

**EUROPEAN
CURRICULUM VITAE
FORMAT**



PERSONAL INFORMATION

Name	FRANCESCO PIACENTE
Address	VIALE VILLA GAVOTTI, 46/8 – 16155 GENOVA (GE)
Telephone	+39 010/4030231 Mobile: +39 3333967938
Fax	+39 010/4030231
E-mail	francesco.piacente@libero.it
Nationality	Italian
Date of birth	11 th January 1986

WORK EXPERIENCE

- Dates (from – to) 6th April 2020 – to date
 - Name and address of employer Department of experimental medicine (DIMES), University of Genoa
 - Type of business or sector Research structure
 - Occupation or position held Assistant Professor in Biochemistry
 - Main activities and responsibilities
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- Dates (from – to) 7th May 2019 – 5th April 2020
 - Name and address of employer San Martino Hospital of Genoa, Medical Oncology Clinics Department of Internal Medicine (DIMI) – Prof. Alessio Nencioni Laboratory
 - Type of business or sector Research structure
 - Occupation or position held San Martino Hospital research fellowship
 - Main activities and responsibilities Effect of cycles of a low protein diet on neuro-degeneration circulating markers and oxidative stress
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- Dates (from – to) 1st April 2018 – 31st March 2019
 - Name and address of employer University of Genoa, Medical Oncology Clinics Department of Internal Medicine (DIMI) – Prof. Alessio Nencioni Laboratory
 - Type of business or sector Research structure
 - Occupation or position held Fondazione Umberto Veronesi research fellowship
 - Main activities and responsibilities Nicotinate phosphoribosyltransferase (NAPRT) as a new target for treating triple negative breast cancer
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- Dates (from – to) 1st January 2018 – 31st March 2018
 - Name and address of employer San Martino Hospital of Genoa, Medical Oncology Clinics Department of Internal Medicine (DIMI) – Prof. Alessio Nencioni Laboratory
 - Type of business or sector Research structure
 - Occupation or position held Coordinated and Continuous Collaboration
 - Main activities and responsibilities Pre-clinical evaluation of SIRT6 inhibition as an innovative strategy for the treatment of acute myeloid leukemia
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- Dates (from – to) 1st January 2017 – 31st December 2017
 - Name and address of employer University of Genoa, Medical Oncology Clinics Department of Internal Medicine (DIMI) – Prof. Alessio Nencioni Laboratory

<ul style="list-style-type: none"> • Type of business or sector • Occupation or position held • Main activities and responsibilities 	<p>Research structure IBSA Foundation research fellowship Preclinical evaluation of chemical SIRT6 inhibitors for treating field cancerization</p>
<ul style="list-style-type: none"> • Dates (from – to) • Name and address of employer • Type of business or sector • Occupation or position held • Main activities and responsibilities 	<p>2nd March 2016 – 31st December 2016 University of Genoa, Medical Oncology Clinics Department of Internal Medicine (DIMI) – Prof. Alessio Nencioni Laboratory Research structure Postdoctoral New metabolic approaches to treat cancer based on fasting and intracellular NAD⁺ reduction</p>
<ul style="list-style-type: none"> • Dates (from – to) • Name and address of employer • Type of business or sector • Occupation or position held • Main activities and responsibilities 	<p>2nd March 2015 – 1st March 2016 University of Genoa, Medical Oncology Clinics Department of Internal Medicine (DIMI) – Prof. Alessio Nencioni Laboratory Research structure Postdoctoral Biochemical and biological characterization of small molecule SIRT6 inhibitors</p>
<ul style="list-style-type: none"> • Dates (from – to) • Name and address of employer • Type of business or sector • Occupation or position held • Main activities and responsibilities 	<p>10th November 2014 – 31st January 2015 University of Genoa, Department of Experimental Medicine (DIMES) Division of Biochemistry Research structure Graduate Teaching Assistant Laboratory teaching activities related to the Biochemistry and Laboratory exam of Biotechnology Bachelor's Degree</p>
<ul style="list-style-type: none"> • Dates (from – to) • Name and address of employer • Type of business or sector • Occupation or position held • Main activities and responsibilities 	<p>27th May 2013 – 28th June 2013 University of Genoa, Department of Experimental Medicine (DIMES) Division of Biochemistry Research structure Graduate Teaching Assistant Laboratory teaching activities related to the Recombinant technologies and Laboratory exam of Biotechnology Bachelor's Degree</p>
<ul style="list-style-type: none"> • Dates (from – to) • Name and address of employer • Type of business or sector • Occupation or position held • Main activities and responsibilities 	<p>12th September 2011 – 11th March 2012 University of Genoa, Department of Experimental Medicine (DIMES) Division of Biochemistry – Prof. Michela Tonetti Laboratory Research structure Coordinated and Continuous Collaboration Cloning of cDNA from marine invertebrates and development of expression systems in bacteria and yeasts</p>
<ul style="list-style-type: none"> • Dates (from – to) • Name and address of employer • Type of business or sector • Occupation or position held • Main activities and responsibilities 	<p>21st January 2011 – 31st December 2011 University of Genoa, Department of Experimental Medicine (DIMES) Division of Biochemistry – Prof. Michela Tonetti Laboratory Research structure Postgraduate studies Cloning, expression in prokaryotic organisms and biochemical characterization of enzymes involved in the biosynthesis of nucleotide-sugars into the Nucleo-Cytoplasmic Large DNA Viruses</p>

