

**Allegato alla domanda di partecipazione**  
**Curriculum formativo, didattico, scientifico e professionale del candidato**

**Dichiarazione sostitutiva di certificazioni**

(Art. 46, D.P.R. 28 dicembre 2000 n. 445)

**Dichiarazione sostitutiva dell'atto di notorietà**

(da sottoscrivere davanti all'impiegato addetto o da presentare o spedire con la fotocopia di un documento di identità)

(Art. 47, D.P.R. 28 dicembre 2000 n. 445)

Estremi del bando di selezione	CONFERIMENTO DI N. 1 ASSEGNO DI RICERCA ART. 22 L. 30.12.10 N. 240 (TIPO B - ASSEGNI SU ALTRI FONDI) AREA 06 - SCIENZE MEDICHE S.C. 06/A3-MICROBIOLOGIA E MICROBIOLOGIA CLINICA – S.S.D. MED/07. TITOLO DEL PROGETTO: “INIBIZIONE NATURALE E FARMACOLOGICA DELLE FASI PRECOCI DELLA REPLICA VIRALE (VIRSUDNET)” RESPONSABILE SCIENTIFICO: PROF. ALDO MANZIN – CODICE SELEZIONE: 46A_20
Informazioni aggiornate al	31/07/2020
Nome e Cognome	GIUSEPPINA SANNA
Data di nascita	06/02/1979

Si raccomanda di indicare con precisione tutti gli elementi valutabili ai sensi del bando di selezione (aggiungere o togliere righe secondo necessità).

**PROFESSIONAL EXPERIENCE**

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- 03/09/2018 - 31/12/2018 **Department of Chemistry and Pharmacy, UNISS Sassari, Italy**
- 21/12/2017 - 20/06/2018 **Fellowship:** "New designed Triazoloquinolones in combination with Pgp inhibitors as useful chemical probe to investigate quinolone resistance in *Mycobacterium tuberculosis*: an approach to face an old reemerging disease with new tools"
- 01/12/2015 – 30/11/2017 **Department of Biomedical Science, UNICA Cagliari, Italy**  
**Post-doc Fellowship:** MC1220, setting up of predictive assays for drug discovery of active compounds against *Flaviviridae*, *Bunya*, *Paramyxovirus* and *Filoviridae*
- 30/05/2016 – 31/06/17 **Columbia University Medical Center, (CUMC) Departments of Pediatrics Infectious Diseases, New York City, NY**  
**Adjunct Associate Research Scientist:** "Mechanisms of entry and membrane fusion mediated by Ebola virus, Influenza and Parainfluenza virus"
- 05/11/2014 - 04/11/2015 **Department of Biomedical Science, UNICA Cagliari, Italy**  
**Post-doc Fellowship:** Development of a natural extract with anti-retroviral activity to prevent sexual HIV transmission/acquisition"
- 01/2014 -03/2014 **Institute of Virology, Slovak Academy of Sciences Bratislava, SK**  
**Visiting Researcher**
- 02/11/2012 - 01/11/2014 **Neuroscienze Pharmaness SCARL / Dept of Biomedical Science, UNICA Pula-Cagliari, Italy**  
**Post-doc Fellowship:** Development of a natural extract with anti-retroviral activity to prevent sexual HIV transmission/acquisition, both in ex vivo cell cultures and in cervicovaginal mucosa explants"

- 10/09/2012 - 27/09/12 **Dept of Biomedical Science, UNICA / Cagliari, Italy**  
**Contract for occasional work, "Evaluation of the antiviral activity of a natural extract in MT4 cells infected with different multiplicity of infection"**
- 15/01/2010-15/01/2012 **Regione Autonoma della Sardegna (RAS L.R . 7/2007)/ Cagliari, Italy**  
**Host Institution, Department of Biomedical Science, UNICA**  
**Researcher (Principal Investigator): "Study of new inhibitors of RNA virus"**
- 07/02/2007 -14/01/2010 **Department of Biomedical Sciences and Technologies Cagliari, Italy**  
**Post-doctoral Fellowship: "Genomic analysis of drug resistant mutants and molecular simulation techniques for defining the molecular basis of drug resistance applied to the development of new antiviral drugs"**
- 02/01/2007 -31/01/2007 **Department of Experimental Biology, Cagliari, Italy**  
**Co-ordinated on going collaboration contract, "BIOMEDICINA - Development of methodologies for the modeling and study of drugs and biopharmaceuticals"**

