DIPARTIMENTO DI CHIMICA E TECNOLOGIE DEL FARMACO
CURRICULUM DIDATTICO-SCIENTIFICO DEL PROF. SSA ROBERTA COSTI

DATI PERSONALI

Nome e Cognome	**ROBERTA COSTI**
Luogo e data di nascita:	Roma 13 luglio 1966
Stato Civile:	
Dipartimento	Di chimica e tecnologie del farmaco
Indirizzo	
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Settore Scientifico-Disciplinare: CHIM-08
Orario di Ricevimento: mercoledì dalle 14 alle 15

ATTUALE POSIZIONE

- Professore associato

CARRIERA E TITOLI

1991-1994 dottorato di ricerca in scienze farmaceutiche
1994-1995 borsista CNR
1995-1997 borsista ISS
1998-2000 Contratto di ricerca presso l'università di Salerno
2000-2005 ricercatore universitario presso l'università di Roma " La Sapienza"
2005-ad oggi professore associato

ATTIVITA' DIDATTICA

1) Analisi chimico farmaceutica e tossicologica II (corso di laurea in CTF)
2) Progettazione dei farmaci (corso di laurea in Farmacia)
3) Chimica farmaceutica del Sistema nervoso centrale mod. II (scuola di specializzazione in Farmacia Ospedaliera)

ATTIVITA' SCIENTIFICA

1) ricerche su chemioterapici

- ***A. ricerche su composti ad attività antivirale***
- ***B. ricerche su composti ad attività antimicobatterica***
- ***C. ricerche su composti ad attività antitumorale***

2) ricerche su sostanze attive sul S.N.C.

PUBBLICAZIONI SCIENTIFICHE (max 30 su un totale di 70)

1.A. Tafi, J. Anastassopoulou, T. Theophanides, M. Botta, F. Corelli, S. Massa, M. Artico, R. Costi, R. Di Santo, R. Ragno.
Molecular Modeling of Azole Antifungal Agents Active Against *Candida albicans*. 1. A Comparative Molecular Field Analysis Study.
J. Med. Chem. **1996**, *39*, 1227-1235. **DOI:** 10.1021/jm950385+ I.F. 5,207

2.M. Artico, R. Di Santo, R. Costi, S. Massa, F. Scintu, A. G. Loi, A. De Montis, P. La Colla.
1-Arylsulfonyl-3-(◎-hydroxybenzyl)-1*H*-pyrroles, a Novel Class of Anti-HIV-1 Reverse Transcriptase Inhibitors.
Bioorg. Med. Chem. Lett. **1997**, *7*, 1931-1936. **DOI**:10.1016/S0960-894X(97)00340-5

3.R. Di Santo, R. Costi, M. Artico, S. Massa, M. E. Marongiu, A. G. Loi, M. Putzolu, P. La Colla.
1,2,5-Benzothiadiazepine and Pyrrolo[2,1-*d*][1,2,5]benzothiadiazepine Derivatives with Anti-HIV-1 Activity.
Antiviral. Chem. Chemother. **1998**, *9*, 127-137.

4.M. Artico, R. Di Santo, R. Costi, E. Novellino, G. Greco, S. Massa, E. Tramontano, M. E. Marongiu, A. De Montis, P. La Colla.
Geometrically and Conformationally Restrained Cinnamoyl-Compounds as Inhibitors of HIV-1 Integrase: Synthesis, Biological Evaluation and Molecular Modeling.
J. Med. Chem. **1998**, *41*, 3948-3960. **DOI:** 10.1021/jm9707232, I.F. 5,207

5.R. Di Santo, R. Costi, M. Artico, S. Massa, G. Lampis, D. Deidda, R. Pompei.
Pyrrolnitrin and Related Pyrroles Endowed with Antibacterial Activities Against *Mycobacterium Tuberculosis*.
Bioorg. Med. Chem. Lett. **1998**, *8*, 2931-2936. **DOI**:10.1016/S0960-894X(98)00526-5

6.R. Costi, R. Di Santo, M. Artico, S. Massa, A. Lavecchia, T. Marceddu, L. Sanna, P. La Colla, M. E. Marongiu.
Structure-Activity Relationship Studies on Potential Non-Nucleoside DABO-like Inhibitors of HIV-1 Reverse Transcriptase.
Antiviral Chem. Chemother. **2000**, *11*, 117-133.

