primary human breast cancer by 454 deep sequencing". Rizzi E, Guffanti A, Iacono M, Pelucchi P, Kim N, Soldà G, Croft LJ, Taft RJ, Askarian-Amiri M, Bonnal RJ, Callari M, Mignone F, Pesole G, Bertalot G, Bernardi LR, Albertini A, Lee C, Mattick JS, Zucchi I, De Bellis G.

European Human Genetics Conference 2009, Austria. "A transcriptional sketch of a primary human breast cancer by 454 deep sequencing". Rizzi E, Guffanti A, Iacono M, Pelucchi P, Kim N, Soldà G, Croft LJ, Taft RJ, Askarian-Amiri M, Bonnal RJ, Callari M, Mignone F, Pesole G, Bertalot G, Bernardi LR, Albertini A, Lee C, Mattick JS, Zucchi I, De Bellis G.

11° SIGU 2008, Genova, 23-25 Novembre, 2008. "Evaluation of human gene variants detection in amplicon pools by GS-FLX parallel Pyrosequencer". Rizzi E, Bonnal R, Bordoni R, Carrera P, Benedetti S, Cremonesi L, Stenirri S, Colombo A, Montrasio C, Bonalumi S, Albertini A, Bernardi LR, Ferrari M, De Bellis G.

11° SIGU 2008, Genova, 23-25 Novembre, 2008. "Identification of multiple mitochondrial DNA large deletions in Progressive External Ophthalmoplegia (PEO) patients with POLG1 gene mutations". E. Rizzi, R. Bonnal, R. DelBo', M. Iacono, M. Severgnini, F. Saladino, G. Comi, G. De Bellis.

3° SIBE 2008, Alghero (SS), 2-5 Ottobre, 2008. "Sequencing and analysis of a complete mitochondrial genome from a 11,300-year-old Bos primigenius from Italy: implications in cattle domestication process". M. Lari, G. Catalano, E. Rizzi, G. Corti, R. Bonnal, G. De Bellis, S. Mona, G. Bertorelle, D. Caramelli.

FISV 2008, 10th Annual Congress, Riva del Garda, 24-27 Settembre 2008. "Complete mitochondrial genome sequence from a mesolithic Bos primigenius: implications in cattle domestication process". M. Lari, G. Catalano, E. Rizzi, G. Corti, R. Bonnal, S. Mona, G. Bertorelle, D. Caramelli.

7th European Workshop on Molecular Biology of Cyanobacteria, Czech Republic, 31 August-04 September, 2008. "Environmental diagnostics of hepatotoxic cyanobacteria". A. Rantala-Ylino, D. P. Fewer, H. Hirvonen, E. Rizzi, K. Koskeniemi, K. Sivonen.

7th International Conference on Toxic Cyanobacteria, Rio das Pedras, Brazil, 5-10 August, 2007. "Detection and Identification of Hepatotoxin-producing Cyanobacteria with Molecular Methods". Rantala, A., Fewer, D., Hirvonen, H., Rizzi, E., Koskeniemi, K., Köykkä, M., Sivonen, K.

The 2nd ESF Conference Functional Genomics and Disease, 6 - 10 September 2005, Oslo, Norway. Evaluation of TransPlex Whole Transcriptome Amplification method for microarray gene expression profiling. C Peano, M Severgnini, I Cifola, E Rizzi, G De Bellis, C Battaglia.

10°ISME Symposium 22-27 August, 2004. "Development of Quantitative Real Time-PCR and microarray to detect potential microcystin producers". A. Rantala, P. Rajaniemi, L. Lepisto, P. Kuuppo, J. Mankiewicz, B. Castiglioni, E. Rizzi, G. De Bellis, K. Sivonen.

10°ISME Symposium, 22-27 August, 2004. "Development of microarray platform for detecting toxic and non-toxic cyanobacteria". E. Rizzi, B. Castiglioni, A. Frosini, A. Rantala, P. Rajaniemi, K. Sivonen, G. De Bellis.

Array User Meeting, DKFZ Heidelberg, 16-17 May, 2002. "Chemical platform for oligonucleotide and PNA microarrays preparation". R. Bordoni, C. Consolandi, B. Castiglioni, A. Frosini, A. Mezzelani, E. Rizzi, C. Battaglia, L. Rossi Bernardi and G. De Bellis.