EDUCATION AND TRAINING

- Dates (from – to) 1st January 2012 – 31st December 2014
- Name and type of organization providing education and training University of Genoa, Department of Experimental Medicine (DIMES) Division of Biochemistry – Prof. Michela Tonetti Laboratory
- Principal subjects / occupational skills covered Molecular Biology, Biochemistry, Chemistry
- Title of qualification awarded Ph. D. in Biotechnology, awarded on the 31st March 2015
- Level in national classification (if appropriate) Ph. D. (with scholarship)

- Dates (from – to) 15th November 2013 – 14th May 2014
- Name and type of organization providing education and training Imperial College London, Department of Life Sciences - Prof. Anne Dell Laboratory
- Principal subjects / occupational skills covered I acquired experience using mass spectrometry instrumentation, such as MALDI, MALDI TOF/TOF, and experience of Glycomics and Glycoproteomics.

- Dates (from – to) 1st October 2008 – 30th September 2010
- Name and type of organization providing education and training University of Genoa, Faculty of Mathematical, Physical and Natural Sciences
- Principal subjects / occupational skills covered Molecular Biology, Cellular Biology and Biochemistry
- Title of qualification awarded Master Degree in Cellular and Molecular Biology
- Grade 110/110 cum laude, awarded on the 6th October 2010
- Level in national classification (if appropriate) Master Degree

- Dates (from – to) 1st October 2005 – 30th September 2008
- Name and type of organization providing education and training University of Genoa, Faculty of Mathematical, Physical and Natural Sciences
- Principal subjects / occupational skills covered Molecular Biology, Cellular Biology, Biochemistry, Developmental Biology, Microbiology, Physiopathology, Cytology and Histology, Zoology and Chemistry
- Title of qualification awarded Bachelor's Degree in Biological Sciences
- Grade 110/110 cum laude, awarded on the 19th November 2008
- Level in national classification (if appropriate) Bachelor's Degree

- Dates (from – to) s.y. 2000 – s.y. 2005
- Name and type of organization providing education and training Luigi Lanfranchi High School, Via ai Cantieri, 2 – 16158 Genova (GE)
- Principal subjects / occupational skills covered Italian Literature, Mathematics, Physics, Science, Technical Drawing, English Language
- Title of qualification awarded Scientific Qualification
- Level in national classification (if appropriate) High School Leaving Qualifications

**PERSONAL SKILLS
AND COMPETENCES**

Acquired in the course of life and career but not necessarily covered by formal certificates and diplomas.

MOTHER TONGUE

OTHER LANGUAGES

Self-assessment
European level ()*

ENGLISH

**SOCIAL SKILLS
AND COMPETENCES**

Living and working with other people, in multicultural environments, in positions where communication is important and situations where teamwork is essential (for example culture and sports), etc.

**ORGANISATIONAL SKILLS
AND COMPETENCES**

Coordination and administration of people, projects and budgets; at work, in voluntary work (for example culture and sports) and at home, etc.

