PERSONAL INFORMATION

Angela Stefanachi

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Sex Female | Date of birth 28/07/1974| Nationality Italian

WORK EXPERIENCE

1999-2000 **Research fellowship**

Synthesis of selective Adenosine2B receptor antagonists for the treatment of Asthma". Prof. Ravina, University of Santiago de Compostela Spain.

2009- present **Assistant Professor of Medicinal Chemistry** in the Faculty of Pharmacy, University of Bari

RESEARCH FOCUS

The design and synthesis of small molecule through parallel organic synthesis, both on solid phase and in solution, with potential pharmacological activity toward pathologies such as cancer (Aromatase, Protein Kinases (JNK), MDR and HDAC inhibitors.

TEACHING ACTIVITIES

2016-present **Teacher of Analisi chimica farmaceutica e tossicologica II"** Department: Farmacia-Scienze del Farmaco, Università degli studi di Bari "Aldo Moro".

2018-2019, 2020-to present **Teacher of "Analisi II"** Faculty of Pharmacy, Università Cattolica "Nostra Signora del Buon Consiglio" Kompleksi Spitalor Universitar "Zoja e Këshillit të Mirë" Rruga "Dritan Hoxha", Tirana, Albania

2006-present **Laboratory tutor** in the "Analisi chimica farmaceutica e tossicologica II" course, Faculty of Pharmacy, University of Bari

2016- present: **Erasmus Coordinator**

of Dipartimento Di Farmacia Dell'università Degli Studi Di Bari "Aldo Moro" and the Department of Pharmacy of Saarbrueken University, Saarlandes. (coordinators: PROF R.W. HARTMANN and PROF. A.HIRSCH (Head, Department of Drug Design and Optimization (DDOP) Helmholtz Institute for Pharmaceutical Research Saarland).

2016-present: **Global Thesis Coordinator**

of Dipartimento di Farmacia dell'Università Degli Studi Di Bari "Aldo Moro" and the Facultad de Farmacia and CIQUS de la Universidad de Santiago de Compostela. SPAIN (coordinator prof Eddy Sotelo).

2006-present Supervisor of student during their pregraduation experimental thesis training in medicinal chemistry, Faculty of Pharmacy, University of Bari "Aldo Moro".

2009-2013 **Committee Member for the PhD Course "Medicinal Chemistry "**, Faculty of Pharmacy, University of Bari

2014-present **Committee Member for the PhD Course" Biomolecular, Pharmaceutical and Medical Sciences"**, University of Bari.

EDUCATION AND TRAINING

1998 **Degree in Chemistry and Pharmaceutical Technology,**
Grade: Cum Laude, University

1999 **Qualification as Pharmacist,**
University of Bari, Italy.

2004 **PhD in "Medicinal Chemistry",**
awarded to Italian Ministry of University and Research

2004-2008 **Post-doc fellowship**
on "The synthesis of AChE-BChE and Aβ1-40 aggregation inhibitors for the treatment of neurodegenerative diseases" University of Bari, Italy.

PERSONAL SKILLS

Mother tongue(s) ITALIAN

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B1/2	B1/2	B1/2	B1/2	B1/2
Spanish	B1/2	B1/2	B1/2	B1/2	B1/2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills
- good communication skills gained through my experience as university teacher

Organisational / managerial skills
- Leadership (currently responsible for a team of 4 people)

Computer skills good command of Microsoft Office™ tools, Chem Draw, Prism Graph Pad, Pymol.