## Publications

h-index=15

**2015** Chromatin organization at the nuclear pore favours HIV replication. Mickaël Lelek, Nicoletta Casartelli, Danilo Pellin, Ermanno Rizzi, Philippe Souque, Marco Severgnini, Clelia Di Serio, Thomas Fricke, Felipe Diaz Griffero, Christophe Zimmer, Pierre Charneau, Francesca Di Nunzio. **Nature Commun.** 2015 Mar 6;6:6483. doi: 10.1038/ncomms7483..

Genealogical relationships between early medieval and modern inhabitants of Piedmont. Stefania Vai, Silvia Ghirotto, Elena Pilli, Francesca Tassi, Martina Lari, Ermanno Rizzi, Laura Matas-Lalueza, Oscar Ramirez, Carles Lalueza-Fox, Alessandro Achilli, Anna Olivieri, Antonio Torroni, Hovirag Lancioni, Caterina Giostra, Elena Bedini, Luisella Pejrani Baricco, Giuseppe Matullo, Cornelia Di Gaetano, Alberto Piazza, Krishna Veeramah, Patrick Geary, David Caramelli, and Guido Barbujani. **PLoS One.** 2015 Jan 30;10(1):e0116801. doi: 10.1371/journal.pone.0116801.

The Neanderthal in the karst: first dating, morphometric and paleogenetic data on the fossil skeleton from Altamura (Italy). Martina Lari, Fabio Di Vincenzo, Andrea Borsato, Silvia Ghirotto, Mario Micheli, Carlotta Balsamo, Carmine Collina, Gianluca DeBellis, Giacomo Giacobini, Elena Gigli, John C. Hellstrom, Antonella Lannino, Alessandra Modi, Alessandro Pietrelli, Elena Pilli, Antonio Profico, Oscar Ramirez, Ermanno Rizzi, Stefania Vai, Donata Venturo, Marcello Piperno, Carles Lalueza-Fox, Guido Barbujani, David Caramelli and Giorgio Manzi. **J Hum Evol.** 2015 May;82:88-94. doi: 10.1016/j.jhevol.2015.02.007. Epub 2015 Mar 21.

The germline of the malaria mosquito produces abundant miRNAs, endo-siRNAs, piRNAs and 29-nt small RNAs. Leandro Castellano, Ermanno Rizzi, Jonathan Krell, Manlio Di Cristina, Roberto Galizi, Ayako Mori, Janis Tam, Gianluca De Bellis, Justin Stebbing, Andrea Crisanti and Tony Nolan. **BMC Genomics.** 2015 Feb 19;16:100. doi: 10.1186/s12864-015-1257-2..

**2014** Cristina Olivieri, Isolina Marota, Ermanno Rizzi, Luca Ermini, Letizia Fusco, Alessandro Pietrelli, Gianluca De Bellis, Franco Rollo, Stefania Luciani. Positioning the red deer (*Cervus elaphus*) hunted by the Tyrolean Iceman into a mitochondrial DNA phylogeny. **Plos ONE** 2014 Jul 2;9(7):e100136. doi: 10.1371/journal.pone.0100136. eCollection 2014.

Arianna Moiani, Julia Debora Suerth, Francesco Gandolfi, Ermanno Rizzi, Marco Severgnini, Gianluca De Bellis, Axel Schambach, and Fulvio Mavilio. Genome-wide analysis of alpha-retroviral, gammaretroviral and lentiviral vector integration in human

hematopoietic stem/progenitor cells. *Genes* (Basel). 2014 May 16;5(2):415-29. doi: 10.3390/genes5020415.

Marco Fondi, Valerio Orlandini, Giorgio Corti, Marco Severgnini, Marco Galardini, Alessandro Pietrelli, Fabio Fuligni, Michele Iacono, Ermanno Rizzi, Gianluca De Bellis and Renato Fani. Enly: improving draft genomes through reads recycling. *Journal of Genomics* 2014; 2:89-93. doi: 10.7150/jgen.7298

**2013** Annarita Miccio, Clelia Peano, Oriana Romano, Guidantonio Tagliazucchi, Luca Petiti, Ingrid Cifola, Ermanno Rizzi, Marco Severgnini, Silvio Bicciato, Gianluca De Bellis and Fulvio Mavilio. Genome-wide analysis of promoter and enhancer usage in hematopoietic stem cell differentiation. *Epigenetics & Chromatin* 2013, 6(Suppl 1):P53 doi:10.1186/1756-8935-6-S1-P53

