



## Francesco Acquati

**ID:** CA21135SO **Nationality:** Italian **Date of birth:** 15 Sep 1963

**Place of birth:** Rome, Italy **Gender:** Male **Phone number:** (+39) 3355848940

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### ABOUT ME

My current position is Associate Professor of Genetics (SSD BIOS-14/A) at the Department of Biotechnology and Life Sciences of the University of Insubria. I graduated cum laude in Biological Sciences from the University of Milan in 1988. From December 1993 to May 1996, he served as a Senior Researcher at the Department of Molecular Biology and Pharmacology of Boehringer Mannheim GmbH, Mannheim, Germany, as a recipient of a merit-based scholarship awarded by the Adriano Buzzati-Traverso Foundation.

In June 1996 I was hired on a fixed-term basis as a non-medical healthcare manager - research biologist at the IRCCS San Raffaele Hospital in Milan - Human Genetics laboratory, remaining in this position until June 1999. From October 1999 to December 2003 I served as a university researcher (SSD E11A-Genetics) at the Department of Structural and Functional Biology, Faculty of Mathematical, Physical and Natural Sciences, University of Insubria. Since December 2004 I work as associate professor of Genetics (SSD BIOS-14/A) at the Department of Biotechnology and Life Sciences of the University of Insubria.

Throughout my career, I have investigated the genetic basis of complex human diseases, with particular focus on atherosclerosis, congenital heart disease, and cancer. In the latter field, I have been working for 20 years on the molecular and functional characterization of the tumor suppressor gene *RNASET2*. Most recently, I started investigating the role of this gene in a rare inherited childhood leukoencephalopathy, Aicardi-Goutières Syndrome. Currently, I have authored 83 publications in international peer-reviewed journals, with an H-index of 23 and 1,483 citations. My ORCID Id is 0000-0002-9537-400X and Scopus ID is 6603867927.

### WORK EXPERIENCE

#### **University of Milano – Milano, Italy**

City: Milano | Country: Italy

#### **Research Fellow**

[ 8 Jan 1990 – 31 Dec 1993 ]

Holder of a renewable annual fellowship funded by ABIOTEN (Association of Oncological and Genetic Biotechnologies) at the Human Genetics Laboratory (head: Prof. Sergio Ottolenghi) of the Department of Genetics and Biology of Microorganisms at the University of Milan.

Research topic: Isolation and structural and functional characterization of the human apolipoprotein(a) gene cluster, a major cardiovascular risk factor in humans. During this period, I studied the genetic determinants of atherosclerotic disease in humans, with particular reference to Lipoprotein(a), a major cardiovascular risk factor. In this field, I contributed to the identification, cloning, and subsequent characterization of the gene encoding Apolipoprotein(a) [Apo(a)], a key component of Lipoprotein(a). Subsequently, I actively participated in the molecular characterization of the aforementioned gene and of a gene family consisting of four members with an extremely high degree of homology [Apo(a), Plasminogen and the Apo(a)-like and Plasminogen-like genes], located in the q26 region of human chromosome 6. Since apo(a) is a major cardiovascular risk factor, I subsequently focused on the development of in vitro and in vivo models for studying apo(a) gene expression. In this context, I identified some regulatory elements of the gene through transfection experiments in human cell lines of recombinant plasmids containing the proximal region of the apo(a) promoter cloned upstream of the luciferase reporter gene.

## Senior Research Fellow

[ 7 Jan 1994 – 20 May 1996 ]

Senior Researcher at the Department of Molecular Biology and Pharmacology, Boehringer Mannheim GmbH, Mannheim, Germany, as a grant holder from the Adriano Buzzati-Traverso Foundation from January 7th 1994 until May 20th 1996.

Research topics: 1) Analysis of hypothetical cis-regulatory regions upstream of the human LPA gene, encoding apolipoprotein(a); 2) Preparation and screening of a genomic library in YAC vectors from a subject with elevated plasma apolipoprotein(a) levels and derivation of a transgenic mouse model.

As project main investigator, I performed the functional characterization of an allelic series corresponding to putative upstream regulatory regions of the human LPA gene, encoding apolipoprotein(a), using gene reporter assays. In parallel, I constructed a genomic DNA library in a YAC vector from DNA of a patient with elevated apo(a) levels and successfully isolated a recombinant YAC clone by PCR screening. This was subsequently microinjected into fertilized mouse oocytes, producing transgenic lines that revealed a pattern of apo(a) expression largely overlapping with that found in the original patient.

Subsequently, I carried out YAC "retrofitting" experiments via in vivo homologous recombination in *Saccharomyces cerevisiae* cells, in order to mediate a knock-in event on the original YAC clone capable of replacing the LPA gene with the luciferase reporter gene, thus obtaining a new recombinant YAC clone in order to proceed with the mapping of regulatory elements of the aforementioned gene by producing a further transgenic mouse model with the new recombinant construct obtained.

## Associate Researcher

[ 4 Jun 1996 – 3 Jun 1999 ]

Non-Medical Healthcare Manager - Fixed-Term Associate Researcher at the IRCCS San Raffaele Hospital in Milan – Human Genetics Laboratory.

Research topics: 1) Structural characterization of the human LPA gene, encoding apolipoprotein(a). 2) Identification and characterization of the cis-regulatory regions within the apolipoprotein(a)/PLG gene cluster. 3) Definition of the regulatory pattern of the human LPA gene in a transgenic mouse model. 4) Creation of a physical map of the 6q27 region of human chromosome 6.

Following the appointment as a researcher at the IRCCS San Raffaele Hospital, I continued my research on the gene expression regulation of the Apolipoprotein(a) gene, identifying several regions of DNase hypersensitivity located at the 5' end of the gene through transfection assays on human cell lines and contributing to the identification of two functional enhancers, one of which consists of the regulatory sequences of an inactive LINE repeat element. I also contributed to the structural characterization of the LPA gene, which consists of tandem repeats of a variable number of sequences encoding a "kringle" structural domain. In collaboration with Professor Helen Hobbs of the Departments of Internal Medicine and Molecular Genetics, UT Southwestern Medical Center, Dallas, USA, I also investigated the role of growth hormone in the regulation of the Apo(a) gene in the transgenic mouse model overexpressing previously produced human apolipoprotein(a). In this collaboration, I assessed plasma apolipoprotein(a) levels and detected the expression of the apo(a) and Igf-I genes in the aforementioned transgenic mouse model. In parallel, I took part in a new research project, contributing to the preparation of a physical map based on a contig of recombinant YAC clones in the 6q27 region, corresponding to the region defined by loss of heterozygosity (LOH) in human ovarian tumors in the range of genetic markers (D6S149 and D6S193).

## Established University Researcher

[ 1 Nov 1999 – 30 Dec 2004 ]

University Researcher (SSD) at the Department of Structural and Functional Biology, Faculty of Mathematical, Physical, and Natural Sciences, University of Insubria.

Following previous research aimed at defining the hereditary basis of cardiovascular diseases in humans, I initiated and coordinated a new functional genetics project in the context of a rare congenital heart disease. In this project, I played a leading role in the identification and subsequent molecular and functional characterization of a gene located near the 10q23 region, at the level of a chromosomal rearrangement found in a pediatric patient with Total Anomalous Pulmonary Venous Return (TAPVR), a rare congenital heart disease. I also participated in the characterization of the DRAP/BACE2 gene, located in the "Down Critical Region" of human chromosome 21 and encoding an aspartyl protease with a high level of sequence identity with the BACE1 gene, implicated in the processing of the APP protein, implicated in the pathogenesis of Alzheimer's disease.

Thanks to my previous experience in the isolation and characterization of human genes, I also actively participated in and subsequently coordinated a new project on the functional genetics of human solid tumors, focused on the structural and functional characterization of a human tumor suppressor gene.

