EUROPEAN CURRICULUM VITAE FORMAT

PERSONAL INFORMATION

Name	**CICERO DANIEL OSCAR**
Address	[redacted] Pomezia, 00071 (RM)
Telephone	+390672594835 [redacted]
E-mail	cicero@scienze.uniroma2.it
Nationality	Italian/Argentinean
Date of Birth	12/10/1961
Gender	Male

WORK EXPERIENCE

2016-2021	Scientific consultant IRBM S.p.A., Pomezia, Italy Pharmaceutical Company Research assistance
2014-present	Corresponding Investigator Consejo Nacional de Investigaciones Tecnológicas, Argentinal Research
2010-2011	Principal Investigator Consejo Nacional de Investigaciones Tecnológicas, Argentinal Research
2010-2012	Director of the Nuclear Magnetic Resonance Laboratory Fundación Instituto Leloir, Buenos Aires, Argentina Research
2004-present	Associate Professor Department of Chemical Science and Technologies, The University of Rome "Tor Vergata" Italy Research Group Leader, Lecturer Education, Research
2001-2004	Senior Research Fellow Department of Chemical Science and Technologies, The University of Rome "Tor Vergata" Italy Research Group Leader, Lecturer Education, Research
1992-2001	Research Fellow Merck Research Laboratories, Pomezia, Italy Pharmaceutical Industry Research
1990-1992	Postdoctoral Fellow Merck Research Laboratories, Pomezia, Italy Pharmaceutical Industry Research
1986-1989	Assistant Professor Organic Chemistry Department, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Argentina Research fellow, Lecturer

EDUCATION AND TRAINING

1990-1992 Postdoctoral Fellow
Merck Research Laboratories, Pomezia, Italy
Pharmaceutical Chemistry

1986-1990 Ph.D. in Chemistry
Universidad de Buenos Aires, Argentina
Organic Chemistry

1980-1985 MSc in Chemistry
Universidad de Buenos Aires, Argentina

PERSONAL SKILLS AND COMPETENCES

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

MOTHERTONGUE **SPANISH**

OTHER LANGUAGES

ENGLISH

• Reading skills EXCELLENT
• Writing skills EXCELLENT
• Oral expression skills EXCELLENT

ITALIAN

EXCELLENT
EXCELLENT
EXCELLENT

GERMAN

GOOD
GOOD
GOOD

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.

I HAVE WORKED IN A MULTIDISCIPLINARY AND MULTICULTURAL ENVIRONMENT FOR MORE THAN 30 YEARS. AT THE UNIVERSITY OF ROME, I LEAD AN INTERDISCIPLINARY RESEARCH GROUP. I HAVE SUPERVISED 37 UNDERGRADUATE STUDENTS, 14 PH.D. STUDENTS, 7 POSTDOCTORAL FELLOWS, AND ONE TECHNICIAN.

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.

PROJECTS COORDINATED AS PRINCIPAL INVESTIGATOR

Centro Nazionale Composti Chimici e Screening- Italy Research on Rare and Neglected Diseases, 2015-2020, € 250,000

Centro Nazionale Composti Chimici e Screening- Italy Hit ID using HTS, 2017-2019, € 60,000

Ministero dell'Istruzione, dell'Università e della Ricerca-Italy PdR 2013/C1.03 Research of enzymes that work at extreme temperatures of Antarctic microorganisms, 2014 € 32,900

For further information:
www.cedefop.eu.int/transparency
www.europa.eu.int/comm/education/index_it.html
www.eurescv-search.com

Centro Nazionale Composti Chimici e Screening- Italy NMR screening of proteins containing poly-Q for the discovery of therapeutic agents of neurodegenerative diseases. 2014, € 30,000.

Centro Nazionale Composti Chimici e Screening- Italy NMR Metabolomics applied to parasitic diseases. 2014, € 40,000.

Centro Nazionale Composti Chimici e Screening- Italy NMR screening to select and improve potential therapeutic compounds to treat Friedreich's Ataxia. 2013-2014, € 20,000.

Agencia Nacional de Promoción Científica y Tecnológica-Argentina PID-2011-006 Search, characterization, and evaluation of the biotechnological potential of enzymes active at low temperature from Antarctic organisms. 2011-2013. $150,000.