Ermanno Rizzi and Marco Fondi, Giovanni Emiliani, Valerio Orlandini, Luisa Berna, Maria Cristiana Papaleo, Elena Perrin, Isabel Maida, Giorgio Corti, Gianluca De Bellis, Franco Baldi, Lenie Dijkshoorn, Mario Vaneechoutte, Renato Fani. The genome sequence of the hydrocarbon degrading *Acinetobacter venetianus* VE-C3. *Res Microbiol.* 2013 Jun;164(5):439-49. doi: 10.1016/j.resmic.2013.03.003. Epub 2013 Mar 23

Silvia Ghirotto, Francesca Tassi, Erica Fumagalli, Vincenza Colonna, Anna Sandionigi, Martina Lari, Stefania Vai, Emmanuele Petiti, Giorgio Corti, Ermanno Rizzi, Gianluca De Bellis, David Caramelli and Guido Barbujani. Origins and evolution of the Etruscans' mtDNA. *PLoS One.* 2013;8(2):e55519. doi: 10.1371/journal.pone.0055519. Epub 2013 Feb 6.

Francesca Di Nunzio, Thomas Fricke, Annarita Miccio, Patricio Perez, Philippe Souque, Ermanno Rizzi, Fulvio Mavilio, Pierre Charneau, and Felipe Diaz-Griffero. Nup153 and Nup98 bind the HIV-1 core and contribute to the early steps of HIV-1 replication. *Virology.* 2013 May 25;440(1):8-18. doi: 10.1016/j.virol.2013.02.008. Epub 2013 Mar 21.

Arianna Moiani, Annarita Miccio, Ermanno Rizzi, Marco Severgnini, Danilo Pellin, Julia Debora Suerth, Christopher Baum, Gianluca De Bellis and Fulvio Mavilio. Deletion of the LTR enhancer/promoter has no impact on the integration profile of MLV vectors in human hematopoietic progenitors. *PLoS One.* 2013;8(1):e55721. doi: 10.1371/journal.pone.0055721. Epub 2013 Jan 31.

**2012** Wang X, Mitra N, Secundino I, Banda K, Cruz P, Padler-Karavani V, Verhagen A, Reid C, Lari M, Rizzi E, Balsamo C, Corti G, De Bellis G, Longo L, NISC Comparative Sequencing Program, Beggs W, Caramelli D, Tishkoff SA, Hayakawa T, Green ED, Mullikin JC, Nizet V, Bui J, Varki A. Specific inactivation of two immunomodulatory SIGLEC genes during human evolution. *Proc Natl Acad Sci* 2012, Jun 19;109(25):9935-40

Rizzi E, Lari M, Gigli E, De Bellis G, Caramelli D. Ancient DNA studies: new perspectives on old samples. *Genetics Selection Evolution* 2012, Jul 6;44:21

Olivieri C, Ermini L, Rizzi E, Corti G, Luciani S, Marota I, De Bellis G, Rollo F. Phylogenetic position of a copper age sheep (*Ovis aries*) mitochondrial DNA. *PLoS One* 2012, 7(3):e33792

**2011** Camilli R, Bonnal Rj, Del Grosso M, Iacono M, Corti G, Rizzi E, Marchetti M, Mulas L, Iannelli F, Superti F, Oggioni Mr, De Bellis G, Pantosti A. Complete genome sequence of a serotype 11A, ST62 *Streptococcus pneumoniae* invasive isolate. *BMC Microbiology* 2011, Feb 1;11:25

Magnusson K, Mendes AM, Windbichler N, Papathanos PA, Nolan T, Dottorini T, Rizzi E, Christophides GK, Crisanti A. Transcription regulation of sex-biased genes during ontogeny in the malaria vector *Anopheles gambiae*. *PLoS One* 2011, 6(6):e21572