The initial objective of this project was a positional cloning approach to identify one or more tumor suppressor genes located in the peritelomeric region of the long arm of human chromosome 6, at position 6q27. During the preliminary phase of the project, the team contributed to the construction of a physical map of a region (genetically defined within a 2cM range) frequently altered in numerous types of human tumors. The development of this physical map laid the foundation for the subsequent application of gene trapping protocols aimed at identifying candidate genes for the disease under study.

The availability of the transcriptional map of the 6q27 region described above subsequently allowed the cloning of a hypothetical tumor suppressor gene (RNASE6PL, later renamed RNASET2) potentially implicated in the control of tumorigenesis and metastasis. Using ovarian cancer as an experimental model, this contributed to the definition of RNASET2 as a class II tumor suppressor gene, whose involvement in the tumor process occurs primarily through transcriptional downregulation rather than through the occurrence of inactivating mutations in the coding region. Since 2001, much of my research has focused on broad functional genetics studies, conducted at the highest possible levels of investigation (molecular biological, biochemical, cellular biological, oncological, and immunological —using numerous in vitro and in vivo models), focusing on this tumor suppressor gene. To date, I am the author with the highest number of published papers focussed on the RNASET2 gene globally.

## Associate Professor of Genetics

[ 30 Dec 2004 - Current ]

Associate Professor (SSD BIO/18-Genetics) at the Department of Biotechnology and Life Sciences, University of Insubria. Following this appointment, I continued my research primarily on the two previously mentioned projects. In the first project, I conducted molecular studies to confirm the role of the ANKRD1 gene in the pathogenesis of TAPVR. Furthermore, I recently coordinated a project aimed at producing and analyzing a transgenic mouse model overexpressing the human ANKRD1 gene. This model revealed defects in the sinus venosus during embryonic development, fully consistent with the role of this gene in human disease.

Regarding the second project, I initially demonstrated the ability of the RNASET2 gene to suppress tumorigenesis in vivo in highly interesting experimental oncology models.

Of particular significance was the discovery of independent mechanisms of tumor suppression exerted by this gene, both in cell-autonomous and non-cell-autonomous ways. The former revealed a pleiotropic tumor suppressor role through RNASET2's control of numerous cancer-related parameters detectable in in vitro cellular models.

Regarding the non-cell-autonomous tumor suppressor role, using in vivo experimental models (xenografts in immunocompromised mice and syngeneic models), I demonstrated the prominent role of RNASET2 as an in vivo tumor suppressor through interaction with components of the tumor microenvironment.

In subsequent studies, I demonstrated that overexpression of RNASET2 in various tumor cells leads to the secretion of the RNASET2 protein into the tumor microenvironment, where it acts as an "alarmin" to attract a cellular component of the innate immune system with strong antitumor activity to the tumor site. Subsequent in vitro studies confirmed the gene's ability to influence the polarization pattern of human macrophage cells, causing them to shift from the M2 state (with pro-tumor activity) to the M1 state (with anti-tumor activity).

Overall, the highly pleiotropic antitumor function of RNASET2 makes it a highly attractive candidate for the development of multifunctional therapeutic protocols on multiple fronts.

I have also recently launched a research project aimed at defining the role of RNASET2 in the pathogenesis of an autosomal recessive Mendelian neurodegenerative disease (Aicardi-Gouières Syndrome or AGS) through the identification and functional characterization of a panel of mutations in the RNASET2 coding region found in some AGS patients. Finally, based on the results of multiple genome-wide association studies published in recent years, which report the presence of numerous SNPs in the 5' region of RNASET2 associated with an increased risk of developing several autoimmune diseases, I have recently launched a study to reconstruct the different haplotypes in the aforementioned region, in order to identify any regulatory variants of RNASET2 causally implicated in the risk for these autoimmune diseases.

Significantly, preliminary studies conducted in his laboratory have recently found a significant increase in plasma levels of the RNASET2 protein in patients with Grave's disease.

During the period indicated, I was a tenured professor for 14 courses in the BIO18/Genetics area of study for the bachelor's and master's degree programs at the Department of Biotechnology and Life Sciences. Scientific director of the Human Genetics Laboratory at the Department of Biotechnology and Life Sciences at the University of Insubria.

## EDUCATION AND TRAINING

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### MSC CUM LAUDE IN BIOLOGICAL SCIENCES

*University of Milano* [ 1 Nov 1983 – 8 Feb 1988 ]

City: Milano | Country: Italy | Website: <https://www.unimi.it/it> | Field(s) of study: Natural sciences, mathematics and statistics: • Biology

### POST-LAUREAM INTERSHIP FELLOW

*University of Milano* [ 2 May 1988 – 30 Apr 1989 ]

City: Milano | Country: Italy | Website: <https://www.unimi.it/it> | Field(s) of study: Natural sciences, mathematics and statistics: • Biology

### STATE EXAM FOR BIOLOGISTS (PROFESSIONAL LICENCE)

*University of Milano* [ 15 May 1989 – 15 May 1989 ]

City: Milano | Country: Italy | Website: <https://www.unimi.it/it> | Field(s) of study: Natural sciences, mathematics and statistics: • Biology

### JUNIOR RESEARCH FELLOW

*University of Milano* [ 9 Jan 1990 – 26 Nov 1993 ]

City: Milano | Country: Italy | Website: <https://www.unimi.it/it> | Field(s) of study: Natural sciences, mathematics and statistics: • Biological and related sciences not further defined

### SENIOR RESEARCH FELLOW

*Boehringer Mannheim GmbH* [ 1 Dec 1993 – 24 May 1996 ]

City: Mannheim | Country: Germany | Field(s) of study: Natural sciences, mathematics and statistics: • Biological and related sciences not further defined

## CONFERENCES AND SEMINARS

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[ 11 Sep 1995 – 14 Sep 1995 ] Tutzing - Germany

**European Lipoprotein Club** Oral Presentation: "Expression of a human apo(a) allele associated with a high plasma level of apo(a) in mice using yeast artificial chromosomes"

[ 9 Sep 1996 – 12 Oct 1996 ] Spoleto - Italy

**XI Congresso Nazionale FISME** Oral Presentation: "Espressione in topi transgenici di un allele dell'apolipoproteina(a) umana clonato in un vettore YAC"

[ 21 Sep 2001 – 25 Sep 2001 ] Riva del Garda - Italy

**FISV 2001** Oral Presentation: "Caratterizzazione strutturale e funzionale di RNASE6PL, un putativo gene oncosoppressore localizzato sul cromosoma 6 umano"

[ 15 Oct 2009 – 17 Oct 2009 ] Loutraki - Greece

**14th World Congress on Advances in Oncology** Oral Presentation: "RNASET2, a human tumor antagonizing gene suppressing tumor growth in vivo but not in vitro".

[ 7 Oct 2010 – 9 Oct 2010 ] Loutraki - Greece

**15th World Congress on Advances in Oncology** Oral Presentation: "Human RNASET mediates tumor suppression by means of in vivo recruitment of stromal cells".

[ 6 Oct 2011 – 8 Oct 2011 ] Rhodes - Greece

**16th World Congress on Advances in Oncology** Oral Presentation: "Tumor antagonizing genes and ovarian cancer: the role of human RNASET2 gene".

[ 9 May 2019 – 9 May 2019 ] Rozzano - Italy

**Seminars on Invitation - Humanitas University** Oral Presentation: "Human RNASET2: a multifaceted tumor suppressor gene".

[ 3 Jul 2025 – 4 Jul 2025 ] Barcelona - Spain

**1st International Meeting on RNA & RNases** Oral Presentation: "Human RNASET2 as a remarkable pleiotropic protein involved in both tumor suppression and the pathogenesis of an inherited severe leukodystrophy".

