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| curriculum vitaeeuropean format |
| Personal information |

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| Name, Surname |  | Michele Saviano |
| Address   |  | Istituto di Cristallografia- Consiglio Nazionale delle Ricerchevia Amendola 122/O 70126 Bari, ITALY |
| Telephone |  | **080 5929148** |
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| Work experience |
| Dates (from – to) |  | from 01/05/2010 to this date |
| Name and address of employer |  | Consiglio Nazionale delle Ricerche  |
| Type of business or sector |  | Research in the field of Biotechnology for Health (Design on structural basis of new drugs and diagnostics) and in Structural Chemistry and Biology  |
| Occupation or position held |  | Director of Institute  |
| Main activities and responsibilities |  | Director of Institute of Crystallography – Bari  |
| Dates (from – to) |  | from 01/01/2007 to 30/04/2010 |
| Name and address of employer |  | Consiglio Nazionale delle Ricerche |
| Type of business or sector |  | Research in the field of Biotechnology for Health (Design on structural basis of new drugs and diagnostics) and in Structural Chemistry and Biology  |
| Occupation or position held |  | Director of Research |
| Main activities and responsibilities |  | Director of Research CNR, (Chemical Sciences), at Institute of Biostructures and Bioimaging CNR Napoli |
| Dates (from – to) |  | from 03/2000 to 05/2000 and from 05/2001 to 07/2001 |
| Type of business or sector |  | Research in the field of Biotechnology for Health (Design on structural basis of new drugs and diagnostics) and in Structural Chemistry and Biology  |
| Occupation or position held |  | Visiting Professor |
| Main activities and responsibilities |  | Visiting Professor at Faculty of Sciences of University of Nancy “H. Poincaré”, Nancy France |
| Dates (from – to) |  | from 15/07/1998 to 31/12/2006 |
| Name and address of employer |  | Consiglio Nazionale delle Ricerche |
| Type of business or sector |  | Research in the field of Biotechnology for Health (Design on structural basis of new drugs and diagnostics) and in Structural Chemistry and Biology  |
| Occupation or position held |  | Senior Researcher |
| Main activities and responsibilities |  | Senior Researcher CNR, at Institute of Biostructures and Bioimaging CNR Napoli |
| Dates (from – to) |  | from 01/06/1995 to 31/08/1995 |
| Type of business or sector |  | Research in the field of Biotechnology for Health (Design on structural basis of new drugs and diagnostics) and in Structural Chemistry and Biology  |
| Occupation or position held |  | Visiting Researcher |
| Main activities and responsibilities |  | Visiting Researcher at Gustaf H.Carlson School of Chemistry, Clark University, Worchester, Massachusetts, USA |
| Dates (from – to) |  | from 28/12/1992 to 15/07/1998 |
| Name and address of employer |  | University of Naples "Federico II" |
| Type of business or sector |  | Research in the field of Biotechnology for Health (Design on structural basis of new drugs and diagnostics) and in Structural Chemistry and Biology  |
| Occupation or position held |  | Associated Researcher |
| Main activities and responsibilities |  | Associated Researcher of Inorganic and General Chemistry at Faculty of Science of University of Naples “Federico II”  |
| Dates (from – to) |  | from 09/1990 to 12/1990 |
| Type of business or sector |  | Research in the field of Biotechnology for Health (Design on structural basis of new drugs and diagnostics) and in Structural Chemistry and Biology  |
| Occupation or position held |  | Visiting Researcher |
| Main activities and responsibilities |  | Visiting Researcher at IBM Corporation "Scientific Engineering Computations Data Systems Division" in Kingston, New York, USA, |
| Dates (from – to) |  | from 16/06/1989 to 28/12/1992 |
| Name and address of employer |  | Consiglio Nazionale delle Ricerche |
| Type of business or sector |  | Research in the field of Biotechnology for Health (Design on structural basis of new drugs and diagnostics) and in Structural Chemistry and Biology  |
| Occupation or position held |  | Researcher |
| Main activities and responsibilities |  | Researcher CNR at the Centro di Studio di Biocristallografia (CNR) Napoli |

