

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Stefano Alcaro

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Full Professor of Medicinal Chemistry

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University "La Sapienza", Rome (Italy)	B.S.	07/1990	Medicinal Chemistry
University "La Sapienza", Rome (Italy)	Ph.D	11/1993	Pharmacology, Pharmacognosy and Toxicology
Columbia University, NYC (USA)	Postdoctoral	10/1994	Computational Chemistry
University "La Sapienza", Rome (Italy)	Second B.S.	07/1995	Pharmacy

A. Personal Statement

His scientific interests are related to the development of new molecular modeling tools useful in the drug discovery process and to the application of them and other methods, mainly in the design of anticancer and antiviral agents.

B. Positions and Honors

1996-2002 Assistant Professor of Medicinal Chemistry, Faculty of Pharmacy at University "Magna Græcia" of Catanzaro (Italy);
 2002-2011 Associate Professor of Medicinal Chemistry, Faculty of Pharmacy at University "Magna Græcia" of Catanzaro (Italy);
 2011- Full Professor of Medicinal Chemistry, Department of Health Sciences at University "Magna Græcia" of Catanzaro (Italy);
 2013- Coordinator of Life Science PhD Program at University "Magna Græcia" of Catanzaro;
 2015- "Coordinator-Elect" of the Paul Ehrlich Euro-PhD Network for the period 2019-2021;
 2016- Chair of the H2020 COST Action MuTaLig CA15135 (www.mutalig.eu);
 2013-2016 Outstanding reviewer certificate for Journal of Medicinal Chemistry by the ACS
 2018 Main proposer and founder of the Net4Science academic spin-off (www.net4science.com)

C. Contributions to Science

He is co-author of about 200 peer-reviewed manuscripts and numerous communications presented at national and international meetings.

Bibliometric indexes, Jan 2019:

WOS H-index = 34

Scopus H-Index = 36

Google Scholar H-index = 40

TIS in Chemistry Area at the www.topitalianscientists.org

Evaluation of research quality (Italian VQR 2004-2010) = AAA (out of 3 products)

Evaluation of research quality (Italian VQR 2011-2014) = AA (out of 2 products)