7.R. Ragno, G. R. Marshall, R. Di Santo, R. Costi, S. Massa, R. Pompei, M. Artico. Antimycobacterial Pyrroles: Synthesis, Anti-*Mycobacterium tuberculosis* Activity and QSAR Studies.
Bioorg. Med. Chem. **2000**, *8*, 1423-1432. **DOI**:10.1016/S0968-0896(00)00061-4

8.R. Cirilli, R. Costi, R. Di Santo, R. Ferretti, F. La Torre, L. Angiolella, M. Micocci. Analytical and Semipreparative Enantiomeric Separation of Azole Antifungal Agents by High-Performance Liquid Chromatography on Polysaccharide-Based Chiral Stationary Phases - Application to *in vitro* Biological Studies.
J. Chromatography Sec. A **2002**, *942*, 107-114. **DOI**:10.1016/S0021-9673(01)01401-7

9.R. Di Santo, R. Costi, M. Artico, S. Massa, R. Ragno, G. R. Marshall, P. La Colla. Design Synthesis and QSAR Studies on of *N*-Aryl Heteroarylisopropanolamines, a New Class of non Peptidic HIV-1 Protease Inhibitors.
Bioorg. Med. Chem. **2002**, 10, 2511-2526. **DOI**:10.1016/S0968-0896(02)00119-0

10.A. Tafi, R. Costi, M. Botta, R. Di Santo, F. Corelli, S. Massa, A. Ciacci, F. Manetti, M. Artico.
Antifungal Agents. 10. New Derivatives of 1-[(Aryl)[4-aryl-1*H*-pyrrol-3-yl]methyl]-1*H*-imidazole, Synthesis, Anti-*Candida* Activity, and Quantitative Structure-Activity Relationship Studies.
J. Med. Chem. **2002,** *45*, 2720-2732. **DOI:** 10.1021/jm011087h I.F. 5,207

11.R. Cirilli, R. Costi, R. Di Santo, M. Artico, A. Roux, B. Gallinella, L. Zanitti, F. La Torre. Enantioselective liquid chromatography of C_3-chiral 2,3-dihydro-1,2,5-benzothiadiazepin-4(5H)-one and thione 1,1-dioxides on polyacrylamide- and polysaccaride-based chiral stationary phases.
J. Chromatography Sec. A **2003**, *993*, 17-28. **DOI**:10.1016/S0021-9673(03)00321-2

12.R. Costi, R. Di Santo M. Artico, S. Massa, R. Ragno, R. Loddo, M. La Colla, E. Tramomtano, P. La Colla, A. Pani. 2,6-Bis(3,4,5-trihydroxybenzylidene) derivatives of cyclohexanone: novel potent HIV-1 integrase inhibitors that prevent HIV-1 multiplication in cell-based assays.
Bioorg. Med. Chem. **2004**, *12*, 199-215. **DOI**:10.1016/j.bmc.2003.10.005

13.R. Costi, R. Di Santo, M. Artico, A. Roux, R. Ragno, S. Massa, E. Tramontano, M. La Colla, R. Loddo, M. E. Marongiu, A. Pani, P. La Colla.
6-Aryl-2,4-dioxo-5-hexenoic Acids, Novel Integrase Inhibitors Active Against HIV-1 Multiplication in Cell-Based Assays.

Bioorg. Med. Chem. Lett. **2004**, *14*, 1745-1749. **DOI**:10.1016/j.bmcl.2004.01.037

14.E. Tramontano, F. Esposito, R. Badas, R. Di Santo, R. Costi, P. La Colla.
6-[1-(4-Fluorophenyl)methyl-1H-pyrrol-2-yl)]-2,4-dioxo-5-hexenoic acid ethyl ester a novel diketo acid derivative which selectively inhibits the HIV-1 viral replication in cell culture and the ribonuclease H activity in vitro.
Antiviral Res. **2005**, *65*, 117-124. **DOI**:10.1016/j.antiviral.2004.11.002