Driving licence B

PUBLICATIONS
Co-authored 43 publications

- Iacobazzi, R.M., Cutrignelli, A., Stefanachi, A., Porcelli, L., Lopedota, A.A., Di Fonte, R., Lopalco, A., Serratì, S., Laquintana, V., Silvestris, N., Franco, M., Cellamare, S., Leonetti, F., Azzariti, A., Denora, N. Hydroxy-propil-β-cyclodextrin inclusion complexes of two biphenylnicotinamide derivatives: Formulation and anti-proliferative activity evaluation in pancreatic cancer cell models. (2020) International Journal of Molecular Sciences, 21 (18), art. no. 6545, pp. 1-14. DOI: 10.3390/ijms21186545
- Carofiglio, F., Trisciuzzi, D., Gambacorta, N., Leonetti, F., Stefanachi, A., Nicolotti, O. Bcr-Abl Allosteric Inhibitors: Where We Are and Where We Are Going to (2020) Molecules, 25 (18), art. no. 4210. DOI: 10.3390/molecules25184210
- Blasi, D., Sarcina, L., Tricase, A., Stefanachi, A., Leonetti, F., Alberga, D., Mangiatordi, G.F., Manoli, K., Scamarcio, G., Picca, R.A., Torsi, L. Enhancing the Sensitivity of Biotinylated Surfaces by Tailoring the Design of the Mixed Self-Assembled Monolayer Synthesis (2020) ACS Omega, 5 (27), pp. 16762-16771. DOI: 10.1021/acsomega.0c01717
- Spinelli, F., Giampietro, R., Stefanachi, A., Riganti, C., Kopecka, J., Abatematteo, F.S., Leonetti, F., Colabufo, N.A., Mangiatordi, G.F., Nicolotti, O., Perrone, M.G., Brea, J., Loza, M.I., Infantino, V., Abate, C., Contino, M. Design and synthesis of fluorescent ligands for the detection of cannabinoid type 2 receptor (CB2R). (2020) European Journal of Medicinal Chemistry, 188, art. no. 112037. DOI: 10.1016/j.ejmech.2020.112037
- Cavalluzzi, M.M., Imbrici, P., Gualdani, R., Stefanachi, A., Mangiatordi, G.F., Lentini, G., Nicolotti, O. Human ether-à-go-go-related potassium channel: exploring SAR to improve drug design (2020) Drug Discovery Today, 25 (2), pp. 344-366. DOI: 10.1016/j.drudis.2019.11.005
- Carofiglio, F., Lopalco, A., Lopedota, A., Cutrignelli, A., Nicolotti, O., Denora, N., Stefanachi, A., Leonetti, F. Bcr-abl tyrosine kinase inhibitors in the treatment of pediatric cml (2020) International Journal of Molecular Sciences, 21 (12), art. no. 4469, pp. 1-21. DOI: 10.3390/ijms21124469
- Porcelli, L., Stolfa, D., Stefanachi, A., Di Fonte, R., Garofoli, M., Iacobazzi, R.M., Silvestris, N., Guarini, A., Cellamare, S., Azzariti, A.Synthesis and biological evaluation of N-biphenyl-nicotinic based moiety compounds: A new class of antimitotic agents for the treatment of Hodgkin Lymphoma (2019) Cancer Letters, 445, pp. 1-10. DOI: 10.1016/j.canlet.2018.12.013
- Stefanachi, A., Leonetti, F., Pisani, L., Catto, M., Carotti, A. Coumarin: A natural, privileged and versatile scaffold for bioactive compounds (2018) Molecules, 23 (2), art. no. 250. DOI: 10.3390/molecules23020250