## LANGUAGE SKILLS

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**Mother tongue(s):** Italian

**Other language(s):**

### English

LISTENING C2 READING C2 WRITING C2

SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2

### French

LISTENING B1 READING B1 WRITING B1

SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1

### German

LISTENING A1 READING A1 WRITING A1

SPOKEN PRODUCTION A1 SPOKEN INTERACTION A1

*Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user*

## DRIVING LICENCE

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**Driving Licence:** B

## NETWORKS AND MEMBERSHIPS

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[ 30 Sep 2011 – Current ] Lausanne

**Frontiers in Genetics - noncoding RNA section** Associate Editor

[ 30 Sep 2011 – Current ] Lausanne

**Frontiers in Viral Immunology** Guest Associate Editor

[ 29 Sep 2011 – Current ] Lausanne

**Frontiers in Microbial Immunology** Review Editor

## PUBLICATIONS

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[2025]

**The human RNASET2 alarmin-like molecule differentially affects prostate cancer cells behavior in both cell autonomous and non-cell autonomous manners.**

**Authors:** Roncoroni R, Baci D, Cucchiara M, de Vito A, Gallazzi M, Palano MT, Olmeo F, Rubuano C, Giannatiempo A, Monti L, Bombelli R, Mercatelli D, Finzi G, Franzi F, La Rosa S, Noonan DM, Bassani B, Mortara L, Bruno A, Acquati F.

| **Journal Name:** J Transl Med. | **Volume, Issue and Pages:** 19;23(1):560

doi: 10.1186/s12967-025-06540-0.

[2025]

**A Distinctive Type of Mosaic Variegated Aneuploidy: Case Report and Review of the Literature**

**Authors:** Frattini A, Micheloni G, Musio A, Antunes MB, Barbot J, Costa E, Seabra P, Righi R, Orsini F, Montalbano G, Acquati F, Porta G, Pasquali F, Valli R. | **Journal Name:** Am J Med Genet | **Volume, Issue and Pages:** 197(2):e63901

doi: 10.1002/ajmg.a.63901.

[2024]

**Regulation of neutrophil associated RNASET2 expression in rheumatoid arthritis**

**Authors:** Passari M, Scutera S, Schioppa T, Tiberio L, Piantoni S, Tamassia N, Bugatti M, Vermi W, Angeli F, Caproli A, Salvi V, Gismondi A, Stabile H, Franceschini F, Bosisio D, Acquati F, Vermeren S, Sozzani S, Andreoli L, Prete AD, Musso T, Del Prete A. | **Journal Name:** Sci Rep | **Volume, Issue and Pages:** 14(1):26820

doi: 10.1038/s41598-024-77694-y

[2024]

**Distinctive Type of Mosaic Variegated Aneuploidy: Case Report and Review of the Literature**

**Authors:** Frattini A, Micheloni G, Musio A, Antunes MB, Barbot J, Costa E, Seabra P, Righi R, Orsini F, Montalbano G, Acquati F, Porta G, Pasquali F, Valli R. | **Journal Name:** Am J Med Genet | **Volume, Issue and Pages:** 11:e63901

doi: 10.1002/ajmg.a.63901

[2024]

**Transmembrane Protein TMEM230, Regulator of Glial Cell Vascular Mimicry and Endothelial Cell Angiogenesis in High-Grade Heterogeneous Infiltrating Gliomas and Glioblastoma**

**Authors:** Cocola C, Abeni E, Martino V, Piscitelli E, Pelucchi P, Mosca E, Chiodi A, Mohamed T, Palizban M, Porta G, Palizban H, Nano G, Acquati F, Bruno A, Greve B, Gerovska D, Magnaghi V, Mazzaccaro D, Bertalot G, Kehler J, Balbino C, Arauzo-Bravo MJ, et al. | **Journal Name:** Int J Mol Sci. | **Volume, Issue and Pages:** 25(7):3967.

doi: 10.3390/ijms25073967.

[2024]

**Dynamic relationship among extracellular matrix and body wall cells in *Hirudo verbana* morphogenesis**

**Authors:** Pulze L, Baranzini N, Acquati F, Marcolli G, Grimaldi A. | **Journal Name:** Cell Tissue Res. | **Volume, Issue and Pages:** 396:213–229

doi: 10.1007/s00441-024-03874-x.

[2024]

**Proline Dehydrogenase (PRODH) Is Expressed in Lung Adenocarcinoma and Modulates Cell Survival and 3D Growth by Inducing Cellular Senescence**

**Authors:** Grossi S, Berno E, Chiofalo P, Chiaravalli AM, Cinquetti R, Bruno A, Palano MT, Gallazzi M, La Rosa S, Sessa F, Acquati F, Campomenosi P | **Journal Name:** Int J Mol Sci | **Volume, Issue and Pages:** 25(2):714.

doi: 10.3390/ijms25020714.

[2023]

**Occurrence of L1M Elements in Chromosomal Rearrangements Associated to Chronic Myeloid Leukemia (CML): Insights from Patient-Specific Breakpoints Characterization.**

**Authors:** L'Abbate A, Moretti V, Pungolino F, Micheloni G, Valli R, Frattini A, Barcella M, Acquati F, Reinbold RA, Costantino L, Ferrara F, Trojani A, Ventura M, Porta G and Cairoli R. | **Journal Name:** Genes | **Volume, Issue and Pages:** 14(7), 1351

doi.org/10.3390/genes14071351

[2023]

**Donor Cell Acute Myeloid Leukemia after Hematopoietic Stem Cell Transplantation for Chronic Granulomatous Disease: A Case Report and Literature Review.**

**Authors:** Micheloni G, Frattini A, Donini M, Dusi S, Leszl A, Di Meglio A, Pigazzi M, Musio A, Zecca M, Mina T, Rabusin M, Rocca P, Bernasconi P, Dambruoso I, Minelli A, Montalbano G, Acquati F, Porta G, Valli R, Pasquali F | **Journal Name:** Genes (Basel) | **Volume, Issue and Pages:** 14(11):2085.

doi: 10.3390/genes14112085.

[2023]

**The Potential Role of the T2 Ribonucleases in TME-Based Cancer Therapy**

**Authors:** Campomenosi P, Mortara L, Bassani B, Valli R, Porta G, Bruno A, Acquati F. | **Journal Name:** Biomedicines | **Volume, Issue and Pages:** 11(8):2160.

doi: 10.3390/biomedicines11082160

[2023]

### **A potential role of human RNASET2 overexpression in the pathogenesis of Graves' disease**

**Authors:** Gallo D, De Vito A, Roncoroni R, Bruno A, Piantanida E, Bartalena L, Tanda ML, Mortara L, Acquati F | **Journal Name:** Endocrine | **Volume, Issue and Pages:** 79(1):55-59.

doi:10.1007/s12020-022-03207-4

[2023]

### **OTX Genes in Adult Tissues**

**Authors:** Terrinoni A, Micheloni G, Moretti V, Caporali S, Bernardini S, Minieri M, Pieri M, Giaroni C, Acquati F, Costantino L, Ferrara F, Valli R, Porta G | **Journal Name:** Int J Mol Sci | **Volume, Issue and Pages:** 24(23):16962

doi:10.3390/ijms242316962.

[2022]

### **Spatio-Temporal Changes of Extracellular Matrix (ECM) Stiffness in the Development of the Leech *Hirudo verbana***

**Authors:** Pulze L, Baranzini N, Congiu T, Acquati F, Grimaldi A. | **Journal Name:** Int J Mol Sci | **Volume, Issue and Pages:** 23(24):15953.

doi:10.3390/ijms232415953

[2022]

### **Amyloid fil rouge from invertebrate up to human ageing: A focus on Alzheimer disease**

**Authors:** de Eguileor M, Grimaldi A, Pulze L, Acquati F, Morsiani C, Capri M. | **Journal Name:** Mech Ageing Dev. | **Volume, Issue and Pages:** 206:111705.

doi: 10.1016/j.mad.2022.111705.