Other Experiences

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|   |  | Member of the Scientific Board of National Collection of Compounds and Chemical Screening Center Pomezia from 07/2013 to this dateProject Leader of Project "Design of new molecules with predetermined biochemical properties" at the CNR Department of Molecular Design from 06/2006 to 05/2010Board member of "Diagnostica e Farmaceutica Molecolari" DFM scarl. from 12/2007 to 2015President of Italian Association of Crystallography from 1/2012 to this dateSecretary of the CNR-IuCR (international Union of Crystallography) commission from 09/2011 to this dateMember of the external advisory board of National Biophotonics Imaging Platform- Ireland from 01/2009 to this date.Head of the Scientific Board of Centro Regionale di Competenza in Diagnostica e farmaceutica Molecolari- Napoli from 12/2005 to 04/2010Coordinator of Interdivisional Group in Structural Chemistry of Italian Chemical Society from 2002 to 2007.Member of the Scientific Board of Centro Regionale di Competenza in Diagnostica e Farmaceutica Molecolari- Napoli from 06/2003 to 04/2010Referee of Italian and International Project (MiUR, MAE, Regione Piemonte, CariParma, University of Padova, European Commission). |
| Education and training |
| Dates (from – to)  |  | 1983-88 Course of Industrial Chemistry at University of Naples, Faculty of Science |
| Name and type of organisation providing education and training |  | University of Naples "Federico II" |
| Title of qualification awarded |  | “Laurea” in Industrial Chemistry 110/110 summa cum laude. |
| Level in National classification  |  |  |
| Mother tongue |  | **Italian** |
| Other language  |  | **English** |
| *Self-assessment* |  | Understanding | **Speaking** | **Writing** |
|  *European level (\*)*  |  | Listening | Reading | Spoken interaction | Spoken production |  |

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| English |  | C1 | C1 | C1 | C1 | C1 |

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|  Research activities Research sectors |  | Dr. Saviano's research interests lie in structural biology and chemistry: the relationships between structure and activity of numerous bioactive systems have been the object of his investigations, carried out with a variety of experimental and theoretical techniques, for the understanding of the mechanism of action of biologically relevant systems |
| Recent Scientific Activities*.* |  | Recent Scientific Activities include: a) de novo protein, oligonucleotides and peptide design; b) rational design of conformationally constrained analogues of bioactive peptides with enhanced in vivo selectivity, affinity, and stability; c) development of computational procedures in the conformational analysis of bioactive molecules at different complexity; d) analysis with different computational techniques of modified oligonucleotides and their interaction with proteins or with DNA and RNA; d) chemistry and conformational properties of peptides containing non natural amino acid residues; e) study of the preferred conformations in solution (by NMR, FT-IR, CD) and in the crystal state (by X-ray diffraction) of bioactive molecular systems.He is author of about 200 full paper published on international journals, 2 patents, and many lectures to national and international congresses. His H-index value is 28 using Web of Science, and 29 using Google Scholar (3359 Citations).He has also established many collaborations with a great number of scientists, involved in chemistry of bioactive systems, all over the world. Furthermore he has many ongoing links with industries, both large internationally established firms and small and medium size Italian enterprises. |