- Majellaro, M., Stefanachi, A., Tardia, P., Vicenti, C., Boccarelli, A., Pannunzio, A., Campanella, F., Coluccia, M., Denora, N., Leonetti, F., de Candia, M., Altomare, C.D., Cellamare, S. Investigating Structural Requirements for the Antiproliferative Activity of Biphenyl Nicotinamides (2017) ChemMedChem, 12 (16), pp. 1380-1389. DOI: 10.1002/cmdc.201700365
- Stefanachi, A., Mangiatordi, G.F., Tardia, P., Alberga, D., Leonetti, F., Niso, M., Colabufo, N.A., Adamo, C., Nicolotti, O., Cellamare, S. Design, synthesis, biological evaluation, NMR and DFT studies of structurally simplified trimethoxy benzamides as selective P-glycoprotein inhibitors: the role of molecular flatness (2016) Chemical Biology and Drug Design, 88 (6), pp. 820-831. DOI: 10.1111/cbdd.12811
- Mangiatordi, G.F., Alberga, D., Altomare, C.D., Carotti, A., Catto, M., Cellamare, S., Gadaleta, D., Lattanzi, G., Leonetti, F., Pisani, L., Stefanachi, A., Trisciuzzi, D., Nicolotti, O. Mind the Gap! A Journey towards Computational Toxicology (2016) Molecular Informatics, pp. 294-308. DOI: 10.1002/minf.201501017
- Leo, V., Stefanachi, A., Nacci, C., Leonetti, F., De Candia, M., Carotti, A., Altomare, C.D., Montagnani, M., Cellamare, S. Galloyl benzamide-based compounds modulating tumour necrosis factor α-stimulated c-Jun N-terminal kinase and p38 mitogen-activated protein kinase signalling pathways (2015) Journal of Pharmacy and Pharmacology, 67 (10), pp. 1380-1392. DOI: 10.1111/jphp.12438
- Stefanachi, A., Hanke, N., Pisani, L., Leonetti, F., Nicolotti, O., Catto, M., Cellamare, S., Hartmann, R.W., Carotti, A. Discovery of new 7-substituted-4-imidazolylmethyl coumarins and 4′-substituted-2-imidazolyl acetophenones open analogues as potent and selective inhibitors of steroid-11β-hydroxylase (2015) European Journal of Medicinal Chemistry, 89, pp. 106-114. DOI: 10.1016/j.ejmech.2014.10.021
- Tardia, P., Stefanachi, A., Niso, M., Stolfa, D.A., Mangiatordi, G.F., Alberga, D., Nicolotti, O., Lattanzi, G., Carotti, A., Leonetti, F., Perrone, R., Berardi, F., Azzariti, A., Colabufo, N.A., Cellamare, S. Trimethoxybenzanilide-based P-glycoprotein modulators: An interesting case of lipophilicity tuning by intramolecular hydrogen bonding (2014) Journal of Medicinal Chemistry, 57 (15), pp. 6403-6418. DOI: 10.1021/jm500697c
- Favia, A.D., Nicolotti, O., Stefanachi, A., Leonetti, F., Carotti, A. Computational methods for the design of potent aromatase inhibitors (2013) Expert Opinion on Drug Discovery, 8 (4), pp. 395-409. DOI: 10.1517/17460441.2013.768983
- Pisani, L., Barletta, M., Soto-Otero, R., Nicolotti, O., Mendez-Alvarez, E., Catto, M., Introcaso, A., Stefanachi, A., Cellamare, S., Altomare, C., Carotti, A. Discovery, biological evaluation, and structure-activity and -selectivity relationships of 6′-substituted (E)-2-(benzofuran-3(2H)-ylidene)-N-methylacetamides, a novel class of potent and selective monoamine oxidase inhibitors (2013) Journal of Medicinal Chemistry, 56 (6), pp. 2651-2664. DOI: 10.1021/jm4000769