List of 2018 peer reviewed manuscripts

- Vasile, F., Della Volpe, S., Ambrosio, F.A., Costa, G., Unver, M.Y., Zucal, C., Rossi, D., Martino, E., Provenzani, A., Hirsch, A.K.H., **Alcaro, S.**, Potenza, D., Collina, S. Exploration of ligand binding modes towards the identification of compounds targeting HuR: a combined STD-NMR and Molecular Modelling approach (2018) *Scientific Reports*, 8 (1), art. no. 13780. DOI: 10.1038/s41598-018-32084-z Editor Springer Nature
- Gaudio, E., Paduano, F., Pinton, S., D'Agostino, S., Rocca, R., Costa, G., Ngankeu, A., Aqeilan, R.I., Croce, C.M., Bertoni, F., **Alcaro, S.**, Trapasso, F. TCL1A interacts with TP63 and enhances the survival of Raji Burkitt lymphoma cell line (2018) *British Journal of Haematology*, 183 (3), pp. 509-512. DOI: 10.1111/bjh.14989 Editor Wiley & Sons
- Meleddu, R., Distinto, S., Cottiglia, F., Angius, R., Gaspari, M., Taverna, D., Melis, C., Angeli, A., Bianco, G., Deplano, S., Fois, B., Del Prete, S., Capasso, C., **Alcaro, S.**, Ortuso, F., Yanez, M., Supuran, C.T., Maccioni, E. Tuning the Dual Inhibition of Carbonic Anhydrase and Cyclooxygenase by Dihydrothiazole Benzensulfonamides (2018) *ACS Medicinal Chemistry Letters*, 9 (10), pp. 1045-1050. Cited 1 time. DOI: 10.1021/acsmchemlett.8b00352 Editor American Chemical Society
- Reis, J., Cagide, F., Valencia, M.E., Teixeira, J., Bagetta, D., Pérez, C., Uriarte, E., Oliveira, P.J., Ortuso, F., **Alcaro, S.**, Rodríguez-Franco, M.I., Borges, F. Multi-target-directed ligands for Alzheimer's disease: Discovery of chromone-based monoamine oxidase/cholinesterase inhibitors (2018) *European Journal of Medicinal Chemistry*, 158, pp. 781-800. DOI: 10.1016/j.ejmech.2018.07.056 Editor Elsevier
- Rocca, R., Moraca, F., Costa, G., Talarico, C., Ortuso, F., Da Ros, S., Nicoletto, G., Sissi, C., **Alcaro, S.**, Artese, A. In Silico Identification of Piperidinyl-amine Derivatives as Novel Dual Binders of Oncogene c-myc/c-Kit G-quadruplexes (2018) *ACS Medicinal Chemistry Letters*, 9 (8), pp. 848-853. DOI: 10.1021/acsmchemlett.8b00275 Editor American Chemical Society
- Melis, C., Distinto, S., Bianco, G., Meleddu, R., Cottiglia, F., Fois, B., Taverna, D., Angius, R., **Alcaro, S.**, Ortuso, F., Gaspari, M., Angeli, A., Del Prete, S., Capasso, C., Supuran, C.T., Maccioni, E. Targeting Tumor Associated Carbonic Anhydrases IX and XII: Highly Isozyme Selective Coumarin and Psoralen Inhibitors (2018) *ACS Medicinal Chemistry Letters*, 9 (7), pp. 725-729. DOI: 10.1021/acsmchemlett.8b00170 Editor American Chemical Society
- Marascio, N., Pavia, G., Romeo, I., Talarico, C., Di Salvo, S., Reale, M., Marano, V., Barreca, G.S., Fabiani, F., Perrotti, N., De Siena, M., Giancotti, F., Gravina, T., **Alcaro, S.**, Artese, A., Torti, C., Liberto, M.C., Focà, A. Real-life 3D therapy failure: Analysis of NS5A 93H RAS plus 108 K polymorphism in complex with ombitasvir by molecular modeling (2018) *Journal of Medical Virology*, 90 (7), pp. 1257-1263. DOI: 10.1002/jmv.25073 Editor Wiley & Sons
- Reis, J., Cagide, F., Chavarria, D., Silva, T., Fernandes, C., Gaspar, A., Uriarte, E., Remião, F., **Alcaro, S.**, Ortuso, F., Borges, F. Correction to: Discovery of New Chemical Entities for Old Targets: Insights on the Lead Optimization of Chromone-Based Monoamine Oxidase B (MAO-B) Inhibitors (2018) *Journal of Medicinal Chemistry*, 61 (11), p. 5054. DOI: 10.1021/acs.jmedchem.8b00600 Editor American Chemical Society
- Romeo, I., Marascio, N., Pavia, G., Talarico, C., Costa, G., **Alcaro, S.**, Artese, A., Torti, C., Liberto, M.C., Focà, A. Structural Modeling of New Polymorphism Clusters of HCV Polymerase Isolated from Direct-Acting Antiviral Naïve Patients: Focus on Dasabuvir and Setrobuvir Binding Affinity (2018) *ChemistrySelect*, 3 (21), pp. 6009-6017. DOI: 10.1002/slct.201800649 Editor Wiley & Sons
- Malet, I., Ambrosio, F.A., Subra, F., Herrmann, B., Leh, H., Bouger, M.-C., Artese, A., Katlama, C., Talarico, C., Romeo, I., **Alcaro, S.**, Costa, G., Deprez, E., Calvez, V., Marcelin, A.-G., Delelis, O. Pathway involving the N155H mutation in HIV-1 integrase leads to dolutegravir resistance (2018) *Journal of Antimicrobial Chemotherapy*, 73 (5), pp. 1158-1166. DOI: 10.1093/jac/dkx529 Editor Oxford University press
- Molinaro, R., Evangelopoulos, M., Hoffman, J.R., Corbo, C., Taraballi, F., Martinez, J.O., Hartman, K.A., Cosco, D., Costa, G., Romeo, I., Sherman, M., Paolino, D., **Alcaro, S.**, Tasciotti, E. Design and Development of Biomimetic Nanovesicles Using a Microfluidic Approach (2018) *Advanced Materials*, 30 (15), art. no. 1702749. DOI: 10.1002/adma.201702749 Editor Wiley & Sons
- Ortuso, F., Bagetta, D., Maruca, A., Talarico, C., Bolognesi, M.L., Haider, N., Borges, F., Bryant, S., Langer, T., Senderowitz, H., **Alcaro, S.** The Mu.Ta.Lig. Chemotheca: A community-populated molecular