- Rantala-Ylinen A, Känä S, Wang H, Rouhiainen L, Wahlsten M, Rizzi E, Berg K, Gugger M, Sivonen K. Anatoxin-a synthetase gene cluster of the cyanobacterium *Anabaena* sp. strain 37 and molecular methods to detect potential producers. ***Applied and Environmental Microbiology*** 2011, Oct;77(20):7271-8
- Lari M, Rizzi E, Mona S, Corti G, Catalano G, Chen K, Vernesi C, Larson G, Boscato P, De Bellis G, Cooper A, Caramelli D, Bertorelle G. The Complete Mitochondrial Genome of an 11,450-year-old Aurochsen (*Bos primigenius*) from Central Italy. ***BMC Evolutionary Biology*** 2011, Jan 31;11:32
- 2010** Olivieri C, Ermini L, Rizzi E, Corti G, Bonnal R, Luciani S, Marota I, De Bellis G, Rollo F. Characterization of nucleotide misincorporation patterns in the iceman's mitochondrial DNA. ***PLoS One*** 2010, Jan 8;5(1):e8629
- Lari M, Rizzi E, Milani L, Corti G, Balsamo C, Vai S, Catalano G, Pilli E, Longo L, Condemi S, Giunti P, Hänni C, De Bellis G, Orlando L, Barbujani G, Caramelli D. The microcephalin ancestral allele in a Neanderthal individual. ***PLoS One***. 2010, May 14;5(5):e10648
- Cattoglio C, Pellin D, Rizzi E, Maruggi G, Corti G, Miselli F, Sartori D, Guffanti A, Di Serio C, Ambrosi A, De Bellis G, Mavilio F. High-definition mapping of retroviral integration sites identifies active regulatory elements in human multipotent hematopoietic progenitors. ***Blood***. 2010, Dec 16;116(25):5507-17
- 2009** Cattoglio C, Felice B, Cittaro D, Pellin D, Ambrosi A, Rizzi E, De Bellis G, Bonini C, Maruggi G, Miselli F, Schmidt M, Luzi L, Recchia A, Mavilio F. Cell-specific transcriptional regulatory domains attract  $\gamma$ -retroviral integration in the human genome. ***Molecular Therapy*** 2009. Proceedings of the ASGT, 27th-30th May 2009, San Diego - USA.
- Miselli F, Cattoglio C, Pellin D, Ambrosi A, Rizzi E, Maruggi G, Recchia A, De Bellis G, Mavilio F. High-resolution profiling of MLV integration in human CD34 cells reveals cell-specific transcriptional regulatory element. ***Human Gene Therapy***. 2009; 20(11):1407-1408.
- Guffanti A, Iacono M, Pelucchi P, Kim N, Soldà G, Croft LJ, Taft RJ, Rizzi E, Askarian-Amiri M, Bonnal RJ, Callari M, Mignone F, Pesole G, Bertalot G, Bernardi LR, Albertini A, Lee C, Mattick JS, Zucchi I, De Bellis G. A transcriptional sketch of a primary human breast cancer by 454 deep sequencing. ***BMC Genomics***. 2009, Apr 20;10:163.
- 2008** Mannocci L, Zhang Y, Scheuermann J, Leimbacher M, De Bellis G, Rizzi E, Dumelin C, Melkko S, Neri D. High-throughput sequencing allows the identification of binding molecules isolated from DNA-encoded chemical libraries. ***Proc Natl Acad Sci***. 2008, Nov 10.
- Ermini L, Olivieri C, Rizzi E, Corti G, Bonnal R, Soares P, Luciani S, Marota I, De Bellis G, Richards MB, Rollo F. Complete Mitochondrial Genome Sequence of the Tyrolean Iceman. ***Current Biol***. 2008, Nov 11;18(21):1687-1693.
- Rizzi E, Bonnal R, Bordoni R, Carrera P, Benedetti S, Cremonesi L, Stenirri S, Colombo A, Montrasio C, Bonalumi S, Albertini A, Bernardi LR, Ferrari M, De Bellis G. Evaluation of human gene variant detection in amplicon pools by the GS-FLX parallel Pyrosequencer. ***BMC Genomics***. 2008, Oct 8;9:464.
- Soldà G, Suyama M, Pelucchi P, Boi S, Guffanti A, Rizzi E, Bork P, Tenchini ML, Ciccarelli FD. Non-random retention of protein-coding overlapping genes in Metazoa. ***BMC Genomics***. 2008, Apr 16;9:174.
- Rantala A, Rizzi E, Castiglioni B, De Bellis G, Sivonen K. Identification of hepatotoxin-producing cyanobacteria by DNA-chip. ***Environ Microbiol***. 2008, Mar;10(3):653-64.
- 2007** Peano C, Bicciato S, Corti G, Ferrari F, Rizzi E, Bonnal RJ, Bordoni R, Albertini A, Bernardi

LR, Donadio S, De Bellis G. Complete gene expression profiling of *Saccharopolyspora erythraea* using GeneChip DNA microarrays. *Microb Cell Fact*. 2007, Nov 26;6:37.