Agencia Nacional de Promoción Científica y Tecnológica-Argentina PICT-2009-0099 Using Nuclear Magnetic Resonance to explore key mechanisms of hepatitis C virus proteins. 2009-2011. $50,000.

Agencia Nacional de Promoción Científica y Tecnológica-Argentina IP-PRH07-72 Fortalecimiento de las Áreas Estratégicas de Biomoléculas y Neurociencias 2008 $$60,000.

Agencia Nacional de Promoción Científica y Tecnológica-Argentina PME06-76. Biomolecular Nuclear Magnetic Resonance Unit. 2007 $1,000,000.

Ministero degli Affari Esteri-Italy. Lotta al cancro da Papilloma virus umano ceppo HPV16. Uno Studio di Spettroscopia NMR del meccanismo molecolare di regolazione di E2 della trascrizione virale. 2006 € 112,000.

Merck Research Laboratories-Italy. Structural studies of NS3 protease and complexes. 2005 € 35,000.

Ministero dell'Istruzione, dell'Università e della Ricerca-Italy Structural studies of α-dystroglycan, a natively unfolded protein 2004 € 40,000. Role: Co-Investigator.

Centro Argentino Brasileño de Biotecnología-CABBIO Functional and structural characterization of proteins and domains of dengue virus RNA as possible targets for developing antiviral drugs. 2001, $30,000.

TECHNICAL SKILLS AND COMPETENCES

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

I have made key contributions in the following research fields:

- ✓ Synthesis of modified carbohydrates and nucleosides as potential use in drug discovery. In particular, 2'-modified nucleosides were used to build new antisense DNA molecules.
- ✓ Structure of proteins and their complexes with small molecules, peptides, DNA, lipids, etc. I have studied the hepatitis C NS3 protease, and the studies conducted on its structure significantly impacted the discovery of Grazoprevir, an antiviral produced by Merck. On the other hand, different studies on the key regulator E2 of the human papillomavirus helped us understand its function during viral replication.
- ✓ Methods and experiments in NMR, both for small and large molecules. The algorithm NAMFIS is used by many research groups and companies to study the presence of multiple conformations in solution.
- ✓ In the field of metabolomics, we are carrying out studies to understand the mechanism of drugs' action and the possible discovery of biomarkers to improve the diagnosis and prognosis of diseases like bladder and prostate cancer and different cardiovascular diseases.

PUBLICATIONS

129 papers in ISI peer-reviewed journals (21 in the last five years)
H-index (Scopus): 25
Total citations (Scopus): 2241

My papers are primarily published in the field of Biochemistry; Genetics, and Molecular Biology; Chemistry; Pharmacology, Toxicology, and Pharmaceutics; Chemical Engineering; Immunology and Microbiology; Materials Science; Medicine; Physics and Astronomy; and Agricultural and Biological Sciences.

RELEVANT PUBLICATIONS

1. Comparative metabolic profiling by 1H-NMR spectroscopy analysis reveals the adaptation of S. mansoni from its host to in vitro culture conditions: a pilot study with ex vivo and GSH-supplemented medium-cultured parasites. V. Fustaino, R. Gimmelli, A. Guidi, S. Lentini, F. Saccoccia, G. Petrella, D.O. Cicero, G. Ruberti. Parasitol. Res. doi.org/10.1007/s00436-022-07426-6, (2022).
2. Urinary metabolic markers of bladder cancer: a reflection of the tumor or response of the body? G. Petrella, G. Ciufolini, R. Vago, D.O. Cicero. Metabolites, 11, 756 (2021).
3. A Pilot Study on the 1H-NMR Serum Metabolic Profile of Takotsubo Patients Reveals Systemic Response to Oxidative Stress. D. Vanni, N. Viceconte, G. Petrella, F.G. Biccirè, F. Pelliccia, G. Tanzilli, D.O. Cicero. Antioxidants, 10, 1982 (2021).
4. Personalized metabolic profile by synergic use of NMR and HRMS. G. Petrella, C. Montesano, S. Lentini, G. Ciufolini, D. Vanni, R. Speziale, A. Salonia, F. Montorsi, V. Summa, R. Vago, L. Orsatti, E. Monteagudo, D.O. Cicero. Molecules, 26, 4167 (2021).
5. Drug effects on metabolic profiles of Schistosoma mansoni adult male parasites detected by 1H-NMR spectroscopy. A. Guidi, G. Petrella, V. Fustaino, F. Saccoccia, S. Lentini, R. Gimmelli, G. Di Pietro, A. Bresciano, D.O. Cicero, G. Ruberti. PLoS Negl Trop Dis, 14: e0008767 (2020).
6. The interplay between oxidative phosphorylation and glycolysis as a potential marker of bladder cancer progression. G. Petrella, G. Ciufolini, R. Vago, D.O. Cicero. Int J Mol Sci, 21, 8107 (2020).
7. Early metabolic response to acute myocardial ischemia in patients undergoing elective coronary angioplasty. S. Di Marino, N. Viceconte, A. Lembo, V. Summa, G. Tanzilli, V. Raparelli, G. Truscelli, E. Mangieri, C. Gaudio, D.O. Cicero, Open Heart, DOI: 10.1136/openhrt-2017-000709 (2018).