**TECHNICAL SKILLS
AND COMPETENCES**

With computers, specific kinds of equipment, machinery, etc.

**OTHER SKILLS
AND COMPETENCES**

Competences not mentioned above.

*Page 4 - Curriculum vitae of
PIACENTE Francesco*

ITALIAN

Comprehension				Speaking				Writing	
Listening		Reading		Oral interaction		Oral production			
B1	autonomous	C2	advanced	B2	autonomous	B1	autonomous	C1	advanced

(*) *Common European framework of reference for languages*

Ability to work in groups derived from the experience provided in laboratory during degree courses and at work.

I was a swim instructor for over 10 years engaging with preschooler children to the elderly. From this experience I acquired the ability to transfer knowledge to students.

Listening skills, teamwork and management arising from direct experience in organizing events for the Sports Club Sestri Swimming Centre (C.N.S.).

I obtained experience in planning and writing research protocols for using laboratory animals in pharmacokinetic and MTD studies of potential new drugs and activity tests. I have also gained experience in writing research projects to obtain funding and in writing scientific papers to peer-reviewed journals.

I handled every phase (Business plan, balance, marketing and financing) of a biomedical company foundation.

I have experience in training students and PhD students on GLP (Good Laboratory Practice).

Biomolecular techniques such as extraction techniques of total RNA and mRNA from cells and tissues, extraction and purification techniques of plasmid and genomic DNA, DNA amplification by PCR, qPCR, DNA and cDNA cloning, nucleic acid manipulation by restriction enzymes, recombinant DNA technologies (such as expression and purification of recombinant proteins), in vitro transcription of mRNA, methods for the total collagen analysis, spectrophotometric assays, cell viability assays, cell culture, gene silencing (siRNA, shRNA, CRISPR), transfection, transduction and transformation techniques.

I have a big experience in enzyme characterization, kinetic constants and K_i calculation for inhibiting molecules.

Gel electrophoresis, Western Blot, ELISA, analysis by HPLC, Glycomic and Glycoproteomic, electron impact mass spectrometry, MALDI, MALDI TOF/TOF and GC-MS.

Operative systems Windows ME, XP, Vista, 7, 8, 10: excellent knowledge

Microsoft Office Word, Excel, PowerPoint: excellent knowledge

ChemBioOffice: good knowledge

GraphPad Prism 5: good knowledge

Autodesk AutoCAD: good knowledge

ProgeSOFT IntelliCAD: good knowledge

Adobe Photoshop CS4: good knowledge

Adobe Illustrator CS4: good knowledge

Adobe Fusion 360: good knowledge

Internet and e-mail: excellent knowledge

Preliminary English Test (PET), University of Cambridge ESOL Examinations

Qualified as a Professional Biologist

Attendance certificate of Forensic Botany in collaboration with the Regional Cabinet of Scientific Police of Genoa

Licence of swim instructor level 2, Italian Swimming Federation (FIN)

DRIVING LICENCE(S)

Driver's license B

ADDITIONAL INFORMATION

- Referees

Prof. Alessio Nencioni (DIMI): +39 0103538964
Dr. Stuart Haslam (Imperial College) +4420-75945222
Prof. Michela Tonetti (DIMES): +39 0103538131
Prof. Marco Giovine (DISTAV): +39 01035338221
Dr. Marina Pozzolini: +39 01035338227

- Publications

Abbotto E, Scarano N, Piacente F, Millo E, Cichero E, Bruzzone S.
Virtual Screening in the Identification of Sirtuins' Activity Modulators.
Molecules. 2022 Sep 1;27(17):5641. doi: 10.3390/molecules27175641.

Astigiano C, Benzi A, Laugieri ME, Piacente F, Sturla L, Guida L, Bruzzone S, De Flora A.
Paracrine ADP Ribosyl Cyclase-Mediated Regulation of Biological Processes.
Cells. 2022 Aug 24;11(17):2637. doi: 10.3390/cells11172637.

Franco J, Piacente F, Walter M, Fratta S, Ghanem M, Benzi A, Caffa I, Kurkin AV, Altieri A, Herr P, Martínez-Bailén M, Robina I, Bruzzone S, Nencioni A, Del Rio A.
Structure-Based Identification and Biological Characterization of New NAPRT Inhibitors.
Pharmaceuticals (Basel). 2022 Jul 12;15(7):855. doi: 10.3390/ph15070855.