[2022]

### **Human RNASET2: A Highly Pleiotropic and Evolutionary Conserved Tumor Suppressor Gene Involved in the Control of Ovarian Cancer Pathogenesis**

**Authors:** Bruno A, Noonan DM, Valli R, Porta G, Taramelli R, Mortara L, Acquati F | **Journal Name:** Int J Mol Sci | **Volume, Issue and Pages:** 23(16):9074

doi: 10.3390/ijms23169074

[2022]

### **Immune-Mediated Mechanisms in Patients Testing Positive for SARS-CoV-2: Protocol for a Multianalysis Study**

**Authors:** Ietto G, Mortara L, Dalla Gasperina D, Iovino D, Azzi L, Baj A, Ageno W, Genoni AP, Acquati F, Gallazzi M, Spina G, Coco G, Pierin F, Noonan D, Vigezzi A, Monti E, Iori V, Masci F, Franchi C, Di Saverio S, Carcano G. | **Journal Name:** JMIR | **Volume, Issue and Pages:** 22(14):7564

doi: 10.2196/29892.

[2021]

### **The frequent and clinically benign anomalies of chromosomes 7 and 20 in Shwachman-diamond syndrome may be subject to further clonal variations**

**Authors:** Khan AW, Kennedy A, Furutani E, Myers K, Frattini A, Acquati F, Rocca P, Micheloni G, Minelli A, Porta G, Cipolli M, Cesaro S, Danesino C, Pasquali F, Shimamura A, Valli R | **Journal Name:** Mol Cytogenet. | **Volume, Issue and Pages:** 14(1):54

doi:10.1186/s13039-021-00575-w.

[2021]

### **Expression of Otx Genes in Müller Cells Using an In Vitro Experimental Model of Retinal Hypoxia**

**Authors:** Azzolini C, Donati S, Micheloni G, Moretti V, Valli R, Acquati F, Costantino L, Ferrara F, Borroni D, Premi E, Testa F, Simonelli F, Porta G | **Journal Name:** J Ophthalmol | **Volume, Issue and Pages:** 2021:6265553

doi: 10.1155/2021/6265553

[2021]

### **Soy diet induces intestinal inflammation in adult Zebrafish: Role of OTX and P53 family**

**Authors:** Micheloni G, Carnovali M, Millefanti G, Rizzetto M, Moretti V, Montalbano G, Acquati F, Giaroni C, Valli R, Costantino L, Ferrara F, Banfi G, Mariotti M, Porta G | **Journal Name:** Int J Exp Pathol | **Volume, Issue and Pages:** 103(1):13-22.

doi: 10.1111/iep.12420

[2021]

### **HvRNASET2 Regulate Connective Tissue and Collagen I Remodeling During Wound Healing Process.**

**Authors:** Baranzini N, Pulze L, Tettamanti G, Acquati F, Grimaldi A. | **Journal Name:** Front Physiol | **Volume, Issue and Pages:** 12:632506

doi: 10.3389/fphys.2021.632506

[2021]

### **Hypoxia Enhances the Expression of RNASET2 in Human Monocyte- Derived Dendritic Cells: Role of PI3K/AKT Pathway**

**Authors:** Monaci S, Coppola F, Giuntini G, Roncoroni R, Acquati F, Sozzani S, Carraro F, Naldini A | **Journal Name:** Int J Mol Sci | **Volume, Issue and Pages:** 22(14):7564

doi: 10.3390/ijms22147564

[2020]

### **3D Reconstruction of RNASET2 Molecule to Understand Its Antibacterial Role.**

**Authors:** Baranzini N, Pulze L, Reguzzoni M, Roncoroni R, Orlandi VT, Tettamanti G, Acquati F, Grimaldi A. | **Journal Name:** Int J Mol Sci | **Volume, Issue and Pages:** 21(24):9722

doi: 10.3390/ijms21249722

[2020]

### **MCF7 Spheroid Development: New Insight about Spatio/Temporal Arrangements of TNTs, Amyloid Fibrils, Cell Connections, and Cellular Bridges**

**Authors:** Pulze L, Congiu T, Brevini TA, Grimaldi A, Tettamanti G, D'Antona P, Baranzini N, Acquati F, Ferraro F, de Eguileor M | **Journal Name:** Int J Mol Sci | **Volume, Issue and Pages:** 21(15):5400.

doi: 10.3390/ijms21155400.

[2020]

### **Expression and purification of the human tumor suppressor protein RNASET2 in CHO-S cells**

**Authors:** Rosini E, De Vito A, Ponti F, Scaldaferrri D, Pollegioni L, Acquati F. | **Journal Name:** Protein Expr Purif. | **Volume, Issue and Pages:** 174:105675

doi: 10.1016/j.pep.2020.105675

[2020]

### **Antimicrobial Role of RNASET2 Protein During Innate Immune Response in the Medicinal Leech *Hirudo verbana***

**Authors:** Baranzini N, De Vito A, Orlandi VT, Reguzzoni M, Monti L, de Eguileor M, Rosini E, Pollegioni L, Tettamanti G, Acquati F, Grimaldi A. | **Journal Name:** Front Immunol. | **Volume, Issue and Pages:** 11:370

doi: 10.3389/fimmu.2020.00370

[2020]

### **Overexpression of Murine Rnaset2 in a Colon Syngeneic Mouse Carcinoma Model Leads to Rebalance of Intra-Tumor M1/M2 Macrophage Ratio, Activation of T Cells, Delayed Tumor Growth, and Rejection**

**Authors:** De Vito A, Orecchia P, Balza E, Reverberi D, Scaldaferrri D, Taramelli R, Noonan DM, Acquati F, Mortara L | **Journal Name:** Cancers (Basel) | **Volume, Issue and Pages:** 12(3):717

doi: 10.3390/cancers12030717

[2020]

**Editorial: Role of Ribonucleases in Immune Response Regulation During Infection and Cancer.**

**Authors:** Boix E, Acquati F, Leonidas D, Pulido D | **Journal Name:** Front Immunol | **Volume, Issue and Pages:** 11:236.

doi: 10.3389/fimmu.2020.00236.

[2020]

**Recombinant HVRNASET2 protein induces marked connective tissue remodelling in the invertebrate model *Hirudo verbana***

**Authors:** Baranzini N, Weiss-Gayet M, Chazaud B, Monti L, de Eguileor M, Tettamanti G, Acquati F, Grimaldi A. | **Journal Name:** Cell Tissue Res | **Volume, Issue and Pages:** 380(3):565-579

doi: 10.1007/s00441-020-03174-0

[2020]

**Microarray expression studies on bone marrow of patients with Shwachman-Diamond syndrome in relation to deletion of the long arm of chromosome 20, other chromosome anomalies or normal karyotype**

**Authors:** Khan AW, Minelli A, Frattini A, Montalbano G, Bogni A, Fabbri M, Porta G, Acquati F, Pinto RM, Bergami E, Mura R, Pegoraro A, Cesaro S, Cipolli M, Zecca M, Danesino C, Locatelli F, Maserati E, Pasquali F, Valli R. | **Journal Name:** Mol Cytogenet. | **Volume, Issue and Pages:** 13:1

doi: 10.1186/s13039-019-0466-9

[2020]