- database for multi-target ligands identification and compound-repurposing (2018) *Frontiers in Chemistry*, 6 (APR), art. no. 130. DOI: 10.3389/fchem.2018.00130 Editor Frontiers Media
13. Carradori, S., Ortuso, F., Petzer, A., Bagetta, D., De Monte, C., Secci, D., De Vita, D., Guglielmi, P., Zengin, G., Aktumsek, A., **Alcaro, S.**, Petzer, J.P. Design, synthesis and biochemical evaluation of novel multi-target inhibitors as potential anti-Parkinson agents (2018) *European Journal of Medicinal Chemistry*, 143, pp. 1543-1552. DOI: 10.1016/j.ejmech.2017.10.050 Editor Elsevier
 14. Koch, P., Brunschweiler, A., Namasivayam, V., Ullrich, S., Maruca, A., Lazzaretto, B., Küppers, P., Hinz, S., Hockemeyer, J., Wiese, M., Heer, J., **Alcaro, S.**, Kiec-Kononowicz, K., Müller, C.E. Probing substituents in the 1- and 3-position: Tetrahydropyrazino-annelated water-soluble xanthine derivatives as multi-target drugs with potent adenosine receptor antagonistic activity (2018) *Frontiers in Chemistry*, 6 (JUN), art. no. 206. DOI: 10.3389/fchem.2018.00206 Editor Frontiers Media
 15. Corigliano, D.M., Syed, R., Messineo, S., Lupia, A., Patel, R., Reddy, C.V.R., Dubey, P.K., Colica, C., Amato, R., De Sarro, G., **Alcaro, S.**, Indrasena, A., Brunetti, A. Indole and 2,4-Thiazolidinedione conjugates as potential anticancer modulators (2018) *PeerJ*, 2018 (8), art. no. e5386. DOI: 10.7717/peerj.5386 Editor PeerJ

Additional info at www.researchgate.net/profile/Stefano_Alcaro

D. Additional Information: Research Support and/or Scholastic Performance

Grants and funding resources

- 1997 NATO grant in collaboration with Prof. R. S. Coleman Ohio-State University (Columbus, USA) on a research computational project in anticancer field. Role: Co-Investigator
- 2000 Young research project CNR Agenzia 2000: "Computational study of interaction between biological active compounds and nucleic acids". Role: PI
- 2001 ST fellowship FIRG in the Prof. R.S Coleman's lab Ohio-State University Columbus (OH). Role: PI
- 2001 industrial grant on the project "Computational study of taxane based antitumor agents" Role: PI
- 2002 industrial grant on the project "Computational study of colchicine derivatives" Role: PI
- 2007 Grant MIUR on the project "Drug design, synthesis and biological evaluation of novel cyclooxygenase inhibitors". Role: PI of local unit
- 2008 Grant FIRB on the project "New agents in the specific anticancer therapy". Role: PI of local unit
- 2009 Grant MIUR on the project "Rational drug design and synthesis of ligands able to recognize the G-quadruplex motif of nucleic acids" Role: PI of local unit
- 2013 PON industrial grant for an advanced training course of young researchers. Role: Coordinator
- 2015 PON industrial grant for research activities - project "In silico studies of bioactive compounds". Role: PI
- 2016 COST Action CA15135 starting activities www.cost.eu/COST_Actions/ca/CA15135 (running project). Role: Chair

Catanzaro, Jan 30th 2019