Ghanem MS, Caffa I, Del Rio A, Franco J, Parenti MD, Monacelli F, Cea M, Khalifa A, Nahimana A, Duchosal MA, Ravera S, Bertola N, Bruzzone S, Nencioni A, Piacente F.
Identification of NAPRT Inhibitors with Anti-Cancer Properties by In Silico Drug Discovery.
Pharmaceuticals (Basel). 2022 Jul 10;15(7):848. doi: 10.3390/ph15070848.

Piacente F, Bottero M, Benzi A, Vigo T, Uccelli A, Bruzzone S, Ferrara G.
Neuroprotective Potential of Dendritic Cells and Sirtuins in Multiple Sclerosis.
Int J Mol Sci. 2022 Apr 14;23(8):4352. doi: 10.3390/ijms23084352.

EIMokh O, Matsumoto S, Biniecka P, Bellotti A, Schaeuble K, Piacente F, Gallart-Ayala H, Ivanisevic J, Stamenkovic I, Nencioni A, Nahimana A, Duchosal MA.
Gut microbiota severely hampers the efficacy of NAD-lowering therapy in leukemia.
Cell Death Dis. 2022 Apr 8;13(4):320. doi: 10.1038/s41419-022-04763-3.

Vernazza S, Tirendi S, Passalacqua M, Piacente F, Scarfi S, Oddone F, Bassi AM.
An Innovative In Vitro Open-Angle Glaucoma Model (IVOM) Shows Changes Induced by Increased Ocular Pressure and Oxidative Stress.
Int J Mol Sci. 2021 Nov 9;22(22):12129. doi: 10.3390/ijms222212129.

Becherini P, Caffa I, Piacente F, Damonte P, Vellone VG, Passalacqua M, Benzi A, Bonfiglio T, Reverberi D, Khalifa A, Ghanem M, Guijarro A, Tagliafico L, Sucameli M, Persia A, Monacelli F, Cea M, Bruzzone S, Ravera S, Nencioni A.
SIRT6 enhances oxidative phosphorylation in breast cancer and promotes mammary tumorigenesis in mice.
Cancer Metab. 2021 Jan 22;9(1):6. doi: 10.1186/s40170-021-00240-1.

Caffa I, Spagnolo V, Vernieri C, Valdemarin F, Becherini P, Wei M, Brandhorst S, Zucal C, Driehuis E, Ferrando L, Piacente F, Tagliafico A, Cilli M, Mastracci L, Vellone VG, Piazza S, Cremonini AL, Gradaschi R, Mantero C, Passalacqua M, Ballestrero A, Zoppoli G, Cea M, Arrighi A, Odetti P, Monacelli F, Salvadori G, Cortellino S, Clevers H, De Braud F, Sukkar SG, Provenzani A, Longo VD, Nencioni A.
Fasting-mimicking diet and hormone therapy induce breast cancer regression.
Nature. 2020 Jul;583(7817):620-624. doi: 10.1038/s41586-020-2502-7. Epub 2020 Jul 15.

Cloux AJ, Aubry D, Heulot M, Widmann C, EIMokh O, Piacente F, Cea M, Nencioni A, Bellotti A, Bouzourène K, Pellegriin M, Mazzolai L, Duchosal MA, Nahimana A.
Reactive oxygen/nitrogen species contribute substantially to the antileukemia effect of APO866, a NAD lowering agent.
Oncotarget. 2019 Nov 19;10(62):6723-6738. doi: 10.18632/oncotarget.27336. eCollection 2019 Nov 19.

Gariglio M, Dabbou S, Crispo M, Biasato I, Gai F, Gasco L, Piacente F, Odetti P, Bergagna S,

Plachà I, Valle E, Colombino E, Capucchio MT, Schiavone A.

Effects of the Dietary Inclusion of Partially Defatted Black Soldier Fly (*Hermetia illucens*) Meal on the Blood Chemistry and Tissue (Spleen, Liver, Thymus, and Bursa of Fabricius) Histology of Muscovy Ducks (*Cairina moschata domestica*).