**Myocardial overexpression of ANKRD1 causes sinus venosus defects and progressive diastolic dysfunction**

**Authors:** 30) Piroddi N, Pesce P, Scellini B, Manzini S, Ganzetti GS, Badi I, Menegollo M, Cora V, Tiso S, Cinquetti R, Monti L, Chiesa G, Bleyl SB, Busnelli M, Dellera F, Bruno D, Caicci F, Grimaldi A, Taramelli R, Manni L, Sacerdoti D, et al. | **Journal Name:** Cardiovasc Res | **Volume, Issue and Pages:** 116(8):1458-1472.

doi: 10.1093/cvr/cvz291

[2019]

**Innate Immune Response Regulation by the Human RNASET2 Tumor Suppressor Gene**

**Authors:** doi: 10.3389/fimmu.2019.02587 | **Journal Name:** Front Immunol | **Volume, Issue and Pages:** 10:2587

[2019]

**Identification of OTX1 and OTX2 As Two Possible Molecular Markers for Sinonasal Carcinomas and Olfactory Neuroblastomas**

**Authors:** 3) Micheloni G, Millefanti G, Conti A, Pirrone C, Marando A, Rainero A, Tararà L, Pistoichini A, Lo Curto F, Pasquali F, Castelnuovo P, Acquati F, Grimaldi A, Valli R, Porta G. | **Journal Name:** J Vis Exp | **Volume, Issue and Pages:** 28;(144).

doi: 10.3791/56880

[2019]

**A Cell-Autonomous Oncosuppressive Role of Human RNASET2 Affecting ECM-Mediated Oncogenic Signaling**

**Authors:** Roggiani F, Riva C, Raspagliesi F, Porta G, Valli R, Taramelli R, Acquati F, Mezzanzanica D, Tomassetti A | **Journal Name:** Cancers (Basel) | **Volume, Issue and Pages:** 11(2):255

doi: 10.3390/cancers11020255

[2019]

**AIF-1 and RNASET2 Play Complementary Roles in the Innate Immune Response of Medicinal Leech**

**Authors:** Baranzini N, Monti L, Vanotti M, Orlandi VT, Bolognese F, Scaldaferrri D, Girardello R, Tettamanti G, de Eguileor M, Vizioli J, Taramelli R, Acquati F, Grimaldi A | **Journal Name:** J Innate Immun | **Volume, Issue and Pages:** 11(2):150-167

doi: 10.1159/000493804

[2018]

**The human RNASET2 protein affects the polarization pattern of human macrophages in vitro**

**Authors:** Scaldaferrì D, Bosi A, Fabbri M, Pedrini E, Inforzato A, Valli R, Frattini A, De Vito A, Noonan DM, Taramelli R, Mortara L, Acquati F | **Journal Name:** Immunol Lett | **Volume, Issue and Pages:** 203:102-111

doi: 10.1016/j.imlet.2018.09.005

[2018]

**New insights into hypoxia-related mechanisms involved in different microvascular patterns of bronchopulmonary carcinoids and poorly differentiated neuroendocrine carcinomas. Role of ribonuclease T2 (RNASET2) and HIF-1 $\alpha$**

**Authors:** Uccella S, La Rosa S, Scaldaferrì D, Monti L, Maragliano R, Sorrenti E, Gariboldi M, Taramelli R, Sessa F, Acquati F. | **Journal Name:** Hum Pathol | **Volume, Issue and Pages:** 79:66-76

doi: 10.1016/j.humpath.2018.04.028

[2017]

**Human recombinant RNASET2-induced inflammatory response and connective tissue remodeling in the medicinal leech**

**Authors:** Baranzini N, Pedrini E, Girardello R, Tettamanti G, de Eguileor M, Taramelli R, Acquati F, Grimaldi A. | **Journal Name:** Cell Tissue Res | **Volume, Issue and Pages:** 368(2):337-351

doi: 10.1007/s00441-016-2557-9

[2016]

**RNASET2 silencing affects miRNAs and target gene expression pattern in a human ovarian cancer cell model**

**Authors:** Turconi G, Scaldaferrì D, Fabbri M, Monti L, Lualdi M, Pedrini E, Gribaldo L, Taramelli R, Acquati F. | **Journal Name:** Int J Oncol | **Volume, Issue and Pages:** 49(6):2637-2646

doi: 10.3892/ijo.2016.3763

[2015]

**Pleiotropic modes of action in tumor cells of RNASET2, an evolutionary highly conserved extracellular RNase**

**Authors:** Lualdi M, Pedrini E, Rea K, Monti L, Scaldaferrì D, Gariboldi M, Camporeale A, Ghia P, Monti E, Tomassetti A, Acquati F, Taramelli R | **Journal Name:** Oncotarget | **Volume, Issue and Pages:** 6(10):7851-65

doi: 10.18632/oncotarget.3490

[2015]

**New Strategies for Expression and Purification of Recombinant Human RNASET2 Protein in Pichia pastoris**

**Authors:** Lualdi M, Pedrini E, Petroni F, Näsman J, Lindqvist C, Scaldaferrì D, Taramelli R, Inforzato A, Acquati F | **Journal Name:** Mol Biotechnol | **Volume, Issue and Pages:** 57(6):513-25

doi: 10.1007/s12033-015-9845-6

[2013]

**Loss of function of Ribonuclease T2, an ancient and phylogenetically conserved RNase, plays a crucial role in ovarian tumorigenesis**

**Authors:** Acquati F, Lualdi M, Bertilaccio S, Monti L, Turconi G, Fabbri M, Grimaldi A, Anselmo A, Inforzato A, Collotta A, Cimetti L, Riva C, Gribaldo L, Ghia P, Taramelli R. | **Journal Name:** Proc Natl Acad Sci U S A | **Volume, Issue and Pages:** 110(20):8140-5

doi: 10.1073/pnas.1222079110

[2012]

**RNASET2-an autoantigen in anaplastic large cell lymphoma identified by protein array analysis.**

**Authors:** Patel S, Chen H, Monti L, Gould E, Haralambieva E, Schmid J, Toomey D, Woessmann W, Roncador G, Hatton CS, Liggins AP, Taramelli R, Banham AH, Acquati F, Murphy D, Pulford K. | **Journal Name:** J Proteomics | **Volume, Issue and Pages:** 75(17):5279-92.

doi: 10.1016/j.jprot.2012.06.009

[2012]

**Muscle development and differentiation in the urodele *Ambystoma mexicanum***

**Authors:** Banfi S, Monti L, Acquati F, Tettamanti G, de Eguileor M, Grimaldi A. | **Journal Name:** Dev Growth Differ | **Volume, Issue and Pages:** 54(4):489-502

doi: 10.1111/j.1440-169X.2012.01338.x

[2012]

**Intracellular trafficking of RNASET2, a novel component of P-bodies**

**Authors:** Vidalino L, Monti L, Haase A, Moro A, Acquati F, Taramelli R, Macchi P. | **Journal Name:** Biol Cell | **Volume, Issue and Pages:** 104(1):13-21

doi: 10.1111/boc.201100092

[2011]

**Molecular signature induced by RNASET2, a tumor antagonizing gene, in ovarian cancer cells**

**Authors:** Acquati F, Monti L, Lualdi M, Fabbri M, Sacco MG, Gribaldo L, Taramelli R | **Journal Name:** Oncotarget | **Volume, Issue and Pages:** 2(6):477-84

doi: 10.18632/oncotarget.274

[2011]

**Comparison of the baculovirus-insect cell and *Pichia pastoris* heterologous systems for the expression of the human tumor suppressor protein RNASET2**

**Authors:** Campomenosi P, Cinquetti R, Tallarita E, Lindqvist C, Raimondi I, Grassi P, Näsman J, Dell A, Haslam SM, Taramelli R, Acquati F | **Journal Name:** Biotechnol Appl Biochem | **Volume, Issue and Pages:** 58(1):39-49

doi: 10.1002/bab.7

[2011]