## **EDUCATION**

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- 11/2003 - 11/2006 **University of Cagliari, Cagliari, Italy**  
 PhD in Chemotherapy Of Viral Infections, awarded 15/01/2007  
"Selection and development of microbicides for mucosal use to prevent sexual HIV transmission/acquisition"
- 07/05/2003 **University of Cagliari, Cagliari, Italy**  
 Master's Degree in Biological Sciences at the University of Cagliari  
Final mark: 110/110 e lode. Thesis: SAR Studies and biological evaluation of New Pyridoisquinolindione and Dihydrothienoquinolindione Derivatives with Potent Cytotoxic Activity"
- 02/05/2002 - 02/05/2003 Thesis internship at the Microbiology and Virology Section of the Department of Biomedical Sciences, University of Cagliari

## **TRAINING**

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- 06/2003 -11/2003 **Idenix Pharmaceuticals (L. 196/97, art.18, D.M. n°142/25-03-98, Circular n°92/15-07-98) - Dept of Biomedical Science, UNICA, Cagliari, Italy**  
*Training in Pharmaceutical Company*
- 2003 **University of Cagliari, Cagliari, Italy**  
*Achievement of the professional licence of Biologist*
- 02/2012- 08/2012 **Clinical Analysis Laboratory (Dr. Livio Mereu), Assemini, Italy**  
*Training in Clinical laboratory*
- 2015 **The Health Physics and Radiation Protection unit, Department of Physic, University of Cagliari, Cagliari, Italy**  
*Certificate of safe handling of radioactive materials training*
- 06/2016 **Columbia University Medical Center, (CUMC) Departments of Pediatrics Infectious Diseases, New York City, NY**  
*Training in Laboratory Animals: a correct use of the animal model in biomedical research*

- 06/2016 **Columbia University Medical Center, (CUMC)** Departments of Pediatrics Infectious Diseases, New York City, NY  
*TC0900: Introduction to the Institute of Comparative Medicine*
- 06/2016 **Columbia University Medical Center, (CUMC)** Departments of Pediatrics Infectious Diseases, New York City, NY  
*TC0800: "The Mouse and Rat: Computer Based Training"*
- 06/2016 **Columbia University Medical Center, (CUMC)** Departments of Pediatrics Infectious Diseases, New York City, NY  
*TC1200: "Mouse Wetlab"*
- 06/2016 **Columbia University Medical Center, (CUMC)** Departments of Pediatrics Infectious Diseases, New York City, NY  
*TC0068: "Compensation, Sponsored Projects and Effort Reporting"*
- 11/2016 **Columbia University Medical Center, (CUMC)** Departments of Pediatrics Infectious Diseases, New York City, NY  
*TC0550: "Rodent Barrier Training"*

## **TEACHING ACTIVITY**

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- 2003-2017 **Assistance in thesis preparation** (Bachelor's Degree; Graduate Degree and PhD) and Laboratory exercises in general microbiology, virology, microbial genetics. University of Cagliari.
- 2006-2015 **Member of the exam commission** of the course of Microbiology and General Virology, Biological Sciences, University of Cagliari.

### Doctoral Students

- 2015-2016 *Co-Mentor*, Robert Szabo  
PhD student in joint supervision of thesis (Comenius University in Bratislava and University of Cagliari)
- 11-2018-12-2018 Training supervisor, Annalisa Chianese  
as UNICA visiting PhD student in BIOCHEMICAL AND BIOTECHNOLOGICAL SCIENCES, from University of Campania "Luigi Vanvitelli", Naples, Italy.

### Tutoring in Cagliari University

- 2003-2006 **Tutor in General Microbiology and Virology (BIO / 19)**
- 2018-2019 **Tutor in Histology and Embryology (BIO / 17)**
- 2018-2019 **Tutor in Laboratory Medicine and Clinical Microbiology (MED / 07)**

## **PERSONAL SKILLS AND COMPETENCES**

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### Language skills

Mother tongue: Italian

English: B2 level (CEFR) Trinity College London

French: written good, spoken good.

## Computer Knowledges

WINDOWS; MS WORD, MS EXCEL, MS POWER POINT, ORIGIN PRO, GRAPHPAD, ANOVA

## MAIN ACTIVITIES AND RESPONSABILITIES

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Extensive experience in Biosafety Level 2 and 3 Work Practices. Knowledge of proper standard operating procedures (SOPs) for general laboratory security and safe highly pathogen agents handling (HIV-1/2, Clinical isolates and drugs resistant mutants, Dengue, West Nile Virus, Coronaviruses, Orthohantaviruses). Experimental research in: microbiology, virology and molecular biology.