Animals (Basel). 2019 May 31;9(6). pii: E307. doi: 10.3390/ani9060307

Thongon N, Zucal C, D'Agostino VG, Tebaldi T, Ravera S, Zamporlini F, Piacente F, Moschoi R, Raffaelli N, Quattrone A, Nencioni A, Peyron JF, Provenzani A.

Cancer cell metabolic plasticity allows resistance to NAMPT inhibition but invariably induces dependence on LDHA.

Cancer Metab. 2018 Mar 8;6:1. doi: 10.1186/s40170-018-0174-7. eCollection 2018.

Damonte P, Sociali G, Parenti MD, Soncini D, Bauer I, Boero S, Grozio A, Holtey MV, Piacente F, Becherini P, Sanguineti R, Salis A, Damonte G, Cea M, Murone M, Poggi A, Nencioni A, Del Rio A, Bruzzone S.

SIRT6 inhibitors with salicylate-like structure show immunosuppressive and chemosensitizing effects.

Bioorg Med Chem. 2017 Oct 15;25(20):5849-5858. doi: 10.1016/j.bmc.2017.09.023. Epub 2017 Sep 19.

Piacente F, Caffa I, Nencioni A.

Nicotinic acid: a case for a vitamin that moonlights for cancer?

Cell Cycle. 2017 Aug 3;0. doi: 10.1080/15384101.2017.1360633.

Piacente F, Caffa I, Ravera S, Sociali G, Passalacqua M, Vellone VG, Becherini P, Reverberi D, Monacelli F, Ballestrero A, Odetti P, Cagnetta A, Cea M, Nahimana A, Duchosal M, Bruzzone S, Nencioni A.

Nicotinic Acid Phosphoribosyltransferase Regulates Cancer Cell Metabolism, Susceptibility to NAMPT Inhibitors, and DNA Repair.

Cancer Res. 2017 Jul 15;77(14):3857-3869. doi: 10.1158/0008-5472.CAN-16-3079. Epub 2017 May 15.

Piacente F, De Castro C, Jeudy S, Gaglianone M, Laugieri ME, Notaro A, Salis A, Damonte G, Abergel C, Tonetti MG.

The rare sugar N-acetylated viosamine is a major component of mimivirus fibers.

J Biol Chem. 2017 Mar 17. pii: jbc.M117.783217. doi: 10.1074/jbc.M117.783217

Piacente F, Gaglianone M, Laugieri ME and Tonetti MG.

The Autonomous Glycosylation of Large DNA Viruses.

Int. J. Mol. Sci. 2015, 16, 29315–29328; doi:10.3390/ijms161226169

Piacente F, De Castro C, Jeudy S, Molinaro A, Salis A, Damonte G, Bernardi C, Abergel C, Tonetti MG,

Giant virus Megavirus chilensis encodes the biosynthetic pathway for uncommon acetamido sugars.

J. Biol. Chem. jbc.M114.588947. First Published on July 17, 2014, doi:10.1074/jbc.M114.588947

Piacente F, Bernardi C, Marin M, Blanc G, Abergel C, Tonetti MG.

Characterization of a UDP-N-acetylglucosamine biosynthetic pathway encoded by the giant DNA virus Mimivirus.

Glycobiology. 2014 Jan;24(1):51-61. doi: 10.1093/glycob/cwt089. Epub 2013 Oct 9.

Bernardi C, Soffientini U, Piacente F, Tonetti MG.

Effects of microRNAs on fucosyltransferase 8 (FUT8) expression in hepatocarcinoma cells.

PLoS One. 2013 Oct 9;8(10):e76540. doi: 10.1371/journal.pone.0076540. eCollection 2013.

De Castro C, Molinaro A, Piacente F, Gurnon JR, Sturiale L, Palmigiano A, Lanzetta R, Parrilli M, Garozzo D, Tonetti MG, Van Etten JL.

Structure of N-linked oligosaccharides attached to chlorovirus PBCV-1 major capsid protein reveals unusual class of complex N-glycans.

Proc Natl Acad Sci U S A. 2013 Aug 20;110(34):13956-60. doi: 10.1073/pnas.1313005110. Epub 2013 Aug 5.

Piacente F, Marin M, Molinaro A, De Castro C, Seltzer V, Salis A, Damonte G, Bernardi C,

Claverie JM, Abergel C, Tonetti M.