15.R. Di Santo, R. Costi, A. Roux, M. Artico, O. Befani, T. Meninno, E. Agostinelli, P. Palmegiani, P. Turini, R. Cirilli, R. Ferretti, B. Gallinella, F. La Torre.
Design, Synthesis and Biological Activities of Pyrrolylethanoneamine Derivatives, a Novel Class of MAO Inhibitors.
J. Med. Chem. **2005**, *48*, 4220-4223. **DOI:** 10.1021/jm050172c I.F. 5,207

16.R. Di Santo, A. Tafi, R. Costi, M. Botta, M. Artico, F. Corelli, M. Forte, F. Caporuscio, L. Angiolella, A. T. Palamara.
Antifungal Agents. 11. *N*-Substituted Derivatives of 1-[(Aryl)(4-aryl-1*H*-pyrrol-3-yl)methyl]-1*H*-imidazole, Synthesis, Anti-*Candida* Activity and QSAR Studies.
J. Med. Chem. **2005**, *48*, 5140-5153. **DOI:** 10.1021/jm048997u, I.F. 5,207

17.G. A. Locatelli, R. Di Santo, E. Crespan, R. Costi, A. Roux, U. Hübscher, I. Shevelev, G. Blanca, G. Villani, S. Spadai, G. Maga.
Diketo hexenoic acid derivatives are novel selective non-nucleoside inhibitors of mammalian terminal deoxynucleotidyl transferases, with potent cytotoxic effect against leukemic cells.
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18.R. Di Santo, M. Fermeglia, M. Ferrone, M. S. Paneni, R. Costi, M. Artico, A. Roux, M. Gabriele, K. D. Tardif, A. Siddiqui, S. Pricl.
Simple but Highly Effective Three-Dimensional Chemical-Feature-Based Pharmacophore Model for Diketo Acid Derivatives as Hepatitis C Virus RNA-Dependent RNA Polymerase Inhibitors.
J. Med. Chem. **2005**, *48*, 6304-6314. **DOI:** 10.1021/jm0504454 I.F. 5,207

19.R. Di Santo, R. Costi, M. Artico, R. Ragno, A. Lavecchia, E. Novellino, E. Gavuzzo, F. La Torre, R. Cirilli, R. Cancio, G. Maga.
Design, Synthesis, Biological Evaluation, and Molecular Modeling Studies on TIBO-Like Cyclic Sulfones as Novel Non-Nucleoside HIV-1 Reverse Transcriptase Inhibitors.

Chem. Med. Chem. **2006**, *1*, 82-95. **DOI**: 10.1002/cmdc.200500020

20.R. Di Santo, R. Costi, A. Roux, M. Artico, A. Lavecchia, L. Marinelli, E. Novellino, L. Palmisano, M. Andreotti, R. Amici, C. M. Galluzzo, L. Nencioni, A. T. Palamara, Y. Pommier, C. Marchand.
Novel Bifunctional Quinolonyl Diketo Acid Derivatives as HIV-1 Integrase Inhibitors: Design, Synthesis, Biological Activities and Mechanism of Action
J. Med. Chem. **2006**, *49*, 1939-1945. **DOI:** 10.1021/jm0511583 I.F. 5,207

21.R. Bona, M. Andreotti, V. Buffa, P. Leone, C. M. Galluzzo, R. Amici, L. Palmisano, M. G. Mancini, Z. Michelini, R. Di Santo, R. Costi, A. Roux, Y. Pommier, C. Marchand, S. Vella, A. Cara.
Development of a Human Immunodeficiency Virus Vector-Based, Single-Cycle Assay for Evaluation of Anti-Integrase Compounds.
Antimicrobial Ag. Chemother. **2006**, 50, 3407-3417. **DOI**:10.1128/AAC.00517-06 I.F 4,672

22.R. Di Santo, R. Costi, M. Artico, G. Miele, A. Lavecchia, E. Novellino, A. Bergamini, R. Cancio, G. Maga.
Arylthiopyrrole (AThP) Derivatives as Non-Nucleoside HIV-1 Reverse Transcriptase Inhibitors. Synthesis, Structure-Activity Relationships and Docking Studies. Part 1.
Chem. Med. Chem. **2006**, *1*, 1367-1378. **DOI**: 10.1002/cmdc.200600119