### Cell-based techniques:

- ✓ Bacterial and Cell cultures (Primary cells, Hematologic and solid tumour cell lines, normal cells in monolayer and suspension)
- ✓ MTT, PRT, YRT, chemiluminescence focus reduction-neutralisation test (C-FRNT)
- ✓ Isolation, purification and characterization of viral strains
- ✓ Selection of drug resistant strains
- ✓ Cross-resistance and susceptibility assay
- ✓ Combination drugs
- ✓ Virucidal activity assay

### Biochemical and Molecular Biology methods

- ✓ ELISA
- ✓ IFA
- ✓ Extraction of DNA, RNA
- ✓ PCR
- ✓ Immunohistochemistry
- ✓ Western blot
- ✓ Enzymatic assays
- ✓ Total proteins count by BCA and Bradford assays
- ✓ Electrophoresis (agarose gel and polyacrylamide)
- ✓ Coomassie and Silver staining techniques

### Writing, review and editing of Scientific projects, Papers and Reports

## SCIENTIFIC COLLABORATIONS

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**Columbia University Medical Center, New York**, Division of Pediatric Infectious Diseases

**Professor Anne Moscona**, Director, Center for Host-Pathogen Interaction Vice Chair of Pediatrics, Basic Science Research and **Professor Matteo Porotto** (Viral Molecular Pathogenesis in Pediatrics).

Projects: *"Mechanisms of entry and membrane fusion mediated by Ebola virus, Influenza and Parainfluenza virus"* and *"Mechanism of measles CNS adaptation, viral fusion, antiviral approaches"*

**Federal Research Center "Fundamentals of Biotechnology" of the Russian Academy of Sciences, Moscow.**  
**Dr. Vadim A. Makarov**, Head of the Laboratory for Biomedical Chemistry.

Project: *Study of the molecular mechanisms underlying HIV resistance to antiretroviral drugs and development of new RT inhibitors.*

**Medical University of Warsaw, Department of Medicinal Chemistry, Warsaw**

**Dr. Marta Struga**, Head of Department of Biochemistry.

Project: *Study and evaluation of molecules of potential use in the prophylaxis and therapy of human and animal infection diseases.*

**Biomedical Research Center, Slovak Academy of Sciences, Institute of Virology, Bratislava.**

**Dr. Boris Klempa**, Head of Virus Ecology group.

Project: *Techniques of hantavirus propagation, quantification by immunocytochemistry focus assay, and focus reduction neutralization assays and basic molecular screening techniques.*

**Instituto de Medicina Molecular, Faculdade de Medicina, Universidade de Lisboa, Portugal.**

**Professor Nuno C. Santos**, Head of the Biomembranes Unit.

**Frankincense Biodiversity Unit, Research Center, Dhofar University, Salalah, Oman**

**Professor Luay Rshan.**

Project: *Identification and study of the mechanism of action of natural extracts with potential antiviral activity.*

**Department of Experimental Medicine, University of Study of Campania “Luigi Vanvitelli”, Naples.**

**Professor Massimiliano Galdiero and Department of Medicine, Surgery and Dentistry “Scuola Medica Salernitana”, University of Salerno, Professor Gianluigi Franci.**

Project: *Study and evaluation of natural products as potential antimicrobial agents.*

**Department of Pharmaceutical Sciences, University of Sassari, Italy**

**Professor Antonio Carta** Head of Laboratory NMR.

Projects: *"Identification and definition of the mechanism of action of new leads, belonging to different classes of inhibitors of the multiplication cycle of RNA virus"* and *"New designed Triazoloquinolones in combination with Pgp inhibitors as useful chemical probe to investigate quinolone resistance in Mycobacterium Tuberculosis: an approach to face an old re-emerging disease with new tools"*.

**Department of Biomedical Sciences, University of Sassari, Italy.**

**Professor Stefania Zanetti, Professor Pietro Cappucinelli.**

Project: *Identification and study of the mechanism of action of essential oils with potential antiviral activity.*

**Department of Life and Environmental Sciences, Unit of Drug Sciences, University of Cagliari, Italy**

**Professor Pierluigi Caboni and Dr. Michela Begala.**

Project: *Identification and study of the mechanism of action of natural products with potential antiviral and antiproliferative activity.*

## **PROJECT COORDINATION**

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Principal investigator for the project: *"Study of new inhibitors of RNA virus"*, funded by Regione Autonoma della Sardegna based on competition notice and peer review within the program "Giovani Ricercatori", L.R.7/2007 Regione Autonoma della Sardegna (RAS). CRP1\_574.