Giant DNA virus mimivirus encodes pathway for biosynthesis of unusual sugar 4-amino-4,6-dideoxy-D-glucose (Viosamine)

J Biol Chem. 2012 Jan 27;287(5):3009-18. Epub 2011 Dec 8.

• Participation in Conferences

- FASEB Science Research Conference – The NAD+ Metabolism and Signaling Conference 2022, Steamboat Springs, CO, USA, 26-30 June 2022, Poster: **Identification of novel NAPRT inhibitors with anti-cancer properties by in silico drug discovery**
- AACR Annual Meeting 2018, Chicago 14-18 April 2018, Poster: **SIRT6 deletion slows mouse mammary tumorigenesis**
- 51st Annual Scientific Meeting of ESCI, Genoa 17-19 May 2017, Poster: **Nicotinic acid phosphoribosyltransferase is overexpressed in solid tumors and regulates cancer cell metabolism and susceptibility to FK866.**
- Pancreas final meeting, Camogli 2016, Lecture: **Nicotinic acid phosphorybosyltransferase (NAPRT): a new therapeutic target?**
- 1st European Summer School on Industrial Biotechnology (ESSIB 2014): Stability, Folding and Misfolding of Recombinant Proteins, University of Milano-Bicocca, Milan, Italy, October 6-10 2014.
- 25^a Riunione Nazionale “A. Castellani” dei Dottorandi di Ricerca in discipline Biochimiche, Brallo di Pregola (PV) 2013, Poster: **Mimivirus encodes the pathway for the biosynthesis of UDP-N-Acetylglucosamine.**
- Optic Within Life Sciences (OWLS), Genoa 2012.
- XIII Convegno-Scuola sulla Chimica dei Carboidrati (CSCC) Siena 2012, Lecture: **Glycoconjugates of Nucleo-Cytoplasmic Large Dna Viruses (NCLDV).**
- 1st SPECIAL Open Day Marine Biotechnology, Genoa 2011.
- SIB LLP Novara 2011, Lecture: **Identification of nucleotide-sugar biosynthetic pathways in the Nucleo-Cytoplasmic Large DNA Virus (NCLDV) mimivirus.**

• Attended Courses

- Advanced Course “Strategies to develop strong methods in HPLC and UHPLC – LC3” 20th June 2019 by Phenomenex.
- Advanced Course “Optimization of Chromatographic variables in HPLC and UHPLC – LC2” 14 May 2019 by Phenomenex.
- Advanced Course “Nutrition and Longevity, 1st edition” 26-27th May 2017 at University of Genoa – Department of Internal Medicine and Medical Specialties (DIMI).

• Grants

- 1 year Fondazione Umberto Veronesi Fellowship in Cancer Field 2017 obtained with the project proposal: “Nicotinate phosphoribosyltransferase (NAPRT) as a new target for treating triple negative breast cancer”.
- 1 year IBSA Foundation Fellowship in Dermatology 2016 obtained with the project proposal: “Preclinical evaluation of chemical SIRT6 inhibitors for treating field cancerization”.
- 6 months Erasmus Student Placement scholarship in the academic year 2013/2014.

• Patents

- WO/2017/162840
SENSITIZATION OF CANCER CELLS TO NAMPT INHIBITORS BY NICOTINIC ACID PHOSPHORIBOSYLTRANSFERASE NEUTRALIZATION.

• Public selections

- Winner of the Public Selection D.R. n. 3836 of the 11th November 2016 for an assignment of Postdoctoral position with subject: “NAMPT (Nicotinamide phosphoribosyl transferase) validation as target for cancer treatment”.
- Winner of the Public Selection D.R. n. 9658 of the 16th November 2015 for an assignment of

Postdoctoral position with subject: "New metabolic approaches to treat cancer based on fasting and intracellular NAD⁺ reduction".

- Winner of the Public Selection D.R. n. 1409 of the 10th November 2014 for an assignment of Postdoctoral position with subject: "Biomedical and biological characterization of small molecule SIRT6 inhibitors".

- Winner of the Comparative Selection D.D. n. 5/A of the 12th May 2011 for an assignment of external collaboration with subject: "cDNA cloning from marine invertebrates and development of expression system in bacteria and yeast cells".