23.A. Lavecchia, R. Costi, M. Artico, G. Miele, E. Novellino, A. Bergamini, E. Crespan, G. Maga, R. Di Santo.
Arylthiopyrrole (AThP) Derivatives as Non-Nucleoside HIV-1 Reverse Transcriptase Inhibitors. Synthesis, Structure-Activity Relationships and Docking Studies. Part 2.
Chem. Med. Chem. **2006**, *1*, 1379-1390. **DOI**: 10.1002/cmdc.200600122

24.A. A. Johnson, C. Marchand, S. S. Patil, R. Costi, R. Di Santo, T. R. Burke, Jr., Y. Pommier.
Probing HIV-1 integrase inhibitor binding sites with position-specific integrase-DNA cross-linking assays.
Mol. Pharmacol. **2007**, *71*(3), 893-901. **DOI**:10.1124/mol.106.030817 I:F.4,725

25.R. Costi, R. Di Santo, M. Artico, G. Miele, P. Valentini, E. Novellino, A. Cereseto.
Cynnamoyl compounds as simple molecules that inhibit p300 histone acetyltransferase.

J. Med. Chem. **2007**, *50*, 1973-1977. **DOI:** 10.1021/jm060943s I.F. 5,207

26.S. B. Jensen, R. Di Santo, A. K. Olsen, K. Pedersen, R. Costi, R. Cirilli, P. Cumming.
Synthesis and cerebral uptake of 1-(1-[^{11}C]methyl-1*H*-pyrrol-2-yl)-2-phenyl-2-(1-pyrrolidinyl)ethanone a novel tracer for positron emission tomography studies of monoamine oxidase type A.
J. Med. Chem. **2008**, *51*, 1617-1622. **DOI:** 10.1021/jm701378e I.F. 5,207

27.K. Terrazas-Aranda, Y. Van Herrewege, D. Hazuda, P. Lewi, R. Costi, R. Di Santo, A. Cara, G. Vanham.
Human immunodeficiency virus type 1 (HIV-1) integration: a potential target for microbicides to prevent cell-free or cell-associated HIV-1 infection.
Antimicrob. Agents Chemother. **2008**, *52*, 2544-2554. **DOI**:10.1128/AAC.01627-07 I.F 4,672

28.R. Di Santo, R. Costi A. Roux, G. Miele, G. Cuzzucoli Crucitti, A. Iacovo, F. Rosi, A. Lavecchia,[*,7] L. Marinelli, C. Di Giovanni, E. Novellino, L. Palmisano, M. Andreotti, R. Amici, C. M. Galluzzo, L. Nencioni, A. T. Palamara, Y. Pommier, C. Marchand.
Novel quinolinonyl diketo acid derivatives as HIV-1 integrase inhibitors: design, synthesis and biological activities.
J. Med. Chem. **2008**, *51*, 4744-4750. **DOI:** 10.1021/jm8001422 I.F. 5,207

29..Z. Michelini , C. M. Galluzzo, D. R. Negri, P. Leone , R. Amici , R. Bona, V. Summa, R. Di Santo, R. Costi, Y. Pommier, C. Marchand, L. Palmisano, S. Vella, A. Cara.
Evaluation of HIV-1 integrase inhibitors on human primari macrophages using a luciferase-based single-cycle phenotypic assay.
J. Virol. Methods **2010**, *168*, 272-276. **DOI**:10.1016/j.jviromet.2010.06.004 I.F 2,139

30. Cheng, DH ; Valente, S ; Castellano, S; Sbardella, G ; Di Santo, R ; Costi, R ; Bedford, MT; Mai, A
Novel 3,5-Bis(bromohydroxybenzylidene)piperidin-4-ones as Coactivator-Associated Arginine Methyltransferase 1 Inhibitors: Enzyme Selectivity and Cellular Activity
JOURNAL OF MEDICINAL CHEMISTRY **2011 ,** 54 , 4928-4932 **DOI:** 10.1021/jm200453n **I.F. 5,207**