Trombetti GA, Bonnal RJ, Rizzi E, De Bellis G, Milanese L. Data handling strategies for high throughput pyrosequencers. *BMC Bioinformatics*. 2007, Mar 8;8 Suppl 1:S22.

**2006** Severgnini M, Pattini L, Consolandi C, Rizzi E, Battaglia C, De Bellis G, Cerutti S. Application of the Taguchi method to the analysis of the deposition step in microarray production. *IEEE Trans Nanobioscience*. 2006, Sep;5(3):164-72.

**2004** Castiglioni B, Rizzi E, Frosini A, Sivonen K, Rajaniemi P, Rantala A, Mugnai MA, Ventura S, Wilmotte A, Boutte C, Grubisic S, Balthasart P, Consolandi C, Bordoni R, Mezzelani A, Battaglia C, De Bellis G. Development of a universal microarray based on the ligation detection reaction and 16S rRNA gene polymorphism to target diversity of cyanobacteria. *Appl Environ Microbiol*. 2004, Dec;70(12):7161-72.

Consolandi C, Frosini A, Pera C, Ferrara GB, Bordoni R, Castiglioni B, Rizzi E, Mezzelani A, Bernardi LR, De Bellis G, Battaglia C. Polymorphism analysis within the HLA-A locus by universal oligonucleotide array. *Hum Mutat*. 2004, Nov;24(5):428-34.

Bordoni R, Mezzelani A, Consolandi C, Frosini A, Rizzi E, Castiglioni B, Salati C, Marmioli N, Marchelli R, Rossi Bernardi L, Battaglia C, De Bellis G. Detection and quantitation of genetically modified maize (Bt-176 transgenic maize) by applying ligation detection reaction and universal array technology. *J Agric Food Chem*. 2004, Mar 10;52(5):1049-54.

**2003** Bordoni R, Castiglioni B, Mezzelani A, Rizzi E, Frosini A, Consolandi C, Rossi Bernardi L, Battaglia C, De Bellis G. Apolipoprotein E and transferrin genotyping by ligation detection reaction and universal array. *Clin Chem*. 2003, Sep;49(9):1537-40.

#### Chapters in books

**2015** Chapter 3: "The Pyrosequencing protocol for bacterial genomes", Rizzi E, in book "Bacterial Pangenomics", Humana press, Springer. *Methods Mol Biol*. 2015;1231:49-75. doi: 10.1007/978-1-4939-1720-4\_4.

**2011** Chapter: "Complete Sequencing of the Mitochondrial Genome of Ancient Human Mummies", Ermini L, Olivieri C, Rizzi E, Corti G, Bonnal R, Luciani S, Marota I, De Bellis G, Richards M and Rollo FU, in book "Yearbook of Mummy Studies", Volume 1 June 2011. ISBN 978-3-89937-137-6

#### Scientific dissemination

Ermanno Rizzi, Marco Fondi. Bioremediation of polluted water by *Acinetobacter venetianus*. Biodiversity Success Stories Magazine, March 2014, The BioGenRes, Italian Network of Genetics Resources.

Rizzi E, Ghirotto S. DNA antico e nuove tecnologie per studiare le origini degli Etruschi. Le Scienze Web News, <http://lsw.n.it/>, 3 May 2013.

Salvati da una mutazione genetica, Almanacco della Scienza, Quindicinale a cura dell'Ufficio Stampa del Consiglio Nazionale delle Ricerche, N°11, 20 Giu 2012.

2° numero della rivista "di re in Puglia", numero monografico dedicato agli studi sull'Uomo di Altamura. Analisi paleogenetica del Neanderthal di Altamura David Caramelli; Martina Lari; Ermanno Rizzi; Carlotta Balsamo; Elena Gigli; Giorgio Corti; Lucio Milani; Stefania Vai; Elena Pilli; Fabio di Vincenzo; Marcello Piperno; Giorgio

## Patents

Method for detecting Toxic and NonToxic Cyanobacteria, International Publication Number : WO 2004/104211 A3, 2 December 2004.

In riferimento al D.lgs 196/03 "Codice in materia di protezione dei dati personali", autorizzo l'utilizzo dei miei dati personali e professionali per esigenze di selezione e comunicazione.

**Ermanno Rizzi**