## **PROFESSIONAL ORGANIZATIONS AND SOCIETIES**

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### **Membership**

2010 - present **Italian Society of Virology (SIV-IVS)**

*Member*

2011- present **Italian Association of Biologists (Ordine Nazionale dei Biologi)**

*Member*

2017- present **Italian Society of Microbiology (SIM)**

*Member*

## Member of Editorial Committee

- ✓ Journal of Infections in Developing Countries

## Journal Reviewer (Ad Hoc)

- ✓ European Journal of Medicinal Chemistry;
- ✓ Viruses;
- ✓ Pathogens and diseases;
- ✓ Journal of Infections in Developing Countries;
- ✓ Evidence-Based Complementary and Alternative Medicine;
- ✓ Natural Products Research;
- ✓ Medicinal chemistry

## PUBLICATIONS

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### Peer-reviewed Publications:

\* denotes senior-author papers or corresponding /co-first author

1. **Giuseppina Sanna\***, Silvia Madeddu, Giuseppe Murgia, Gabriele Serreli, Michela Begala, Pierluigi Caboni, Alessandra Incani, Gianluigi Franci, Marilena Galdiero, Gabriele Giliberti. *Potent and selective activity against Human Immunodeficiency Virus 1 (HIV-1) of Thymelaea hirsuta extracts*. Viruses 2020, 12(6), 664. doi.org/10.3390/v12060664
2. Donadu, G.M, Nhan Trong Le, Duc Viet Ho, Tuan Quoc Doan, Anh Tuan Le, Ain Raal, Marianna Usai, Mauro Marchetti, **Giuseppina Sanna**, Silvia Madeddu et al., *Phytochemical compositions and biological activities of essential oils from the leaves, rhizomes and whole plant of Hornstedtia bella Škorničk*. Antibiotics 2020, 9(6), 334. doi.org/10.3390/antibiotics9060334
3. **Sanna G\***, Piras S, Madeddu S, Busonera B, Klempa B, Corona P, Ibba R, Murineddu G, Carta A, Loddo R. *5,6-Dichloro-2-phenyl-benzotriazoles: New potent inhibitors of orthohantavirus*. Viruses 2020 Jan 20;12(1):122. doi: 10.3390/v12010122
4. Nhan Trong Le, Duc Viet Ho, Tuan Quoc Doan, Anh Tuan Le, Ain Raal, Donatella Usai, **Giuseppina Sanna**, Antonio Carta, Paola Rappelli, Nicia Diaz, Piero Cappuccinelli, Stefania Zanetti, Hoai Thi Nguyen, and Matthew Gavino Donadu. *Biological activities of essential oils from leaves of paramignya trimera (Oliv.) guillaum and limnocitrus littoralis (miq.) swingle*. Antibiotics 2020, 9, 207. doi: 10.3390/antibiotics9040207
5. Sandra Piras, Paola Corona, Roberta Ibba, Federico Riu, Gabriele Murineddu, **Giuseppina Sanna**, Silvia Madeddu, Ilenia Delogu, Roberta Loddo, Antonio Carta. *Preliminary anti-Coxsackie Activity of Novel 1-[4-(5,6-dimethyl(H)-1H(2H)-benzotriazol-1(2)-yl)phenyl]-3-alkyl(aryl)ureas*. Med Chem. 2019 Dec 26. doi: 10.2174/1573406416666191226142744
6. Sandra Piras, **Giuseppina Sanna\***, Antonio Carta, Paola Corona, Roberta Ibba, Roberta Loddo, Silvia Madeddu, Paola Caria, Suzana Aulic, Erik Laurini, Maurizio Fermeglia and Sabrina Pricl. *Dichloro-Phenyl-Benzotriazoles: A New Selective Class of Human Respiratory Syncytial Virus Entry Inhibitors*. Front. Chem., 16 April 2019 | https://doi.org/10.3389/fchem.2019.00247
7. **Sanna G\***, Madeddu S, Serra A, Collu D, Efferth T, Hakkim FL, Rashan L. *Anti-poliovirus activity of Nerium oleander aqueous extract*. Nat Prod Res. 2019 Mar 25:1-4. doi: 10.1080/14786419.2019.1582046
8. Gomes B, **Sanna G**, Madeddu S, Hollmann A, Santos NC. *Combining 25-Hydroxycholesterol with an HIV Fusion Inhibitor Peptide: Interaction with Biomembrane Model Systems and Human Blood Cells*. ACS Infect Dis. 2019 Apr 12;5(4):582-591. doi: 10.1021/acsinfecdis.8b00321
9. Mathieu C, Ferren M, Jurgens E, Dumont C, Rybkina K, Harder O, Stelitano D, Madeddu S, **Sanna G**, Schwartz D, Biswas S, Hardie D, Hashiguchi T, Moscona A, Horvat B, Niewiesk S, Porotto M. *Measles Virus Bearing Measles Inclusion Body Encephalitis-Derived Fusion Protein Is Pathogenic after Infection via the Respiratory Route*. J Virol. 2019 Apr 3;93(8). pii: e01862-18. doi: 10.1128/JVI.01862-18

10. Ibba, R.; Corona, P.; Carta, A.; Giunchedi, P.; Loddo, R.; **Sanna, G.**; Delogu, I.; Piras, S. *Antiviral activities of 5-chlorobenzotriazole derivatives*. MONATSHFTE FÜR CHEMIE. 2018, Volume 149, Issue 7, pp 1247–1256. 10.1007/s00706-018-2234-7
11. **Sanna G**, Madeddu S, Giliberti G, Piras S, Struga M, Wrzosek M, Kubiak-Tomaszewska G, Koziol AE, Savchenko O, Lis T, Stefanska J, Tomaszewski P, Skrzycki M, Szulczyk D. *Synthesis and Biological Evaluation of Novel Indole-Derived Thioureas*. *Molecules*. 2018 Oct 7;23(10). pii: E2554. doi: 10.3390/molecules23102554
12. Bielenica, A.; **Sanna, G.**; Madeddu, S.; Giliberti, G.; Stefańska, J.; Koziół, A.E.; Savchenko, O.; Strzyga-Łach, P.; Chrzanowska, A.; Kubiak-Tomaszewska, G.; Struga, M. *Disubstituted 4-Chloro-3-nitrophenylthiourea Derivatives: Antimicrobial and Cytotoxic Studies*. *Molecules* 2018, 23, 2428. 10.3390/molecules23102428
13. Mariola Napiórkowska, Silvia Madeddu, Gabriele Giliberti and **Giuseppina Sanna\***. *Cytotoxic properties of Selected derivatives of Benzofurans preliminary studies*. *Acta Poloniae Pharmaceutica-Drug Research*. 2018 Vol. 75 (1) 255-263
14. Carta A, **Sanna G\***, Briguglio I, Madeddu S, Vitale G, Piras S, Corona P, Peana AT, Laurini E, Fermeglia M, Pricl S, Serra A, Carta E, Loddo R, Giliberti G. *Quinoxaline derivatives as new inhibitors of coxsackievirus B5*. *Eur J Med Chem*. 2017, (145) 559-569. doi: 10.1016/j.ejmech.2017.12.083
15. Bielenica A, **Sanna G\***, Madeddu S, Struga M, Józwiak M, Koziół AE, Sawczenko A, Materek IB, Serra A, Giliberti G. *New thiourea and 1,3-thiazolidin-4-one derivatives effective on the HIV-1 virus*. *Chem Biol Drug Des*. 2017. PMID: 28434186. doi: 10.1111/cbdd.13009
16. Aleksandra Drzewiecka-Antonik, Paweł Rejmak, Marcin T.Klepka, Anna Wolska, Piotr Pietrzyk, Karolina Stępień, **Giuseppina Sanna**, Marta Struga. *Synthesis, structural studies and biological activity of novel Cu(II) complexes with thiourea derivatives of 4-azatricyclo[5.2.1.0<sub>2,6</sub>]dec-8-ene-3,5-dione*. *J Inorg Biochem*. 2017 Nov;176:8-16 PMID: 28822236. doi: 10.1016/j.jinorgbio.2017.08.001
17. Mathieu C, Augusto MT, Niewiesk S, Horvat B, Palermo LM, **Sanna G**, Madeddu S, Huey D, Castanho MA, Porotto M, Santos NC, Moscona A. *Broad spectrum antiviral activity for paramyxoviruses is modulated by biophysical properties of fusion inhibitory peptides*. *Sci Rep*. 2017 Mar 8;7:43610. PMID: 28344321. doi: 10.1038/srep43610
18. Franchini S, Battisti UM, Sorbi C, Tait A, Cornia A, Jeong LS, Lee SK, Song J, Loddo R, Madeddu S, **Sanna G**, Brasili L. *Synthesis, structural characterization and biological evaluation of 4'-C-methyl- and phenyl-dioxolane pyrimidine and purine nucleosides*. *Arch Pharm Res*. 2017 May;40(5):537-549. PMID: 27615010. doi: 10.1007/s12272-016-0825-6
19. Bielenica, A., Stefańska, J., Koziół, A.E., Iuliano, F., Collu, D., **Sanna, G.**, Józwiak, M., Struga, M. *Thiourea derivatives of 4-azatricyclo[5.2.2.0<sub>2,6</sub>]undec-8-ene-3,5-dione - Synthesis and biological activity*. *Acta Poloniae Pharmaceutica - Drug Research*, 2016 73 (3), 693-703
20. Ibrahim MM, Mazzei M, Delogu I, Szabó R, **Sanna G**, Loddo R., *Activity of bis(7-hydroxycoumarin) Mannich bases against bovine viral diarrhoea virus*. *Antiviral Res*. 2016 Oct;134:153-160. PMID: 27478031
21. Stefanska J, Stepien K, Bielenica A, Szulczyk D, Miroslaw B, E Koziol A, **Sanna G**, Iuliano F, Madeddu S, Jozwiak M, Struga M. *Antimicrobial and Anti-Biofilm Activity of Thiourea Derivatives Bearing 3-Amino-1H-1, 2, 4-Triazole Scaffold*. *Med Chem*. 2016;12(5):478-88. PMID:26648331
22. Briguglio I, Loddo R, Laurini E, Fermeglia M, Piras S, Corona P, Giunchedi P, Gavini E, **Sanna G**, Giliberti G, Ibba C, Farci P, La Colla P, Pricl S, Carta *Synthesis, cytotoxicity and antiviral evaluation of new series of imidazo[4,5-g]quinoline and pyrido[2,3-g]quinoxalinone derivatives*. *Eur J Med Chem*. 2015 Nov 13;105:63-79. doi: 10.1016/j.ejmech.2015.10.002. PMID: 26479028
23. **Sanna G**, Madeddu S, Giliberti G, Ntalli NG, Cottiglia F, De Logu A, Agus E, Caboni P. *Limonoids from Melia azedarach fruits as inhibitors of Flaviviruses and Mycobacterium tuberculosis*. *PlosOne* (2015) Oct 20;10(10):e0141272. doi: 10.1371/journal.pone.0141272. PMID: 26485025

24. Fobofou SA, Franke K, **Sanna G**, Porzel A, Bullita E, La Colla P, Wessjohann LA. *Isolation and anticancer, anthelmintic, and antiviral (HIV) activity of acylphloroglucinols, and regioselective synthesis of empetrifranzinans from Hypericum roeperianum*. Bioorg Med Chem. 2015 Oct 1;23(19):6327-34. doi: 10.1016/j.bmc.2015.08.028. Epub 2015 Aug 28. PMID: 26358281
25. Spallarossa A, Caneva C, Caviglia M, Alfei S, Butini S, Campiani G, Gemma S, Brindisi M, Zisterer DM, Bright SA, Williams CD, Crespan E, Maga G, **Sanna G**, Delogu I, Collu G, Loddo R. *Unconventional Knoevenagel-type indoles: Synthesis and cell-based studies for the identification of pro-apoptotic agents*. Eur J Med Chem. 2015 Sep 18;102:648-60. doi: 10.1016/j.ejmech.2015.08.009. Epub 2015 Aug 8. PMID: 26320088
26. Bielenica, A, Kedzierska, E, Fidecka, S, Maluszynska, H, Miroslaw, B, Koziol, AE, Stefanska, J, Madeddu, S, Giliberti, G, **Sanna, G**, Struga, M. *Synthesis, antimicrobial and pharmacological evaluation of thiourea derivatives of 4H-1,2,4-triazole*. Letters in Drug Design and Discovery. 12 ( 4): 263-276 (2015)
27. Bielenica A, Stefańska J, Stępień K, Napiórkowska A, Augustynowicz-Kopec E, **Sanna G**, Madeddu S, Boi S, Giliberti G, Wrzosek M, Struga M. *Synthesis, antimicrobial and cytotoxic activity of thiourea derivatives incorporating 3-(trifluoromethyl)phenyl moiety*. Eur J Med Chem. 2015 Aug 28;101:111-25. doi: 10.1016/j.ejmech.2015.06.027. Epub 2015 Jun 14. PMID: 26119992
28. Faiyazalam Mahmad Saiyad Shaikh, Navin B. Patel, **Giuseppina Sanna**, Bernardetta Busonera, Paolo La Colla, Dhanji P. Rajani. *Synthesis of some new 2-amino-6-thiocyanato benzothiazole derivatives bearing 2,4-thiazolidinediones and screening of their in vitro antimicrobial, antitubercular and antiviral activities*. Medicinal Chemistry Research 24 (8), 3129-3142 (2015)
29. Fioravanti R, Desideri N, Biava M, Droghini P, Atzori EM, Ibba C, Collu G, **Sanna G**, Delogu I, Loddo R. *N-((1,3-Diphenyl-1H-pyrazol-4-yl)methyl)anilines: A novel class of anti-RSV agents*. Bioorg Med Chem Lett. 2015 Jun 1;25(11):2401-4. doi: 10.1016/j.bmcl.2015.04.006. Epub 2015 Apr 9. PMID: 25913116
30. Stefanska J, Nowicka G, Struga M, Szulczyk D, Koziol AE, Augustynowicz-Kopec E, Napiorkowska A, Bielenica A, Filipowski W, Filipowska A, Drzewiecka A, Giliberti G, Madeddu S, Boi S, La Colla P, **Sanna G**. *Antimicrobial and anti-biofilm activity of thiourea derivatives incorporating a 2-aminothiazole scaffold*. Chem Pharm Bull (Tokyo). 63(3):225-36 (2015). 10.1248/cpb.c14-00837
31. **Sanna G\***, Farci P, Busonera B, Murgia G, La Colla P, Giliberti G. *Antiviral properties from plants of the Mediterranean flora*. Nat Prod Res. 2015;29(22):2065-70. doi: 10.1080/14786419.2014.1003187. Epub 2015 Jan 23. PMID: 25613403
32. Tonelli M, Novelli F, Tasso B, Vazzana I, Sparatore A, Boido V, Sparatore F, La Colla P, **Sanna G**, Giliberti G, Busonera B, Farci P, Ibba C, Loddo R. *Antiviral activity of benzimidazole derivatives. III. Novel anti-CVB-5, anti-RSV and anti-Sb-1 agents*. Bioorg Med Chem. 2014 Sep 1;22(17):4893-909. doi: 10.1016/j.bmc.2014.06.043. Epub 2014 Jul 1. PMID: 25082514
33. Loddo, R, Briguglio, I, Corona, P, Piras, S, Loriga, M, Paglietti, G, Carta, A, **Sanna, G**, Giliberti, G, Ibba, C, Farci, P, La Colla, P. *Synthesis and antiviral activity of new phenylimidazopyridines and N-benzylidenequinolinamines derived by molecular simplification of phenylimidazo[4,5-g]quinolines*. Eur J Med Chem. 2014 Sep 12;84:8-16. doi: 10.1016/j.ejmech.2014.07.011. Epub 2014 Jul 4. PMID: 25014745
34. Loksha YM, Pedersen EB, Loddo R, **Sanna G**, Collu G, Giliberti G, La Colla P. *Synthesis of Novel Fluoro Analogues of MKC442 as Microbicides*. J Med Chem. 2014 Jun 26;57(12):5169-78. doi: 10.1021/jm500139a. Epub 2014 Jun 3. PMID: 24805780
35. Drzewiecka, A, Koziol, AE, Borowski, P, **Sanna, G**, Giliberti, G, Colla, P.L, Zawadowski, T, Struga, M. *Structural and antiviral studies of dipetalactone and its methyl derivative*. Journal of Molecular Structure. 1054-1055, 150-156 (2013). 10.1016/j.molstruc.2013.09.020
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## CHAPTER IN A TEXTBOOK

Pricl S, Manfredini S, Angusti A, Ciliberti N, Durini E, Vertuani S, Buzzoni L, Coslanich A, Ferrone M, Fermeglia M, Paneni MS, La Colla P, **Sanna G**, Cadeddu A, Mura M, and Loddo R. *Hindered nucleoside analogs as inhibitors of HCV RNA-dependent RNA polymerase: evolving vistas*. In: "Framing the knowledge of viral hepatitis", edited by Schinasi R.F. and Schiff E.R. IHL Press, Division of Informed Horizons, LLC, GA 30349 USA, p. 279-318 (2006). ISBN: 978-0-9754188-1-9.

## CONGRESS

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1. Speaker at the 10th National Congress of the Italian Society of Virology (SIV) with the presentation of the poster entitled "*Phenyl-benzotriazoles: new potent and selective inhibitors of Respiratory Syncytial and Hanta viruses*". Orvieto, 12-14 September 2011
2. Speaker at the 11th National Congress of the Italian Society of Virology (SIV) with the presentation of the poster entitled "*Potent and Selective Activity of Daphnane Diterpens against HIV-1, HIV-2 and Coxsackievirus*". Orvieto, 17-19 September 2012
3. Speaker at the 28th International Conference on Antiviral Research (ICAR) with the presentation of the poster entitled "*Limonoids from Melia Azeradach Fruits as Inhibitors of Flaviviruses*". Rome, 11-14 May 2015.
4. Speaker at the 13th National Congress of the Italian Society of Virology (SIV-ISV) with the presentation of the poster entitled "*New benzothiazol thiourea derivative as nonnucleoside inhibitor of HIV-1 Reverse Transcriptase*". Orvieto, 14-16 September 2015

5. Speaker at the first edition of the UNICA & Imprese congress. "Researchers from the University of Cagliari introduce themselves to companies" with the oral communication entitled "*New frontiers of biomedicine for the development of diagnostic and therapeutic strategies for the management of infectious and tumor diseases*". Cagliari, Caesar's Hotel, 5-6 November 2015
6. Speaker at the 45th National Congress of the Italian Society of Microbiology (SIM) with the presentation of the poster entitled "*Quinoxaline derivatives as new inhibitors of Coxsackievirus B5*". Genoa, Palazzo Ducale 27 - 30 September 2017
7. Speaker at the 46th National Congress of the Italian Society of Microbiology (SIM) with the presentation of the poster entitled "*Potent And Selective Inhibition Of Thymelaea Hirsuta Extracts Against Human Immunodeficiency Virus (HIV) -1*". Palermo, 26-29 September 2018
8. Speaker at the Congress on ESSENTIAL OILS IN CLINICAL PRACTICE with the oral communication entitled "*Essential Oils in Virology*". Sassari, 27 February 2020