**Microenvironmental control of malignancy exerted by RNASET2, a widely conserved extracellular RNase**

**Authors:** Acquati F, Bertilaccio S, Grimaldi A, Monti L, Cinquetti R, Bonetti P, Lualdi M, Vidalino L, Fabbri M, Sacco MG, van Rooijen N, Campomenosi P, Vigetti D, Passi A, Riva C, Capella C, Sanvito F, Doglioni C, Gribaldo L, Macchi P, Sica A, et al. | **Journal Name:** Proc Natl Acad Sci U S A | **Volume, Issue and Pages:** 108(3):1104-9

doi: 10.1073/pnas.1013746108

[2009]

**Intracellular ANKRD1 protein levels are regulated by 26S proteasome-mediated degradation**

**Authors:** Badi I, Cinquetti R, Frascoli M, Parolini C, Chiesa G, Taramelli R, Acquati F. | **Journal Name:** FEBS Lett | **Volume, Issue and Pages:** 583(15):2486-92

doi: 10.1016/j.febslet.2009.07.001

[2009]

**In silico prediction and experimental validation of natural antisense transcripts in two cancer-associated regions of human chromosome 6**

**Authors:** Monti L, Cinquetti R, Guffanti A, Nicassio F, Cremona M, Lavorgna G, Bianchi F, Vignati F, Cittaro D, Taramelli R, Acquati F. | **Journal Name:** Int J Oncol | **Volume, Issue and Pages:** 34(4):1099-108.

doi: 10.3892/ijo\_00000237

[2008]

**BACE2 is stored in secretory granules of mouse and rat pancreatic beta cells**

**Authors:** Finzi G, Franzi F, Placidi C, Acquati F, Palumbo E, Russo A, Taramelli R, Sessa F, La Rosa S. | **Journal Name:** Ultrastruct Pathol | **Volume, Issue and Pages:** 32(6):246-51

doi: 10.1080/01913120802486217

[2008]

## **RNASET2 as a tumor antagonizing gene in a melanoma cancer model**

**Authors:** Monti L, Rodolfo M, Lo Russo G, Noonan D, Acquati F, Taramelli R | **Journal Name:** Oncol Res | **Volume, Issue and Pages:** 17(2):69-74

doi: 10.3727/096504008784523658

[2008]

## **Transcriptional deregulation and a missense mutation define ANKRD1 as a candidate gene for total anomalous pulmonary venous return**

**Authors:** Cinquetti R, Badi I, Campione M, Bortoletto E, Chiesa G, Parolini C, Camesasca C, Russo A, Taramelli R, Acquati F | **Journal Name:** Hum Mutat | **Volume, Issue and Pages:** 29(4):468-74

doi: 10.1002/humu.20711

[2008]

## **A hedgehog homolog is involved in muscle formation and organization of Sepia officinalis (mollusca) mantle**

**Authors:** Grimaldi A, Tettamanti G, Acquati F, Bossi E, Guidali ML, Banfi S, Monti L, Valvassori R, de Eguileor M | **Journal Name:** Dev Dyn | **Volume, Issue and Pages:** 237(3):659-71

doi: 10.1002/dvdy.21453

[2008]

## **Topological properties of co-occurrence networks in published gene expression signatures**

**Authors:** Muller H, Acquati F. | **Journal Name:** Bioinform Biol Insights | **Volume, Issue and Pages:** 17;2:203-13

doi: 10.4137/bbi.s518

[2006]

## **Characterization of RNASET2, the first human member of the Rh/T2/S family of glycoproteins**

**Authors:** Campomenosi P, Salis S, Lindqvist C, Mariani D, Nordström T, Acquati F, Taramelli R | **Journal Name:** Arch Biochem Biophys | **Volume, Issue and Pages:** 449(1-2):17-26

doi: 10.1016/j.abb.2006.02.022

[2005]

## **Gene and protein expressions in human cord blood cells after exposure to acrylonitrile**

**Authors:** Diodovich C, Malerba I, Ferrario D, Bowe G, Bianchi MG, Acquati F, Taramelli R, Parent-Massin D, Gribaldo L. | **Journal Name:** J Biochem Mol Toxicol | **Volume, Issue and Pages:** 19(4):204-12

doi: 10.1002/jbt.20090

[2005]

## **Tumor and metastasis suppression by the human RNASET2 gene**

**Authors:** Acquati F, Possati L, Ferrante L, Campomenosi P, Talevi S, Bardelli S, Margiotta C, Russo A, Bortoletto E, Rocchetti R, Calza R, Cinquetti R, Monti L, Salis S, Barbanti-Brodano G, Taramelli R | **Journal Name:** Int J Oncol | **Volume, Issue and Pages:** 26(5):1159-68

[2004]

## **The human genome project and the discovery of genetic determinants of cancer susceptibility**

**Authors:** Taramelli R, Acquati F. | **Journal Name:** Eur J Cancer | **Volume, Issue and Pages:** 40(17):2537-43

doi: 10.1016/j.ejca.2004.07.030

[2004]

## **Response of human cord blood cells to styrene exposure: evaluation of its effects on apoptosis and gene expression by genomic technology**

**Authors:** Diodovich C, Bianchi MG, Bowe G, Acquati F, Taramelli R, Parent-Massin D, Gribaldo L. | **Journal Name:** Toxicology | **Volume, Issue and Pages:** 200(2-3):145-57

. doi: 10.1016/j.tox.2004.03.021

[2003]

**Naphthalene exposure: effects on gene expression and proliferation in human cord blood cells**

**Authors:** Diodovich C, Malerba I, Bowe G, Acquati F, Bianchi MG, Taramelli R, Parent- Massin D, Gribaldo L | **Journal Name:** J Biochem Mol Toxicol | **Volume, Issue and Pages:** 17(5):286-94.

doi: 10.1002/jbt.10091

[2003]

**Influence of metal ions on gene expression of BALB 3T3 fibroblasts**

**Authors:** Cinquetti R, Mazzotti F, Acquati F, Gornati R, Sabbioni E, Taramelli R, Bernardini G | **Journal Name:** Gene | **Volume, Issue and Pages:** 318:83-9

. doi: 10.1016/s0378-1119(03)00755-8

[2003]

**Genetic and cytogenetic observations among different types of ovarian tumors are compatible with a progression model underlying ovarian tumorigenesis**

**Authors:** Tibiletti MG, Bernasconi B, Taborelli M, Facco C, Riva C, Capella C, Franchi M, Binelli G, Acquati F, Taramelli R. | **Journal Name:** Cancer Genet Cytogenet | **Volume, Issue and Pages:** 146(2):145-53

doi: 10.1016/s0165-4608(03)00134-1

[2001]

**Cloning and characterization of a senescence inducing and class II tumor suppressor gene in ovarian carcinoma at chromosome region 6q27**

**Authors:** Acquati F, Morelli C, Cinquetti R, Bianchi MG, Porrini D, Varesco L, Gismondi V, Rocchetti R, Talevi S, Possati L, Magnanini C, Tibiletti MG, Bernasconi B, Daidone MG, Shridhar V, Smith DI, Negrini M, Barbanti-Brodano G, Taramelli R. | **Journal Name:** Oncogene | **Volume, Issue and Pages:** 20(8):980-8

doi: 10.1038/sj.onc.1204178

[2001]

**Molecular cloning, tissue distribution, and chromosomal localization of the human homolog of the R2/Th/ Styler ribonuclease gene family**

**Authors:** Acquati F, Nucci C, Bianchi MG, Gorletta T, Taramelli R | **Journal Name:** Methods Mol Biol | **Volume, Issue and Pages:** 160:87-101

doi: 10.1385/1-59259-233-3:087

[2000]