TOP HIGH IMPACT PUBLICATIONS (IF 7-15)

1. Cyclic phosphopantothenic acid prodrugs for treatment of pantothenate kinase associated neurodegeneration. G. Auciello, A. Di Marco, O. Gonzalez Paz, S. Malancona, S. Harper, M. Beconi, I. Rossetti, A. Ciammaichella, P. Fezzardi, A. Vecchi, E.E. Bracacel, D.O. Cicero, E. Monteagudo, D. Elbaum. J. Med. Chem., 63, 15785-15801 (2020).
2. Chemical characterization and surface properties of a new bioemulsifier produced by Pedobacter sp. strain MCC-Z. T. Beltrani, S. Chiavarini, D.O. Cicero, M. Grimaldi, C. Ruggeri, E. Tamburini, C. Cremisini. Int. J. Biol. Macromol.,72, 1090-1096 (2014).
3. The discodermolide hairpin structure flows from conformationally stable modular motifs. A.S. Jogalekar, F.H. Kriel, Q. Shi, B. Cornett, D.O. Cicero and J.P. Snyder. J. Med. Chem., 53, 155-165 (2010).
4. Relationship among ligand conformations in solution, in the solid state, and at the Hsp90 binding site: geldanamycin and radicicol. P. Thepchatri, T. Eliseo, D.O. Cicero, D. Myles and J.P. Snyder, J. Am. Chem. Soc., 129, 3127-3134 (2007).
5. Conformations of Laulimalide in DMSO-d6. P. Thepchatri, D.O. Cicero, E. Monteagudo, A. K. Ghosh, B. Cornett, E. R. Weeks and J. P. Snyder, J. Am. Chem. Soc., 127, 12838-12846 (2005).
6. Structural rearrangements of the two domains of Azotobacter vinelandii Rhodanese upon sulfane sulfur release: Essential molecular dynamics, 15N NMR relaxation and deuterium exchange on the uniformly labeled protein. D.O. Cicero, S. Melino, M. Orsale, G. Brancato, A. Amadei, F. Forlani, S. Pagani and M. Paci, Int. J. Biol. Macromol., 33, 193-201 (2003).
7. The conformations of Discodermolide in DMSO. E. Monteagudo, D. O. Cicero, B. Cornett, D.C. Myles and J.P. Snyder, J. Am. Chem. Soc., 123, 6929-6930 (2001).
8. The conformations of Taxol in Chloroform. J. P. Snyder, N. Nevins, D.O. Cicero, and J. Jansen, J. Am. Chem. Soc. 122, 724-725 (2000).
9. Inhibitor binding induces active site stabilisation of the HCV NS3 protein serine protease domain. G. Barbato, D.O. Cicero, F. Cordier, F. Narjes, B. Gerlach, S. Sambucini, S. Grzesiek, V. G. Matassa, R. De Francesco and Bazzo, R., Embo J., 19, 1195-1206 (2000).

10. NMR analysis of molecular flexibility in solution (NAMFIS): a new method for the study of complex distributions of rapidly exchanging conformations. Application to a 13-residue peptide with an 8 residue loop. D.O. Cicero, G. Barbato and R. Bazzo, J. Am. Chem. Soc., 117, 1027-1033 (1995).

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV