PERSONAL INFORMATION

Paola Barraja

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Current Position: Full Professor (SSD CHI/M08)

Scientific Profile: Prof. Paola Barraja, is a medicinal chemist with large experience in synthesis of several classes of heterocyclic compounds, as bioactive molecules, with large variability on chemical scaffolds. Her skills are also documented by a high technological transfer activity consisting of 8 patents including Italian and international ones. In conjunction with Prof. Galietta from Telethon Institute (TIGEM), Pozzuoli she has recently explored the therapeutic use in CF leading to highly effective F508del correctors, capable to synergize with benchmark modulators in the functional rescue of F508del-CFTR (PCT Int. Appl. (2020), Preparation of heterocyclic compounds for medical use WO 2020104558 A1 20200528, Telethon-UniPa-FFC; PCT/EP2019/081988; estensione della domanda dal 2021 con i seguenti numeri di deposito UNITED STATES N°17295728, CANADA N°3120739, AUSTRALIA N° 2019382862, ISRAEL N° 283315, EPO N°198087553) Personal bibliography. Today the scientific production of Prof. Paola Barraja consists of 120 peer-reviewed publications; 11 International and Italian patents; H-index: 37, total citations 3254 (Scopus 23/02/2022).

GOLDEN PARAGRAPH

Bibliometric Indicators:
Publications: 135; # Citations 5561; H index 40

3 most relevant publications or patents:

Barraja et al. PCT Int. Appl. (2020), Preparation of heterocyclic compounds for medical use WO 2020104558 A1 20200528, Telethon-UniPa-FFC; PCT/EP2019/081988; estensione della domanda dal 2021 con i seguenti numeri di deposito UNITED STATES N°17295728, CANADA N°3120739, AUSTRALIA N° 2019382862, ISRAEL N° 283315, EPO N°198087553.

Spanò, V. et al. Evaluation of Fused Pyrrolothiazole Systems as Correctors of Mutant CFTR Protein. *Molecules* (**2021**), 26, 1275, 10.3390/molecules26051275

Spanò, V. et al. An overview on chemical structures as ΔF508-CFTR correctors. *Eur. J. Med. Chem.* (**2019**), *180*, 430. 10.1016/j.ejmech.2019.07.037, 2-s2.085069561178

ROLE IN THE PROJECT

Expert of drug discovery, collaborating within network for the medicinal chemistry unit.
Paola Barraja will guide the investigation of compounds properly synthetizing modulators aiming to the identification of the structural requirements correlated with the optimal efficacy on the target proteins. After validating the mechanism, a *hit to lead* phase will be based on structure-activity relationship (SAR) studies and the pharmacological insight will inspire the synthesis of new scaffolds. Structural changes will be introduced in the points of diversity of the *hit scaffolds* to explore the role of specific positions with respect to the activity thus providing new libraries of compounds. Several rounds of synthesis and biological testings, will drive to analogues with improved features leading to modulators with optimized efficacy and potency to maximize the effect and at the same time to develop candidates with optimal drug-like properties.

WORK EXPERIENCE

2020 – Current

Full professor SSD-CHIM/08, University of Palermo
Main duties/responsibilities: Research activities, Teachings
Sector: Academic sector

2002 – 2020
Associate professor SSD-CHIM/08, University of Palermo
Main duties/responsibilities: Research activities, Teachings
Sector: Academic sector

1996 – 2002
Researcher SSD-CHIM/08 University of Palermo
Replace with employer's name and locality (if relevant, full address and website)
Main duties/responsibilities: Research activities
Sector: Academic sector

EDUCATION AND TRAINING

1998-1999

Marie Curie fellow- European Community Framework Programm for research and development, Department of Chemistry
University of Exeter, UK (supervisor Prof. C. J. Moody).

1992 (4 months)

Cancer Research Campaign (C.R.C. Laboratories) research fellow
University of Nottingham Exeter, UK (supervisor Prof. M. Stevens).

1992-1994

C.N.R. Research fellow in chemistry,
University of Palermo, ITALY

1992-1994

C.N.R. Research fellow in chemistry,
University of Palermo, ITALY

PERSONAL SKILLS

Organisational / managerial skills

- Selected member from Ministry of Education for ASN committee 2021-2023
- Group leader (currently responsible for a team of about 10 people)
- Scientific coordination of RTDA-PON (REACT-EU Azione IV.4 - tematiche dell'innovazione)

ADDITIONAL INFORMATION

Most relevant publications in the last 10 Years

1. Renda, M.; Barreca, M.; Borrelli, A.; Spanò, V.; Montalbano, A.; Raimondi, M. V.; Bivacqua, R.; Musante, I.; Scudieri, P.; Guidone, D.; Buccirossi, M.; Genovese, M.; Venturini, A.; Bandiera, T.; **Barraja, P**.; Galietta, L. J. V. *Novel tricyclic pyrrolo-quinolines as pharmacological correctors of the mutant CFTR chloride channel.* Scientific Reports, (2023), 13, 7604.
2. Barreca, M.; Spanò, V.; Rocca, R.; Bivacqua, R.; Gualtieri, G.; Raimondi, M. V.; Gaudio, E.; Bortolozzi, R.; Manfreda, L.; Bai, R.; Montalbano, A.; Alcaro, S.; Hamel, E.; Bertoni, F.; Viola, G.; **Barraja, P.** *Identification of pyrrolo[3',4':3,4]cyclohepta[1,2-d][1,2]oxazoles as promising new candidates for the treatment of lymphoma*. European Journal of Medicinal Chemistry (2023), 254, 115372.
3. Barreca, M.; Buttacavoli, M.; Di Cara, G.; D'Amico, C.; Peri, E.; Spanò, V.; Li Petri, G.; **Barraja, P.**; Raimondi, M. V. ; Cancemi, P.; Montalbano, A. *Exploring the anticancer activity and the mechanism of action of pyrrolomycins F obtained by microwave-assisted total synthesis.* European Journal of Medicinal Chemistry (2023), 253, 115339.
4. Bivacqua, R.; Romeo, I. ; Barreca, M. ; **Barraja, P**.; Alcaro, S. ; Montalbano, A. *HSV-1 Glycoprotein D and Its Surface Receptors: Evaluation of Protein-Protein Interaction and Targeting by Triazole-Based Compounds through In Silico Approaches.* International journal of molecular sciences (2023), 24(8), 7092.
5. Bivacqua, R.; Barreca, M.; Spanò, V.; Raimondi, M. V.; Romeo, I.; Alcaro, S.; Andrei, G.; **Barraja, P**.; Montalbano, A. Insight into non-nucleoside triazole-based systems as viral polymerases inhibitors. European Journal of Medicinal Chemistry (2023), 249, 115136.
6. Barreca, M.; Spanò V.; Rocca, R.; Bivacqua, R.; Abel, A. C.; Maruca, A.; Montalbano, A.; Raimondi, M. V.; Tarantelli, C.; Gaudio, E.; Cascione, L.; Rinaldi, A.; Bai, R.; Steinmetz, M. O.; Prota, A. E.; Alcaro, S.; Hamel, E.; Bertoni, F.; **Barraja, P**. *Development of [1,2]oxazoloisoindoles tubulin polymerization inhibitors: Further chemical modifications and potential therapeutic effects against lymphomas*. European Journal of Medicinal Chemistry (2022) 243,114744
7. Barreca, M.; Ingarra, A. M.; Raimondi, M. V.; Spanò, V.; Palumbo Piccionello, A.; De Franco, M.; Menilli, L.; Gandin, V.; Miolo, G.; **Barraja, P.**; Montalbano, A. *New tricyclic systems as photosensitizers towards triple negative breast cancer cells.* Archives of Pharmacal Research (2022), 45, 806-821
8. Barreca M.; Spanò V.; Rocca R.; Bivacqua R.; Maruca A.; **Montalbano A**.; Raimondi M.V.; Tarantelli C.; Gaudio E.; Cascione L.; Rinaldi A.; Bai R.; Prota A.; Abel A.C.; Steinmetz M.; Alcaro S.; Hamel E.; Bertoni F.; Barraja P.

Transcriptome and computational analysis assess the anti-tubulin activity of [1,2]oxazole derivatives in lymphoma. European Journal of Cancer (2022),174, S65-S66

9. Grillone, K.;Riillo, C.;Rocca, R.;Ascrizzi, S.;Spanò, V.;Scionti, F.;Polerà, N.;Maruca, A.;Barreca, M.;Juli, G.;Arbitrio, M.;Di Martino, M. T.Caracciolo, D.;Tagliaferri, P.;Alcaro, S.; Montalbano, A. ; **Barraja, P**.; Tassone, P. *The New Microtubule-Targeting Agent SIX2G Induces Immunogenic Cell Death in Multiple Myeloma*. International Journal of Molecular Sciences (2022), 23,10222

10. Labbozzetta, M.;Barreca, M.;Spanò, V.;Raimondi, M.V.; Poma, P.; Notarbartolo, M.; **Barraja, P**.; Montalbano, A. *Novel insights on [1,2]oxazolo[5,4-e]isoindoles on multidrug resistant acute myeloid leukemia cell line*. Drug Development Research (2022), 83, 1331-1341

11. Barreca, M.; Ingarra, A. M.; Raimondi, M. V.; Spanò, V.; De Franco, M.; Menilli, L.; Gandin, V.; Miolo, G.; **Barraja, P**.; Montalbano, A. *Insight on pyrimido[5,4-g]indolizine and pyrimido[4,5-c]pyrrolo[1,2-a]azepine systems as promising photosensitizers on malignant cells.* Eur. J. Med. Chem. (2022), 237, 114399.

12. Cilibrasi, V.; Spanò, V.; Bortolozzi, R.; Barreca, M.; Raimondi, M. V.; Rocca, R.; Maruca, A.; Montalbano, A.; Alcaro, S.; Ronca, R.; Viola, G.; **Barraja, P**. *Synthesis of 2H-Imidazo[2',1':2,3] [1,3]thiazolo[4,5-e]isoindol-8-yl-phenylureas with promising therapeutic features for the treatment of acute myeloid leukemia (AML) with FLT3/ITD mutations.* Eur. J. Med. Chem. (2022), 235, 114292.

13. Barreca, M.; Spanò, V.; Raimondi, M. V; Bivacqua, R.; Giuffrida, S.; Montalbano, A.; Cavalli, A.; Bertoni, F.; **Barraja, P**. *GPCR Inhibition in Treating Lymphoma*. ACS Med. Chem. Lett. 2022, 13, 358–364

14. Li Petri, G.; Raimondi, M. V.; Spanò, V.; Holl, R.; **Barraja, P**.; Montalbano, A. *Pyrrolidine in Drug Discovery: A Versatile Scaffold for Novel Biologically Active Compounds.* Top. Curr. Chem. (2021), 379, 34

15. Spanò, V.; Barreca, M.; Cilibrasi, V.; Genovese, M.; Renda, M.; Montalbano, A.; Galietta, L. J. V.; **Barraja, P.** *Evaluation of Fused Pyrrolothiazole Systems as Correctors of Mutant CFTR Protein.* Molecules (2021), 26, 1275. DOI:10.3390/molecules26051275

16. Spanò, V.; Barreca, M.; Rocca, R.; Bortolozzi, R.; Bai, R.; Carbone, A.; Raimondi, M. V.; Palumbo Piccionello, A.; Montalbano, A.; Alcaro, S.; Hamel, E.; Viola, G.; **Barraja, P**. *Insight on [1,3]thiazolo[4,5-e]isoindoles as tubulin polymerization inhibitors.* Eur. J. Med. Chem. (2021), 212, 113122.

17. Barreca, M.; Spanò, V.; Raimondi, M. V.; Tarantelli, C.; Spriano F.; Bertoni, F.; **Barraja, P.**; Montalbano A. *Recurrence of the oxazole motif in tubulin colchicine site inhibitors with anti-tumor activity*. Eur. J. Med. Chem. Rep. (2021), 1, 100004.

18. Barreca, M.; Stathis, A.; **Barraja, P**.; Bertoni, F. *An overview on anti-tubulin agents for the treatment of lymphoma patients.* Pharmacology and Therapeutics, (2020), 211, 107552.

19. Barreca, M.; Spanò, V.; Raimondi, M. V.; Montalbano, A.; Bai, R.; Gaudio, E.; Rocca, R.; Alcaro, S.; Hamel, E.; Bertoni, F.; **Barraja, P**. *Evaluation of [1,2]oxazolo[5,4-e]isoindoles in lymphoma cells*. Eur. J. Cancer 138S2 (2020) S1–S62. ISSN: 0959-8049 https://doi.org/10.1016/S0959-8049(20)31165-5

20. Barreca, M.; Spanò, V.; Montalbano, A.; Cueto, M.; Díaz Marrero, A. R.; Deniz, I.; Erdogan, A.; Lukic Bilela, L.; Moulin, C.; Taffin-de-Givenchy E.; Spriano, F.; Perale, G.; Mehiri, M.; Rotter, A.; Thomas, O. P.; **Barraja, P.;**

Gaudêncio, S. P; Bertoni, F. *Marine Anticancer Agents: An Overview with a Particular Focus on Their Chemical Classes.* Mar. Drugs (2020), 18, 619.
21. Spanò, V.; Rocca, R.; Barreca, M.; Giallombardo, D.; Montalbano, A.; Carbone, A.; Raimondi, M. V.; Gaudio, E.; Bortolozzi, R.; Bai, R.; Tassone, P.; Alcaro, S.; Hamel, E.; Viola, G.; Bertoni, F.; **Barraja, P**. *Pyrrolo[2',3':3,4]cyclohepta[1,2-d][1,2]oxazoles, a New Class of Antimitotic Agents Active against Multiple Malignant Cell Types.* J. Med. Chem. (2020), 63, 12023-12042.
22. Spanò, V.; Venturini, A.; Genovese, M.; Barreca, M.; Raimondi, M. V.; Montalbano, A.; Galietta, L. J. V.; **Barraja, P**. *Current development of CFTR potentiators in the last decade.* Eur. J. Med. Chem., (2020), 204, 112631.
23. Li Petri, G.; Spanò, V.; Spatola, R.; Holl, R.; Raimondi, M. V.; **Barraja, P**.; Montalbano, A. *Bioactive pyrrole-based compounds with target selectivity* Eur. J. Med. Chem., (2020), 208, 112783
24. Pojero, F.; Poma, P.; Spanò, V.; Montalbano, A.; **Barraja, P**.; Notarbartolo, M. *Targeting multiple myeloma with natural polyphenols*. Eur. J. Med. Chem., (2019), 180, 465-485.
25. Spanò, V.; Montalbano, A.; Carbone, A.; Scudieri, P.; Galietta, L. J. V.; **Barraja, P**. *An overview on chemical structures as ΔF508-CFTR correctors*. Eur. J. Med. Chem., (2019), 180, 430-448.
26. Carbone, A.; Montalbano, A.; Spanò, V.; Musante, I.; Galietta, L. J. V.; **Barraja, P.** *Furocoumarins as multi-target agents in the treatment of cystic fibrosis.* Eur. J. Med. Chem., (2019), 180, 283-290.
27. Attanzio, A.; Diana, P.; **Barraja, P**.; Carbone, A.; Spanò, V.; Parrino, B.; Cascioferro, S.M.; Allegra, M.; Cirrincione, G.; Tesoriere, L.; Montalbano, A. *Quality, functional and sensory evaluation of pasta fortified with extracts from Opuntia ficus-indica cladodes*. Journal of the Science of Food and Agriculture (2019), 99, 4242-4247.
28. Frasson, I.; Spanò, V.; Di Martino, S.; Nadai, M.; Doria, F.; Parrino, B.; Carbone, A.; Cascioferro, S.M.; Diana, P.; Cirrincione, G.; Freccero, M.; **Barraja, P**.; Richter, S. N.; Montalbano, A. *Synthesis and photocytotoxic activity of [1,2,3]triazolo[4,5-h][1,6]naphthyridines and [1,3]oxazolo[5,4-h][1,6]naphthyridines*. Eur. J. Med. Chem., (2019), 162, 176-193.
29. Carbone, A.; Parrino, B.; Cusimano, M.G.; Spanò, V.; Montalbano, A.; **Barraja, P.;** Schillaci, D.; Cirrincione, G.; Diana, P.; Cascioferro, S. *New thiazole nortopsentin analogues inhibit bacterial biofilm formation*. Marine Drugs, (2018), 16, 274/1-274/15.
30. Parrino, B.; Ullo, S.; Attanzio, A.; Cascioferro, S.; Spanò, V.; Carbone, A.; Montalbano, A.; **Barraja, P**.; Cirrincione, G.; Tesoriere, L.; Diana, P. *Synthesis of 5H-pyrido[3,2-b]pyrrolizin-5-one tripentone analogs with antitumor activity*. Eur. J. Med. Chem., (2018), 158, 236-246.
31. Parrino, B.; Ullo, S.; Attanzio, A.; Spanò, V.; Cascioferro, S.; Montalbano, A.; **Barraja, P**.; Tesoriere, L.; Cirrincione, G.; Diana, P. *New tripentone analogs with antiproliferative activity*. Molecules, (2017), 22, 2005/1-2005/13.
32. Cascioferro, S.; Parrino, B.; Spanò, V.; Carbone, A.; Montalbano, A.; **Barraja, P**.; Diana, P.; Cirrincione, G. *1,3,5-Triazines: A promising scaffold for anticancer drugs development*. Eur. J. Med. Chem., (2017), 142, 523-549.
33. Cascioferro, S.; Parrino, B.; Spanò, V.; Carbone, A.; Montalbano, A.; **Barraja, P**.; Diana, P.; Cirrincione, G. *An overview on the recent developments of 1,2,4-triazine derivatives as anticancer compounds*. Eur. J. Med. Chem., (2017), 142, 328-375.

34. Balogh, B.; Carbone, A.; Spanò, V.; Montalbano, A.; **Barraja, P.;** Cascioferro, S.; Diana, P.; Parrino, B. *Investigation of Isoindolo[2,1-a]quinoxaline-6-imines as Topoisomerase I Inhibitors with Molecular Modeling Methods*. Current Computer-Aided Drug Design (2017), 13, 208-221.
35. Parrino, B.; Attanzio, A.; Spanò, V.; Cascioferro, S.; Montalbano, A.; **Barraja, P.;** Tesoriere, L.; Diana, P.; Cirrincione, G.; Carbone, A. *Synthesis, antitumor activity and CDK1 inhibition of new thiazole nortopsentin analogues*. Eur. J. Med. Chem., (2017), 138, 371-383.
36. Cascioferro, S.; Parrino, B.; Spanò, V.; Carbone, A.; Montalbano, A.; **Barraja, P**.; Diana, P.; Cirrincione, G. *Synthesis and antitumor activities of 1,2,3-triazines and their benzo- and heterofused derivatives*. Eur. J. Med. Chem., (2017), 142, 74-86.
37. Schillaci, D.; Spanò, V.; Parrino, B.; Carbone, A.; Montalbano, A.; **Barraja, P**.; Diana, P.; Cirrincione, G.; Cascioferro, S. *Pharmaceutical Approaches to Target Antibiotic Resistance Mechanisms.* J. Med. Chem., (2017), 60, 8268-8297.
38. Spanò, V.; Giallombardo, D.; Cilibrasi, V.; Parrino, B.; Carbone, A.; Montalbano, A.; Frasson, I.; Salvador, A.; Richter, S.N.; Doria, F.; Freccero, M.; Cascioferro, S.; Diana, P.; Cirrincione, G.; **Barraja, P**. *Pyrrolo[3',2':6,7]cyclohepta[1,2-b]pyridines with potent photo-antiproliferative activity*. Eur. J. Med. Chem., (2017), 128, 300-318.
39. Spanò, V.; Attanzio, A.; Cascioferro, S.; Carbone, A.; Montalbano, A.; **Barraja, P**.; Tesoriere, L.; Cirrincione, G.; Diana, P.; Parrino, B. *Synthesis and antitumor activity of new thiazole nortopsentin analogs.* Marine Drugs, (2016), 14, 226/1-226/18.
40. Spanò, V.; Pennati, M.; Parrino, B.; Carbone, A.; Montalbano, A.; Lopergolo, A.; Zuco, V.; Cominetti, D.; Diana, P.; Cirrincione, G.; Zaffaroni, N.; **Barraja, P**. *[1,2]Oxazolo[5,4-e]isoindoles as promising tubulin polymerization inhibitors*. Eur. J. Med. Chem., (2016), 124, 840-851.
41. Spanò, V.; Frasson, I.; Giallombardo, D.; Doria, F.; Parrino, B.; Carbone, A.; Montalbano, A.; Nadai, M.; Diana, P.; Cirrincione, G.; Freccero, M.; Richter, S.N.; **Barraja, P**. *Synthesis and antiproliferative mechanism of action of pyrrolo[3',2':6,7]cyclohepta[1,2-d]pyrimidin-2-amines as singlet oxygen photosensitizers*. Eur. J. Med. Chem., (2016), 123, 447-461.
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44. Carbone, A.; Parrino, B.; Di Vita, G.; Attanzio, A.; Spanò, V., Montalbano, A.; **Barraja, P.**; Tesoriere, L.; Livrea, M.A.; Diana, P.; Cirrincione, G. *Synthesis and antiproliferative activity of thiazolyl-bis-pyrrolo[2,3-b]pyridines and indolyl-thiazolyl-pyrrolo[2,3-c]pyridines, nortopsentin analogues*. Marine Drugs, (2015), *13*, 460-492.
45. Parrino, B.; Carbone, A.; Ciancimino, C.; Spanò, V.; Montalbano, A.; **Barraja, P**.; Cirrincione, G.; Diana, P.; Sissi, C.; Palumbo, M.; Pinato, O.; Pennati, M.; Beretta, G.; Folini, M.; Matyus, P.; Balogh, B.; Zaffaroni, N. *Water-soluble isoindolo[2,1-a]quinoxalin-6-imines: In vitro antiproliferative activity and molecular mechanism(s) of action*. Eur. J. Med. Chem., (2015), 94, 149-162.

46. Parrino, B.; Carbone, A.; Spanò, *V.;* Montalbano, A.*;* Giallombardo, D.; **Barraja, P**.; Attanzio, A.; Tesoriere, L.; Sissi, C.; Palumbo, M.; Cirrincione, G.; Diana, P. *Aza-indolo and isoindolo-azaquinoxaline derivatives with antiproliferative activity*. Eur. J. Med. Chem., (2015), 94, 367-377.
47. Parrino, B.; Carbone, A.; Di Vita, G.; Ciancimino, C.; Attanzio, A.; Spanò, V.; Montalbano, A.; **Barraja, P**.; Tesoriere, L.; Livrea, M.A.; Diana, P.; Cirrincione, G. *3-[4-(1H-Indol-3-yl)-1,3-thiazol-2-yl]-1H-pyrrolo[2,3-b]pyridines, Nortopsentin Analogues with Antiproliferative Activity*. Marine Drugs, (2015), 13, 1901-1924.
48. Spanò, V.; Parrino, B.; Carbone, A.; Montalbano, A.; Salvador, A.; Brun, P.; Vedaldi, D.; Diana, P.; Cirrincione, G.; **Barraja, P.** *Pyrazolo[3,4-h]quinolines promising photosensitizing agents in the treatment of cancer*. Eur. J. Med. Chem., (2015), 102, 334-351.
49. Parrino, B.; Ciancimino, C.; Carbone, A.; Spanò, V.; Montalbano, A.; **Barraja, P**.; Cirrincione, G.; Diana, P. *Synthesis of isoindolo[1,4]benzoxazinone and isoindolo[1,5]benzoxazepine: two new ring systems of pharmaceutical interest*. Tetrahedron, (2015), 71, 7332-7338.
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58. Barraja, P.; Spanò, V.; Giallombardo, D.; Diana, P.; Montalbano, A.; Carbone, A.; Parrino, B.; Cirrincione, G. *Synthesis of [1,2]oxazolo[5,4-e]indazoles as antitumor agents*. Tetrahedron, (2013), 69, 6474-6477.
59. Montalbano, A.; Parrino, B.; Diana, P.; **Barraja, P**.; Carbone, A.; Spanò, V.; Cirrincione, G. *Synthesis of the new oligopeptide pyrrole derivative isonetropsin and its one pyrrole unit analogue.* Tetrahedron, (2013), 69, 2550-2554.
60. Carbone, A.; Parrino, B.; **Barraja P.**; Spanò, V.; Cirrincione, G.; Diana, P.; Maier, A.; Kelter, G.; Fiebig, H.-H. *Synthesis and Antiproliferative Activity of 2,5-bis(3'-Indolyl)pyrroles, Analogues of the Marine Alkaloid Nortopsentin*. Mar. Drugs, 2013, 11, 643

Projects/Grants

2023-2025
Molecules 3.0 for cystic fibrosis. New generation of pharmacological modulators to rescue mutant CFTR protein. Italian Cystic Fibrosis Foundation (FFC), P.I. . in collaboration with the Telethon Institute (TIGEM)
€ 170.000 1st year, € 180 2nd year

2021-2023
Molecules 3.0 for cystic fibrosis. New generation of pharmacological modulators to rescue mutant CFTR protein. Italian Cystic Fibrosis Foundation (FFC), P.I. in collaboration with the Telethon Institute (TIGEM)
€ 190.000 1st year, € 270 2nd year

2020-2022
FFC#3/2020
Small nitrogen heterocycles as correctors of the mutant CFTR protein in cystic fibrosis (Italian Cystic Fibrosis Foundation FFC Grant 2020, P.I.)
92.000 EUROS