Publications

- Catto, M., Pisani, L., Leonetti, F., Nicolotti, O., Pesce, P., Stefanachi, A., Cellamare, S., Carotti, A.Design, synthesis and biological evaluation of coumarin alkylamines as potent and selective dual binding site inhibitors of acetylcholinesterase (2013) Bioorganic and Medicinal Chemistry, 21 (1), pp. 146-152. DOI: 10.1016/j.bmc.2012.10.045
- Pisani, L., Catto, M., Nicolotti, O., Grossi, G., Di Braccio, M., Soto-Otero, R., Mendez-Alvarez, E., Stefanachi, A., Gadaleta, D., Carotti, A. Fine molecular tuning at position 4 of 2H-chromen-2-one derivatives in the search of potent and selective monoamine oxidase B inhibitors (2013) European Journal of Medicinal Chemistry, 70, pp. 723-739. DOI: 10.1016/j.ejmech.2013.09.034
- Nicolotti, O., Catto, M., Giangreco, I., Barletta, M., Leonetti, F., Stefanachi, A., Pisani, L., Cellamare, S., Tortorella, P., Loiodice, F., Carotti, A. Design, synthesis and biological evaluation of 5-hydroxy, 5-substituted-pyrimidine-2,4,6-triones as potent inhibitors of gelatinases MMP-2 and MMP-9 (2012) European Journal of Medicinal Chemistry, 58, pp. 368-376. DOI: 10.1016/j.ejmech.2012.09.036
- Leonetti, F., Muncipinto, G., Stefanachi, A., Nicolotti, O., Cellamare, S., Catto, M., Pisani, L., Pellegrino, G., Carotti, A. Toward a fragment-based approach to MMPs inhibitors: An expedite and efficient synthesis of N-hydroxylactams (2012) Tetrahedron Letters, 53 (32), pp. 4114-4116. DOI: 10.1016/j.tetlet.2012.05.124
- Stolfa, D.A., Stefanachi, A., Gajer, J.M., Nebbioso, A., Altucci, L., Cellamare, S., Jung, M., Carotti, A. Design, Synthesis, and Biological Evaluation of 2-Aminobenzanilide Derivatives as Potent and Selective HDAC Inhibitors (2012) ChemMedChem, 7 (7), pp. 1256-1266. DOI: 10.1002/cmdc.201200193
- Pellicani, R.Z., Stefanachi, A., Niso, M., Carotti, A., Leonetti, F., Nicolotti, O., Perrone, R., Berardi, F., Cellamare, S., Colabufo, N.A. Potent galloyl-based selective modulators targeting multidrug resistance associated protein 1 and P-glycoprotein (2012) Journal of Medicinal Chemistry, 55 (1), pp. 424-436. DOI: 10.1021/jm201305y
- Stefanachi, A., Leonetti, F., Nicolotti, O., Catto, M., Pisani, L., Cellamare, S., Altomare, C., Carotti, A. New strategies in the chemotherapy of leukemia: Eradicating cancer stem cells in chronic myeloid leukemia (2012) Current Cancer Drug Targets, 12 (5), pp. 571-596. DOI: 10.2174/156800912800673239
- Giangreco, I., Lattanzi, G., Nicolotti, O., Catto, M., Laghezza, A., Leonetti, F., Stefanachi, A., Carotti, A. Insights into the complex formed by matrix metalloproteinase-2 and alloxan inhibitors: Molecular dynamics simulations and free energy calculations (2011) PLoS ONE, 6 (10), art. no. e25597. DOI: 10.1371/journal.pone.0025597
- Nicolotti, O., Giangreco, I., Introcaso, A., Leonetti, F., Stefanachi, A., Carotti, A. Strategies of multi-objective optimization in drug discovery and development (2011) Expert Opinion on Drug Discovery, 6 (9), pp. 871-884. DOI: 10.1517/17460441.2011.588696
- Leonetti, F., Stefanachi, A., Nicolotti, O., Catto, M., Pisani, L., Cellamare, S., Carotti, A. BCR-ABL inhibitors in chronic myeloid leukemia: Process chemistry and biochemical profile (2011) Current Medicinal Chemistry, 18 (19), pp. 2943-2959. DOI: 10.2174/092986711796150414
- Stefanachi, A., Favia, A.D., Nicolotti, O., Leonetti, F., Pisani, L., Catto, M., Zimmer, C., Hartmann, R.W., Carotti, A. Design, synthesis, and biological evaluation of imidazolyl derivatives of 4,7-disubstituted coumarins as aromatase inhibitors selective over 17-α-hydroxylase/C17-20 lyase (2011) Journal of Medicinal Chemistry, 54 (6), pp. 1613-1625. DOI: 10.1021/jm101120u
- Nicolotti, O., Pisani, L., Catto, M., Leonetti, F., Giangreco, I., Stefanachi, A., Carotti, A.
- Discovery of a potent and selective hetero-bivalent AChE inhibitor via bioisosteric replacement (2011) Molecular Informatics, 30 (2-3), pp. 133-136. DOI: 10.1002/minf.201000126
- Pisani, L., Catto, M., Leonetti, F., Nicolotti, O., Stefanachi, A., Campagna, F., Carotti, A. Targeting monoamine oxidases with multipotent ligands: An emerging strategy in the search of new drugs against neurodegenerative diseases (2011) Current Medicinal Chemistry, 18 (30), pp. 4568-4587. DOI: 10.2174/092986711797379302
- Pisani, L., Catto, M., Giangreco, I., Leonetti, F., Nicolotti, O., Stefanachi, A., Cellamare, S., Carotti, A. Design, synthesis, and biological evaluation of coumarin derivatives tethered to an edrophonium-like fragment as highly potent and selective dual binding site acetylcholinesterase inhibitors (2010) ChemMedChem, 5 (9), pp. 1616-1630. DOI: 10.1002/cmdc.201000210
- Pellegrino, G., Leonetti, F., Carotti, A., Nicolotti, O., Pisani, L., Stefanachi, A., Catto, M. Solid phase synthesis of a molecular library of pyrimidines, pyrazoles, and isoxazoles with biological potential (2010) Tetrahedron Letters, 51 (13), pp. 1702-1705. DOI: 10.1016/j.tetlet.2010.01.089
- Fernández, F., Caamaño, O., Isabel Nieto, M., López, C., García-Mera, X., Stefanachi, A., Nicolotti, O., Isabel Loza, M., Brea, J., Esteve, C., Segarra, V., Vidal, B., Carotti, A. 1,3-Dialkyl-8-N-substituted benzyloxycarbonylamino-9-deazaxanthines as potent a adenosine receptor ligands: Design, synthesis, structure-affinity and structure-selectivity relationships (2009) Bioorganic and Medicinal Chemistry, 17 (10), pp. 3618-3629. DOI: 10.1016/j.bmc.2009.03.062
- Coelho, A., Crespo, A., Fernández, F., Biagini, P., Stefanachi, A., Sotelo, E. Synthetic applications of polystyrene-supported 1,1,3,3- tetramethylguanidine (2008) Combinatorial Chemistry and High Throughput Screening, 11 (10), pp. 843-847. DOI: 10.2174/138620708786734253

