



Beatrice Severino

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Gender: Female **Date of birth**: 1 Jun 1973 **Place of birth**: NAPOLI, Italy **Nationality**: Italian

WORK EXPERIENCE

- [2024 – Current] **Member of the Board of the PhD Course in Pharmaceutical Sciences**
University of Naples Federico II
- [2020 – Current] **Member of joint committee; Framework agreement for cultural and scientific collaboration between Department of Pharmacy (University of Naples Federico II) and the Medical University of Lublin (Poland)**
- [2018 – Current] **Associate Professor of Medicinal Chemistry Department of Pharmacy,**
University of Naples Federico II
- [2006 – 2018] **Assistant Professor in Medicinal Chemistry (03/D1, CHIM08), Department of Pharmacy**
University of Naples Federico II
- [2004 – 2005] **Postdoctoral Fellow, Pharmaceutical and Toxicological Department**
University of Naples Federico II
- [2003 – 2004] **Postdoctoral Fellow, Chemistry Department, College of Staten Island, CUNY, New York, USA**
- [2001 – Current] **Member of the Italian Society of Chemistry**
- [1998 – 1999] **Research Fellow funded by POP 1994/1999 (Campania Region), Department of Pharmaceutical and Toxicological Chemistry**
University of Naples Federico II

EDUCATION AND TRAINING

- [2003] **Ph.D. in Pharmaceutical Sciences**
University of Naples Federico II
- [1997] **Degree (M.Sc. equivalent) in Pharmaceutical Chemistry and Technology**
University of Naples Federico II

WORK ACTIVITIES

Funded projects as PI

2023 – to date PI for Research Unit of the PRIN 2022 Research Project prot. no. 2022W8SLMW entitled “Smart Injectable Scaffolds for Sclerostin Based Bone Resorption Treatment - SMART4SCLERO”

2018 – 2021 PI for the medicinal chemistry unit, EU project: PON ARS01_01226, subject: “Personalized medicine for innovative strategies in neuro-psychiatric and vascular diseases - PERMEDNET”

Funded projects as participant

2017 – 2020 Participant PRIN 2015, prot. n° 201532AHAE_001, subject: “The role of metabolic pathway of hydrogen sulphide in chronic obstructive pulmonary bronchopathy and pulmonary fibrosis: identification of potential therapeutic targets”.

2013 – 2016 Participant EU project: PON03PE_00146_1, subject: “Biomarkers, biomaterials and innovative drugs for the diagnosis and therapy of cerebral ischaemia and multi-drug resistant tumors of the head, neck and breast, through the creation of a biobanks network - BIBIOFAR”

2013 – 2016 Participant EU project: LIFE+ 2012 (ENV/IT/00633), subject: “Endocrine Disruptors in silico /in vivo evaluation and substitution for industrial applications”.

2013 – 2016 PRIN 2010-2011, prot. n° 2010Y4WMCR_002, subject: " Role of L-Cysteine / H₂S Transduction pathway in Inflammatory Diseases: Identification of a New Therapeutic Target ".

Editorial Activity

2024 - to date Guest Editor of the Special Issue of Molecules entitled “Design, Synthesis and Evaluation of Small Molecule Drugs”.

2018 – to date Editorial Board Member Medicinal Chemistry (Bentham Science Publishers)

2017 – to date Editorial Board Member Journal of Chemistry (Hindawi Publishing Corporation)

2007 – to date reviewer for Journal of Medicinal Chemistry, European Journal of Medicinal Chemistry, Bioorganic & Medicinal Chemistry, International Journal of Molecular Sciences, Molecules