## POSTERS

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13. Cesarini S., Ranise A., Spallarossa A., Schenone S., Bondavalli F., Bruno O., Menozzi G., Fossa P., Mosti L., Loddo R., Collu G., **Sanna G.**, Murreddu M., Busonera B., Secci B., Visioli A., Ibba C., and La Colla P. *Structure-based design, parallel synthesis and SAR studies of thiocarbamates, non-nucleoside HIV-1 reverse transcriptase inhibitor isosteres of Trogidone*. Second Joint Italian-Swiss Meeting on Medicinal Chemistry. 2005, Modena, Italy.
14. Tonelli M., Canu C., Tasso B., Boido V., Sparatore F., Busonera B., Collu G., **Sanna G.**, La Colla P., Loddo R. *Triazene derivatives endowed with antiproliferative and antiviral activities*. Joint Meeting on Medicinal Chemistry. 2005, Vienna.
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18. Priel S., Ferrone M., Posocco P., Fermeglia M., **Sanna G.**, Collu G., La Colla P., Loddo R., Sias A., Piras S., Carta A. *Chasing the evaders. Design, synthesis, activity and molecular modelling of a new small molecule with activity against drug-resistant HIV-1 mutants*. HIV DART 2006: Frontiers in drug development for antiretroviral therapies. 2006, Cancun, Mexico.
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- La Colla P. and Loddo R. *Further SAR studies on bicyclic basic merbarone analogues as potent antiproliferative agents*. National Meeting on Medicinal Chemistry. 2008, Verona, Italy.
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  21. Blois S., Marongiu E., **Sanna G.**, Collu G., Secci B., Giliberti G., Loddo R., Pedersen E., De Giuli Morghen C., Stahl-Hennig C., and La Colla P. *Results on different formulations of an NNRTI candidate (MC 1220) for application as topical microbicide*. 9th National Congress of the Italian Society of Virology. 7-9 September 2009. Orvieto, Italy.
  22. Blois S., Giliberti G., **Sanna G.**, Secci B., Marongiu E., Loddo R. and La Colla P. *1,2-benzisothiazol-3(2H)-one benzenesulfonamides as new microbicide candidates for prevention of mucosal HIV infections*. Europrise annual conference. 15-18 November 2009. Budapest, Hungary.
  23. S. Blois, **G. Sanna**, B. Secci, G. Giliberti, E. Marongiu, R. Loddo and P. La Colla. *1,2-benzisothiazol-3(2H)-one benzenesulfonamides targeting the HIV nucleocapsid proteins are potential microbicide candidates for the prevention of mucosal HIV transmission/acquisition*. 4th European Congress of Virology. 7-11 April 2010. Cernobbio (CO), Italy.
  24. Filippo Cottiglia, Laura Casu, Marco Leonti, Pierluigi Caboni, Costantino Floris, Bernardetta Busonera, Pamela Farci, Aicha Ouhtit and **Giuseppina Sanna**. *Bioguided-isolation of cytotoxic phloroglucinols from the leaves of myrtus communis* I. Convegno La Chimica della Vita: da alimenti funzionali a principi attivi. 29-30 September 2011. Catanzaro, Italy.
  25. G. Giliberti, S. Asthana, S. Blois, **G. Sanna**, B. Busonera, R. Loddo and P. La Colla. *A Computationally-Based Explanation for the Knocking Out Activity of the Microbicide MC1220*. 11TH National Congress of the Italian Society for Virology. 17-19 September 2012. Orvieto, Italy.
  26. Madeddu S, **Sanna G**, Giliberti G, Falconieri D, Porcedda S, Piras A. *Antiviral activity of some aromatic and medicinal plants against RNA virus: preliminary study*. 6th International Congress on Medicinal and Aromatic Plants (CIPAM 2016). Coimbra, Portugal: 29 May – 1 June 2016.
  27. Noble, A, **SANNA, G**, Palermo, LM, Potter, C, Carragher, B, Porotto M, Moscona, A. *STRUCTURAL REARRANGEMENTS IN THE PARAMYXOVIRUS FUSION COMPLEX IN THE PRESENCE OF A NOVEL ANTIVIRAL*. Annual Retreat of the Department of Physiology & Cellular Biophysics, Columbia University Medical Center. The New York Academy of Medicine, New York NY 10029, 2016, November 4th.
  28. Silvia Madeddu, **GIUSEPPINA SANNA**, Sudipta Biswas, Christopher A. Alabi, Matteo Porotto. *Multivalent-Zanamivir analogs as potent Influenza Virus Inhibitors*. 46th National Congress of the Italian Society of Microbiology (SIM). Palermo, 26-29 September 2018.

Luogo e data

31/07/2020

Firma