2019-2023
PRIN 2018 2017XZ7A37 Selective mGlu3 metabotropic glutamate receptor ligands as new potential therapeutic agents in experimental models of parkinsonism.
106.000 EUROS

2018-2020
FFC#4/2018
Towards the discovery of new correctors based on nitrogen heterocyclic systems (Italian Cystic Fibrosis Foundation FFC Grant 2020, P.I.)
82.000 EUROS

2017
PJ_005042_LIFC
Donazione dalla Lega Italiana Fibrosi Cistica ONLUS
17.000 EUROS

2013-2015
PON02_00451_3361785– DI.ME.SA
Valorizzazione di prodotti tipici della Dieta Mediterranea e loro impiego a fini salutistici e nutraceutici
240.390 EUROS

Patents

• Italian Patent (2009), IT 1395194 (PD2009A000224) "Sintesi chimica di nuovi agenti fotochemioterapici eterociclici, con attività antiproliferativa compresa quella di natura neoplastica"

• PCT Int. Appl. (2011), WO 2011013159 "Pyrrolo[3,2-h]quinoline derivatives as photochemotherapeutic heterocyclic having antiproliferative and antineoplastic activity"

• US2012129884A1 (2012) "Pyrrolo[3,2-h]quinoline derivatives as photochemotherapeutic heterocyclic having antiproliferative and antineoplastic activity"

• Italian Patent (2014), IT 13318PTIT (FI2014A000305 del 24/12/2014) "Nuovi composti pirazolo[3,4-h]chinolinici, loro preparazione ed uso medico"

• Italian Patent (2015), IT 2015-RM210 "Composti a struttura ossazolica, procedimenti per la loro produzione e loro impiego per la cura di patologie a carattere iperproliferativo"

• Italian Patent (2015), IT 2015-RM212 "4,5,6,9-Tetraidropirrolo[2',3':3,4] cicloepta[1,2-d]isossazoli, procedimento per la loro preparazione e loro uso come agenti antitumorali"

• PCT Int. Appl. (2016), WO 2016185348 (PCTIB2016052788) "4,5,6,9-tetrahydropyrrolo[2',3':3,4]cyclohepta[1,2-d]isoxazole, process for their preparation production and their uses as antitumor
agents"

• Italian Patent (2018), Fondazione Telethon-UniPa- IT 102018000010466 - Rif. A 137726 " Sistemi Eterociclici azotati e loro uso medico"

• Italian Patent (2019), UniPa N. 102019000015030 (26/08/2019) “Nuovi agenti terapeutici per il trattamento di patologie ematologiche”

•PCT Int. Appl. (2021), WO2021/038452 ”New therapeutic agents for the tratment of haematological pathologies”

- PCT Int. Appl. (2020), Preparation of heterocyclic compounds for medical use WO 2020104558 A1 20200528, Telethon-UniPa-FFC; PCT/EP2019/081988; estensione della domanda dal 2021 con i seguenti numeri di deposito UNITED STATES N°17295728, CANADA N°3120739, AUSTRALIA N° 2019382862, ISRAEL N° 283315, EPO N°198087553.

Conferences

Invited Lectures

- 19th Congresso nazionale SIFC, 2023 Palermo
- 21th Convention FFC Investigors in Cystic Fibrosis November, 2023 Verona
- XX SEMINARIO DI PRIMAVERAFFC ricerca 18 giugno 2022, Jesolo (VE)
- 20th Convention FFC Investigors in Cystic Fibrosis November, 2022 Verona
- 19th Convention FFC Investigors in Cystic Fibrosis November, 2021Verona
- 18th Convention FFC Investigors in Cystic Fibrosis November, 2020 Verona
- 17th Convention FFC Investigors in Cystic Fibrosis November, 2019 Verona
- 16th Convention FFC Investigors in Cystic Fibrosis November, 2018 Verona
- MuTaLig COST ACTION CA15135 2018 - 2018 Valletta (Malta)
- XXIV National Meeting in Med. Chem. 2016, Perugia
- 21st National Meeting on Med. Chem. 2012, Palermo
- European Organization for Research and Treatment of Cancer (EORTC) Bruxelles - "Pharmacology and Molecular Mechanisms" (PAMM) 03-2009
- Regional meeting on Medicinal Chemistry 12-2005, Catania
- XVI National meeting on Medicinal Chemistry 2002
- IX Meeting on Heterocyclic Structures 2000, Palermo.

Honours and awards

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

Location, Date *Palermo 10/09/2023*
Signature