**Nonsyndromic total anomalous venous return associated with a de novo translocation involving chromosomes 10 and 21 t(10;21)(q23.1;q11.2)**

**Authors:** Acquati F, Russo A, Taramelli R, Tibiletti MG, Taborelli M, Camesasca C, Papa M. | **Journal Name:** Am J Med Genet | **Volume, Issue and Pages:** 95(3):285-6

doi: 10.1002/1096-8628(20001127)95:3<285

[2000]

**Human allantoinase gene: cDNA cloning, genomic organization and chromosome localization**

**Authors:** Vigetti D, Monetti C, Acquati F, Taramelli R, Bernardini G | **Journal Name:** Gene | **Volume, Issue and Pages:** 256(1-2):253-60

doi: 10.1016/s0378-1119(00)00342-5

[2000]

**A large 6q deletion is a common cytogenetic alteration in fibroadenomas, pre-malignant lesions, and carcinomas of the breast**

**Authors:** Tibiletti MG, Sessa F, Bernasconi B, Cerutti R, Broggi B, Furlan D, Acquati F, Bianchi M, Russo A, Capella C, Taramelli R. | **Journal Name:** Clin Cancer Res | **Volume, Issue and Pages:** 6(4):1422-31

[2000]

**The gene encoding DRAP (BACE2), a glycosylated transmembrane protein of the aspartic protease family, maps to the down critical region**

**Authors:** Acquati F, Accarino M, Nucci C, Fumagalli P, Jovine L, Ottolenghi S, Taramelli R | **Journal Name:** FEBS Lett | **Volume, Issue and Pages:** 468(1):59-64

doi: 10.1016/s0014-5793(00)01192-3

[1999]

**Human growth hormone increases apo(a) expression in transgenic mice**

**Authors:** Tao R, Acquati F, Marcovina SM, Hobbs HH | **Journal Name:** Arterioscler Thromb Vasc Biol | **Volume, Issue and Pages:** 19(10):2439-47

doi: 10.1161/01.atv.19.10.2439

[1999]

**Transgenic mice expressing a human apolipoprotein[a] allele**

**Authors:** Acquati F, Hammer R, Ercoli B, Mooser V, Tao R, Rönicke V, Michalich A, Chiesa G, Taramelli R, Hobbs HH, Müller HJ | **Journal Name:** J Lipid Res | **Volume, Issue and Pages:** 40(6):994-1006

doi:10.1016/S0022-2275(20)33503-3

[1998]

**Physical map of the D6S149-D6S193 region on chromosome 6Q27 and its involvement in benign surface epithelial ovarian tumours**

**Authors:** Tibiletti MG, Trubia M, Ponti E, Sessa L, Acquati F, Furlan D, Bernasconi B, Fichera M, Mihalich A, Ziegler A, Volz A, Facco C, Riva C, Cremonesi L, Ferrari M, Taramelli R. | **Journal Name:** Oncogene | **Volume, Issue and Pages:** 16(12):1639-42

doi: 10.1038/sj.onc.1201654

[1997]

**Reporter gene analysis of four DNaseI hypersensitive sites in the plasminogen/apolipoprotein(a) intergenic region**

**Authors:** Acquati F, Rönicke V, Taramelli R, Müller HJ, | **Journal Name:** Clin Genet | **Volume, Issue and Pages:** 52(5):303-7

doi: 10.1111/j.1399-0004.1997.tb04347.x

[1997]

**Characterization of multiple enhancer regions upstream of the apolipoprotein(a) gene**

**Authors:** Wade DP, Puckey LH, Knight BL, Acquati F, Mihalich A, Taramelli R | **Journal Name:** J Biol Chem | **Volume, Issue and Pages:** 272(48):30387-99

doi: 10.1074/jbc.272.48.30387

[1997]

**Genomic structure and organization of kringles type 3 to 10 of the apolipoprotein(a) gene in 6q26-27**

**Authors:** Mihalich A, Magnaghi P, Sessa L, Trubia M, Acquati F, Taramelli R | **Journal Name:** Gene | **Volume, Issue and Pages:** 196(1-2):1-8

doi: 10.1016/s0378-1119(97)00091-7

[1995]

**Ten allelic apolipoprotein[a] 5' flanking fragments exhibit comparable promoter activities in HepG2 cells**

Authors: Bopp S, Köchl S, Acquati F, Magnaghi P, Pethö-Schramm A, Kraft HG, Utermann G, Müller HJ, Taramelli R | **Journal Name:** J Lipid Res | **Volume, Issue and Pages:** 36(8):1721-8

[1994]

**A 2-Mb YAC contig linking the plasminogen-apoprotein(a) gene family to the insulin-like growth factor 2 receptor (IGF2R) gene on the telomeric region of chromosome 6 (6q26-q27).**

Authors: Acquati F, Margaretti N, Hauptschein R, Rao P, Gaidano G, Taramelli R. | **Journal Name:** Genomics | **Volume, Issue and Pages:** 22(3):664-6.

doi: 10.1006/geno.1994.1450

[1994]

**Molecular characterisation of the human apo(a)-plasminogen gene family clustered on the telomeric region of chromosome 6 (6q26-27)**

Authors: Magnaghi P, Citterio E, Margaretti N, Acquati F, Ottolenghi S, Taramelli R | **Journal Name:** Hum Mol Genet | **Volume, Issue and Pages:** 3(3):437-42

doi: 10.1093/hmg/3.3.437

[1993]

**Demonstration of physical linkage between the promoter region and the polymorphic kringle IV domain in the Apo(a) gene by pulsed-field gel electrophoresis**

Authors: Kraft HG, Margaretti N, Köchl S, Acquati F, Utermann G, Taramelli R | **Journal Name:** Genomics | **Volume, Issue and Pages:** 17(1):260-2

doi: 10.1006/geno.1993.1318

[1992]

**Characterization by yeast artificial chromosome cloning of the linked apolipoprotein(a) and plasminogen genes and identification of the apolipoprotein(a) 5' flanking region**

Authors: Margaretti N, Acquati F, Magnaghi P, Bruno L, Pontoglio M, Rocchi M, Saccone S, Della Valle G, D'Urso M, LePaslier D, et al. | **Journal Name:** Proc Natl Acad Sci U S A | **Volume, Issue and Pages:** 89(23):11584-8

doi: 10.1073/pnas.89.23.11584

[1992]

**Cloning and transposon vectors derived from satellite bacteriophage P4 for genetic manipulation of Pseudomonas and other gram-negative bacteria**

Authors: Polissi A, Bertoni G, Acquati F, Dehò G. | **Volume, Issue and Pages:** 28(2):101-14 | **Publisher:** Plasmid

doi: 10.1016/0147-619x(92)90041-8

## PROJECTS

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[ 9 Apr 2003 – 8 Apr 2004 ]

**Molecular genetic analysis of a rare human congenital heart disease** Research project funded by Fondazione Comunitaria del Varesotto Onlus (12.500 €)Role in the project: PI

[ 20 Oct 2003 – 20 Nov 2005 ]

**Functional characterization by transgenic and gene ablation approaches of a gene involved in neoplastic and neurodegenerative disorders** Research project funded by Progetti di Ricerca Scientifica di Rilevante Interesse Nazionale (PRIN) (79.000 €)Role in the project: Co-investigator

[ 30 Jan 2006 – 29 Jan 2008 ]

**Congenital heart diseases: clinical, embryologica and genetic aspects.** Research project funded by Progetti di Ricerca Scientifica di Rilevante Interesse Nazionale (PRIN) - Prot. 2005068877\_003.(41.209,00 €)Role in the project: Scientific Director of the Research Unit. Subproject Title: "Congenital Heart Disease: Genetic, Embryological, and Clinical Aspects"