Publications

- Stefanachi, A., Nicolotti, O., Leonetti, F., Cellamare, S., Campagna, F., Loza, M.I., Brea, J.M., Mazza, F., Gavuzzo, E., Carotti, A. 1,3-Dialkyl-8-(hetero)aryl-9-OH-9-deazaxanthines as potent A2B adenosine receptor antagonists: Design, synthesis, structure-affinity and structure-selectivity relationships (2008) Bioorganic and Medicinal Chemistry, 16 (22), pp. 9780-9789. DOI: 10.1016/j.bmc.2008.09.067
- Leonetti, F., Catto, M., Nicolotti, O., Pisani, L., Cappa, A., Stefanachi, A., Carotti, A.Homo- and hetero-bivalent edrophonium-like ammonium salts as highly potent, dual binding site AChE inhibitors (2008) Bioorganic and Medicinal Chemistry, 16 (15), pp. 7450-7456. DOI: 10.1016/j.bmc.2008.06.022
- Cellamare, S., Stefanachi, A., Stolfa, D.A., Basile, T., Catto, M., Campagna, F., Sotelo, E., Acquafredda, P., Carotti, A. Design, synthesis, and biological evaluation of glycine-based molecular tongs as inhibitors of Aβ1-40 aggregation in vitro(2008) Bioorganic and Medicinal Chemistry, 16 (9), pp. 4810-4822. DOI: 10.1016/j.bmc.2008.03.052
- Stefanachi, A., Brea, J.M., Cadavid, M.I., Centeno, N.B., Esteve, C., Loza, M.I., Martinez, A., Nieto, R., Raviña, E., Sanz, F., Segarra, V., Sotelo, E., Vidal, B., Carotti, A. 1-, 3- and 8-substituted-9-deazaxanthines as potent and selective antagonists at the human A2B adenosine receptor (2008) Bioorganic and Medicinal Chemistry, 16 (6), pp. 2852-2869. DOI: 10.1016/j.bmc.2008.01.002
- Leonetti, F., Capaldi, C., Pisani, L., Nicolotti, O., Muncipinto, G., Stefanachi, A., Cellamare, S., Caccia, C., Carotti, A. Solid-phase synthesis and insights into structure-activity relationships of safinamide analogues as potent and selective inhibitors of type B monoamine oxidase (2007) Journal of Medicinal Chemistry, 50 (20), pp. 4909-4916. DOI: 10.1021/jm070725e
- Carotti, A., Cadavid, M.I., Centeno, N.B., Esteve, C., Loza, M.I., Martinez, A., Nieto, R., Raviña, E., Sanz, F., Segarra, V., Sotelo, E., Stefanachi, A., Vidal, B. Design, synthesis, and structure-activity relationships of 1-,3-,8-, and 9-substituted-9-deazaxanthines at the human A2B adenosine receptor (2006) Journal of Medicinal Chemistry, 49 (1), pp. 282-299. DOI: 10.1021/jm0506221
- Carotti, A., Stefanachi, A., Raviña, E., Sotelo, E., Loza, M.I., Cadavid, M.I., Centeno, N.B., Nicolotti, O. 8-Substituted-9-deazaxanthines as adenosine receptor ligands: Design, synthesis and structure-affinity relationships at A 2B (2004) European Journal of Medicinal Chemistry, 39 (10), pp. 879-887. DOI: 10.1016/j.ejmech.2004.07.008
- Stefanachi, A., Leonetti, F., Cappa, A., Carotti, A. Fast and highly efficient one-pot synthesis of 9-deazaxanthines (2003) Tetrahedron Letters, 44 (10), pp. 2121-2123. DOI: 10.1016/S0040-4039(03)00173-4
- Nieto, R.M., Coelho, A., Martínez, A., Stefanachi, A., Sotelo, E., Raviña, E. Synthesis of 1-substituted-6-methyluracils (2003) Chemical and Pharmaceutical Bulletin, 51 (9), pp. 1025-1028. DOI: 10.1248/cpb.51.1025