**List of Publications Last 5 Years**

1. G Santulli, MF Basilicata, M De Simone, C Del Giudice, A Anastasio, D Sorriento, M Saviano, A Del Gatto, B Trimarco, C Pedone, L Zaccaro, and G Iaccarino. Evaluation of the anti-angiogenic properties of the new selective αVβ3 integrin antagonist RGDechiHCit. J Transl Med. (2011) Jan 13;9:7.
2. A Del Gatto, M De Simone, I de Paola, M Saviano and L Zaccaro Investigation of the Best Conditions to Obtain c(RGDfK) Peptide on Solid Phase Int J Pept Res Ther (2011) 17(1), 39-45.
3. C. Avitabile, L. Moggio, G. Malgieri, D. Capasso, S. Di Gaetano, M. Saviano, C. Pedone, and A. Romanelli “γ sulphate PNA (PNA S): Highly Selective DNA Binding Molecule Showing Promising Antigene Activity” PLoS One. (2012); 7(5):e35774.
4. G Scarì, F Porta, U Fascio, S Avvakumova, V Dal Santo, M De Simone, M Saviano, M Leone, A Del Gatto, C Pedone, and L Zaccaro “Gold nanoparticles capped by a GC-containing peptide functionalized with an RGD motif for integrin targeting”. Bioconjug Chem. (2012); 23(3):340-9.
5. D S Illera, S Suresh, M Moccia, G Bellini, M Saviano, and M F A Adamo “N-heterocyclic carbene catalysed homoenolate addition to 3-methyl-4-nitro-5-styrylisoxazoles” Tetrahedron Letters (2012), 53, no.14, 1808(4)
6. C. Avitabile, L. Moggio, G Malgieri, D Capasso, S Di Geatano, M Saviano, C Pedone, and A Romanelli, γ sulphate PNA (PNA S): highly selective DNA binding molecule showing promising antigene activity PLoS One (2012), 7(5), e35774
7. A Finotti, M Borgatti, V Bezzerri, E. Nicolis, I Lampronti, M Dechecchi, I Mancini, G Cabrini, M Saviano, C Avitabile, A Romanelli, and R Gambari. Effects of decoy molecules targeting NF-kappaB transcription factors in Cystic fibrosis IB3-1 cells: Recruitment of NF-kappaB to the IL-8 gene promoter and transcription of the IL-8 gene. Artif DNA PNA XNA. 2012 Apr 1;3(2):97-296
8. C Avitabile, M Saviano, L D'Andrea, N Bianchi, E Fabbri, E Brognara, R Gambari, and A Romanelli. Targeting pre-miRNA by Peptide Nucleic Acids: A new strategy to interfere in the miRNA maturation Artif DNA PNA XNA. 2012 Apr 1;3(2):88-96.
9. E Calce, L Monfregola, A Sandomenico, M Saviano and S De Luca. Fluorescence study for selecting specific ligands toward HER2 receptor: an example of receptor fragment approach. Eur J Med Chem. 2013 Mar;61:116-21.
10. M Pisano, I De Paola, V Nieddu, I Sassu, S Cossu, G Galleri, A Del Gatto, M Budroni, A Cossu, M Saviano, G Palmieri, L Zaccaro and C Rozzo. In vitro activity of the αvβ3 integrin antagonist RGDechi-hCit on malignant melanoma cells. Anticancer Res. 2013 Mar;33(3):871-9.
11. M Carotenuto, E Pedone, D Diana, P de Antonellis, S Džeroski, N Marino, L Navas, V Di Dato, MN Scoppettuolo, F Cimmino, S Correale, L Pirone, SM Monti, E Bruder, B Zenko, I Slavkov, F Pastorino, M Ponzoni, JH Schulte, A Schramm, A Eggert, F Westermann, G Arrigoni, B Accordi, G Basso, M Saviano, R Fattorusso and M Zollo. Neuroblastoma tumorigenesis is regulated through the Nm23-H1/h-Prune C-terminal interaction. Sci Rep. 2013;3:1351.
12. I Autiero, M Saviano and E. Langella In silico investigation and targeting of amyloid β oligomers of different size. Mol Biosyst. 2013 Aug;9(8):2118-24.
13. I Autiero, M Saviano and E Langella E. Molecular dynamics simulations of PNA-PNA and PNA-DNA duplexes by the use of new parameters implemented in the GROMACS package: a conformational and dynamics study. Phys Chem Chem Phys. 2014 Feb 7;16(5):1868-74.
14. E Calce, A Sandomenico, M Saviano, M Ruvo and S De Luca Cysteine co-oxidation process driven by native peptide folding: an example on HER2 receptor model system. Amino Acids. 2014 May;46(5):1197-206.
15. I. Autiero, M Saviano and E Langella. Conformational studies of chiral d-Lys-PNA and achiral PNA system in binding with DNA or RNA through a molecular dynamics approach Eur J Med Chem. 2014 Aug 6. pii: S0223-5234(14)00742-9.
16. D Capasso, I de Paola, A Liguoro, A Del Gatto, S Di Gaetano, D Guarnieri, M Saviano and L Zaccaro "RGDechi-hCit: αvβ3 selective pro-apoptotic peptide as potential carrier for drug delivery into melanoma metastatic cells" PloS one (2014), 9 (9), e106441.
17. D Comegna, I de Paola, M Saviano, A Del Gatto, and L Zaccaro "Straightforward Entry to S-Glycosylated Fmoc-Amino Acids and Their Application to Solid Phase Synthesis of Glycopeptides and Glycopeptidomimetics." Org Lett. (2015) 17(3), 640-643
18. E. Calce, P. Ringhieri, FA Mercurio, M Leone, V Bugatti, M Saviano, V Vittoria, and S De Luca "A biocompatible process to prepare hyaluronan-based material able to self-assemble into stable nano-particles" RSC Advances (2015), 5(37), 29573-29576.