[ 1 Mar 2008 – 28 Feb 2009 ]

**Innovative strategies for the development of antitumoral molecules** Research project funded by Fondazione Comunitaria del Varesotto Onlus (23.046,00 €)Role in the project: PI

[ 30 Jun 2015 – 29 Jun 2016 ]

**Biomarkers for ovarian cancer** Research project funded by Fondazione Comunitaria del Varesotto Onlus (20.000,00 €)Role in the project: Co-investigator

[ 1 Jan 2018 – 31 Dec 2018 ]

**Use of innovative molecular technologies to study the dynamics of drug resistance onset and the stress response in human tumor cells** Research project funded by Fondazione Banca del Monte di Lombardia (5.000,00 €)Role in the project: PI

[ 25 Sep 2019 – 24 Sep 2023 ]

**RNASET2 as a new player in the modulation of the innate immune system in cancer and autoimmunity: potential diagnostic and Therapeutic implications".** Research project funded by Progetti di Ricerca Scientifica di Rilevante Interesse Nazionale (PRIN) - Prot. 2017NTK4HY\_001. (205.489,00 €)Role in the project: Co-investigator

[ 31 Mar 2022 – 30 Mar 2023 ]

**Role of the human RNASET2 gene in the induction of cellular senescence.** Research project funded by Associazione Amici dell'Insubria (15.000,00 €)Role in the project: PI

[ 18 Oct 2023 – 17 Oct 2025 ]

**Normalizing the fibrotic tumor microenvironment to reactivate immune response in pancreatic ductal adenocarcinoma: the RNASET2 alarmin-like molecule as novel immunomodulatory effector for (combination)therapies.** Research project funded by Progetti di Ricerca Nazionali - MIUR - PRIN (127.000,00 €)Role in the project; Coinvestigator

[ 22 Oct 2024 – 21 Oct 2025 ]

**Direct and Sensitive detection of Circulating RNAs for Oncology** Research project funded by Università degli Studi di ROMA La Sapienza (100,000 €)Role in the project; Coinvestigator

[ 1 Apr 2025 – Current ]

**Molecular and functional analysis of the RNASET2 gene in relation to the pathogenesis of Aicardi-Goutières syndrome.** Research project funded by La Gemma Rara Association (12.660,00€)Role in the project: PI

## OTHER ACTIVITIES

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[ 20 Sep 2022 – Current ]

### **Co-founder of the ILFARM Startup**

Co-founder of ILFARM, an innovative start-up of the University of Insubria, Tax Code 03890760121, registered office at Via Gucciardini 14,

21100 Varese. The company's mission is the development, production, and marketing of innovative products or services with high technological

value, and more specifically: 1) the breeding for the sale of adult, juvenile, and embryonic leeches (cocoons) belonging to the species *Hirudo medicinalis* and *Hirudo verbana*. 2) the production of liquid and powder extracts; 3) the production of genetically modified individuals of the aforementioned species for scientific

research purposes, with the right to purchase and breed adult and small leeches of various sizes and cocoons (cocoons containing fertilized eggs and embryos), to genetically manipulate embryos, and to market cocoons, leeches of various sizes, and cell lines derived from them for the purposes of

scientific, biomedical, therapeutic, and cosmetic research. The company, through its members, also aims to organize workshops and courses to train new professionals in the practice of hirudotherapy and to specialize in this practice, with the aim of opening a dedicated corporate center.

Link: <https://www.ilfarm.it/>

[ 1 Nov 1999 – Current ]

### **Teaching activity at University of Insubria**

- 1999 to 2000: Molecular Genetics, Bachelor Degree Course in Biological Sciences, Faculty of Mathematics, Physics and Natural Sciences

-1999 to 2003: Genetics, Bachelor Degree Course in Biological Sciences, Faculty of Mathematics, Physics and Natural Sciences

-2002 to 2003: Molecular Evolutionary Genetics, Bachelor Degree Course in Biological Sciences, Faculty of Mathematics, Physics and Natural Sciences

-2003 to present: Recombinant DNA Technology, Bachelor Degree Courses in Biological Sciences and in Biotechnology, Faculty of Mathematics, Physics and Natural Sciences and later Department of Biotechnology and Life Sciences

-2003 to 2012: Life Sciences, Bachelor Degree Courses in Biological Sciences and in Biotechnology, Faculty of Mathematics, Physics and Natural Sciences

2003-2010: Genetics of Embryonic Development, MSc Course in Biological Sciences, Faculty of Mathematics, Physics and Natural Sciences

2004-2010: Genomics, Transcriptomic and Proteomics, MSc Course in Biological Sciences, Faculty of Mathematics, Physics and Natural Sciences

-2010-2018: Regulation of Gene Expression and Genomics, MSc Course in Molecular and Industrial Biotechnologies, Department of Biotechnology and Life Sciences

-2004-2010; Molecular Mechanisms of Gene Regulation, MSc Course in Biological Sciences, Faculty of Mathematics, Physics and Natural Sciences

-2012-2014: Developmental Genetics and Genomics, MSc Course in Biological Sciences, Department of Biotechnology and Life Sciences

-2016-2022: Human Genetics and Genomics (english course), MSc Course in Biomedical Sciences, Department of Biotechnology and Life Sciences

-2018-2021: Genomics, MSc Course in Molecular and Industrial Biotechnologies, Department of Biotechnology and Life Sciences

-2019-2022: Regulation of Gene Expression (english course), MSc Course in Molecular and Industrial Biotechnologies, Department of Biotechnology and Life Sciences

-2022-present: Applied Genomics (english course), MSc Course in Biotechnology for the Bio-based and Health Industry, Department of Biotechnology and Life Sciences

-2020-present: Human Genetics and Genomics (english course), MSc Course in Biomedical Sciences, Department of Biotechnology and Life Sciences

-2021-present: Advanced Genetics, Specialty School in Medical Genetics, University of Insubria

February 6, 2023: achievement of the National Scientific Qualification for the role of Full Professor in Genetics.

## INSTITUTIONAL COMMITMENTS

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[ 1 Nov 2005 – Current ]

### **Official assignments at the University of Insubria**

2006: Member of the Commission for Drafting the Regulations of the Faculty of Mathematical, Physical, and Natural Sciences

2015-2018: Member of the Commission for the allocation of University Funds for Research (FAR)

2001-2011: Head of the Radioisotope Laboratory of the Department of Structural and Functional Biology

2007-2009: Deputy Director of the Department of Biotechnology and Molecular Sciences

Member of the Evaluation Committee for the State Exam for the license to practice the profession of Biologist:

- 2005 - President

- 2007 - Full Member

- 2010 - Full Member

- 2011 - Full Member

- 2013 - President

- 2014 - Full Member

- 2016 - President

2016 to present: Member of the Evaluation Committee for admission to the Master's Degree in Molecular and Industrial Biotechnology (subsequently converted to the Degree in Biotechnology for the Bio-based and Health Industry).

2011 to present: Coordinator of the Departmental Committee on Didactic Laboratories.

2013 to present: Member (and President since 2020) of the Joint Faculty-Student Committee of the Department of Biotechnology and

Life Sciences

2005-2012: Member of the teaching board of the PhD Course in Biotechnology at the University of Insubria.

2013 to present: Member of the teaching board of the PhD Course in Experimental and Translational Medicine at the University of Insubria.

Since June 2023, member of the Board of Directors of the University of Insubria.

## BIBLIOMETRIC DATA

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[ 20 Jun 1992 – Current ]

### **Bibliometric data**

(updated October 31st 2025)

83 publications in peer-reviewed international journals

H-index: 23

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