19. G. Morelli, M. Saviano, and P Grieco, The renaissance era of peptides in drug discovery at the 14th Naples workshop on bioactive peptides Journal of Peptide Science (2015), May;21(5):321-2.
20. E Calce, L Monfregola, M Saviano, S De Luca. HER2-mediated anticancer drug delivery: strategies to prepare targeting ligands highly specific for the receptor. Curr Med Chem. (2015) ;22(21):2525-38.
21. FA Mercurio, C Di Natale, L Pirone, PL Scognamiglio, D Marasco, EM Pedone, M Saviano, M Leone. Peptide Fragments of Odin-Sam1: Conformational Analysis and Interaction Studies with EphA2-Sam. Chembiochem. (2015) Jul 27;16(11):1629-36
22. C Avitabile, A Accardo, P Ringhieri, G Morelli, M Saviano, G Montagner, E Fabbri, E Gallerani, R Gambari, A Romanelli. Incorporation of Naked Peptide Nucleic Acids into Liposomes Leads to Fast and Efficient Delivery Bioconjugate Chemistry (2015), 26(8), 1533-1541
23. P Ringhieri, G Morelli, M Saviano, G Montagner, E Fabbri, E Gallerani, R Gambari, A Romanelli Incorporation of Naked Peptide Nucleic Acids into Liposomes Leads to Fast and Efficient Delivery. Bioconjug Chem. 2015 Aug 19;26(8):1533-41.
24. M Moccia, MFA Adamo, M Saviano Insight on chiral, backone modified peptide nucleic acids: properties and biological activity. Artif DNA PNA XNA. (2014) Dec 15;5(3):e1107176.
25. M Moccia, L Piras, MFA Adamo, M Saviano Recent advances in peptide nucleic acids delivery. Artificial DNA: PNA & XNA, 2016, in press.
26. B Farina, I de Paola, L Russo, D Capasso, A Liguoro, A Del Gatto, M Saviano, PV Pedone, S Di Gaetano, G Malgieri, L Zaccaro, R Fattorusso. A Combined NMR and Computational Approach to Determine the RGDechi-hCit-αv β3 Integrin Recognition Mode in Isolated Cell Membranes. Chemistry (2016) Jan 11;22(2):681-93.
27. E Calce, FA Mercurio, M Leone, M Saviano, S De Luca S. Eco-friendly microwave-assisted protocol to prepare hyaluronan-fatty acid conjugates and to induce their self-assembly process. Carbohydr Polym. (2016) Jun 5;143:84-9
28. E Langella, E Calce, M Saviano, S De Luca Structural identification of an HER2 receptor model binding pocket to optimize lead compounds: a combined experimental and computational approach. Mol Biosyst. (2016) Jun 21;12(7):2159-67
29. P Ringhieri, C Avitabile, M Saviano, G Morelli, A Romanelli, A Accardo The influence of liposomal formulation on the incorporation and retention of PNA oligomers. Colloids Surf B Biointerfaces. (2016) May 12;145:462-469
30. A Sinopoli, A Giuffrida, MF Tomasello, ML Giuffrida, M Leone, F Attanasio, F Caraci, P De Bona, I Naletova, M Saviano, A Copani, G Pappalardo, E Rizzarelli. The Peptidomimetic trehalose conjugated Ac-LPFFD-Th as a strong suppressor of amyloid-β oligomer formation and cytotoxicity. Chembiochem. ChemBioChem (2016), 17(16), 1541-1549
31. G Valente, N Depalo, I de Paola, RM Iacobazzi, N Denora, V Laquintana, RComparelli, E Altamura, T Latronico, M Altomare, E Fanizza, M Striccoli, A Agostiano, M Saviano, A Del Gatto, L Zaccaro, M L Curri Integrin-targeting with peptide-bioconjugated semiconductor-magnetic nanocrystalline heterostructures Nano Research (2016), 9 (3), 644-662
32. C Avitabile, LD D'Andrea, M Saviano, A Romanelli Determination of the secondary structure of peptides in the presence of Gram positive bacterium S. epidermidis cells RSC Advances (2016) 6 (56), 51407-51410
33. GN Roviello, V Roviello, I Autiero, M Saviano Solid phase synthesis of TyrT, a thymine–tyrosine conjugate with poly (A) RNA-binding ability RSC Advances (2016) 6 (33), 27607-27613
34. C Avitabile, LD D'Andrea, M Saviano, M Olivieri, A Cimmino, A Romanelli, Alessandra Binding studies of antimicrobial peptides to Escherichia coli cells Biochemical and Biophysical Research Communications (2016), 478(1), 149-153
35. E Calce, E Petricci, M Saviano, S De Luca, Green microwave-assisted procedure to generate bio-based pectin materials Sustainable Chemistry and Pharmacy (2017), 5, 127-130.
36. G Balassone, F Bellatreccia, L Ottolini, A Mormone, C Petti, MR Ghiara, A Altomare, M Saviano, R Rizzi, Rosanna; L D'Orazio Sodalite-group minerals from the somma-vesuvius volcano (Naples, Italy): a combined EPMA, SIMS, and FTIR crystal-chemical study Canadian Mineralogist (2016), 54(3), 583-604
37. L Piras, C Avitabile, LD D'Andrea, M Saviano, A Romanelli, Detection of oligonucleotides by PNA-peptide conjugates recognizing the biarsenical fluorescein complex FlAsH-EDT2 Biochemical and Biophysical Research Communications (2017), 493(1), 126-131
38. P Disetti, L Piras, M Moccia, M Saviano, MFA Adamo, Model Studies for the Preparation of Oxepanes and Fused Compounds by Tandem [4+3] Cycloaddition/Ring-Opening Metathesis/Cross Metathesis European Journal of Organic Chemistry (2017), 2017(41), 6202-6208.