Patents

1. Indolylacetic derivatives for use in the treatment of neurodegenerative diseases. Caliendo, Giuseppe; Corvino, Angela; Fiorino, Ferdinando; Frecentese, Francesco; Gargiulo, Michele; Perissutti, Elisa; Pignataro, Giuseppe; Santagada, Vincenzo; Severino, Beatrice. – (2024). EP4414363
2. Budesonide 21-phosphate sodium salt for use as anti-inflammatory or anti-asthmatic agent. Caliendo, Giuseppe; Cirino, Giuseppe; Fiorino, Ferdinando; Frecentese, Francesco; Muscara, Marcelo Nicolas; Perissutti, Elisa; Petti, Antonio; Roviezzo, Fiorentina; Santagada, Vincenzo; Severino, Beatrice; Magli, Elisa. (2023) WO2023001890
3. Process for the preparation of budesonide 21-phosphate. Caliendo, Giuseppe; Corvino, Angela; Fiorino, Ferdinando; Frecentese, Francesco; Magli, Elisa; Perissutti, Elisa; Petti, Antonio; Santagada, Vincenzo; Severino, Beatrice. (2023) WO2023001901
4. Budesonide 21-phosphate salts and pharmaceutical compositions containing the same. Caliendo, Giuseppe; Cirino, Giuseppe; Fiorino, Ferdinando; Frecentese, Francesco; Muscara, Marcelo Nicolas; Perissutti, Elisa; Petti, Antonio; Roviezzo, Fiorentina; Santagada, Vincenzo; Severino, Beatrice; Magli, Elisa. (2021) WO 2021191366
5. Montelukast esters and pharmaceutical compositions containing the same. Caliendo, Giuseppe; Cirino, Giuseppe; Fiorino, Ferdinando; Frecentese, Francesco; Muscara', Marcelo Nicolas; Perissutti, Elisa; Petti, Antonio; Santagada, Vincenzo; Severino, Beatrice; Roviezzo, Fiorentina. (2021) WO 2021023751
6. Montelukast salts and pharmaceutical compositions containing the same. Caliendo, Giuseppe; Cirino, Giuseppe; Fiorino, Ferdinando; Frecentese, Francesco; Muscara, Marcelo Nicolas; Perissutti, Elisa; Petti, Antonio; Roviezzo, Fiorentina; Santagada, Vincenzo; Severino, Beatrice. (2020) WO2020245358
7. Preparation of 7-nitro-5-phenyl-1-(pyrrolidin-1-ylmethyl)-1H-benzo[e][1,4]diazepin-2(3H)-one and other benzodiazepine derivatives useful in treating cerebral ischemia. Pignataro, G; Annunziato, L; Molinaro, P; Scorziello, A; Secondo, A; Pannaccione, A; Cuomo, O; Cantile, M; Di Renzo, G; Caliendo, G; Santagada, V; Severino, B; Fiorino, F. (2012) WO 2012072620

National and International Collaborations

-Prof. Giuseppe Cirino, Department of Pharmacy, University of Naples

-Prof. Paola Massarelli, Department of Medical, Surgical and Neuroscience Sciences University of Siena

-Prof. Gilberto de Nucci, Department of Pharmacology, Faculty of Medical Sciences, UNICAMP Campinas SP, Brazil

-Prof. Lucio Annunziato, Department of Neurosciences, University of Naples Federico II

-Prof. Luiz Juliano, Department of Biophysics, Escola Paulista de Medicina, Universidade Federal de Sao Paulo, SP, Brazil

- Prof. Anna Bielenica, Department of Biochemistry, Medical University of Warsaw, Poland
- Prof. Ewa Kędzierska, Department of Pharmacology and Pharmacodynamics, Medical University of Lublin, Poland
- Prof. Vincenzo Calderone, Department of Pharmacy, University of Pisa
- Prof. Marcelo Nicolas Muscarà, Department of Pharmacology, Institute of Biomedical Sciences, University of Sao Paulo, Brazil
- Prof. Chiara Donati, Department of Experimental and Clinical Biomedical Sciences "Mario Serio", University of Florence

Conferences and Seminars

- 2024 – Synthesis of 3,5-dihydrobenzo[e][1,4]thiazepin-2(1H)-one derivatives as NCX3 activators and evaluation in an in vivo model of ischemia. EFMC-ISMC 2024 - XXVIII EFMC International Symposium on Medicinal Chemistry Rome, September 01- 05, 2024
- 2023 – Developing H₂S donating hybrids as novel opportunity in multifactorial diseases. XXVIII National Meeting on Medicinal Chemistry (NMMC28) Università degli studi "G. D'Annunzio", Chieti-Pescara, September 17 – 20, 2023
- 2022 – New Insights into the Structure–Activity Relationships of Benzothiazepinone Derivatives as NCX3 Modulators. XXVII National Meeting on Medicinal Chemistry (NMMC28), Università degli Studi di Bari Aldo Moro Palazzo del Prete, September 11-14, 2022
- 2022 – Sviluppo di pepducine ad attività S1P3 antagonista e valutazione in un modello di fibrosi. National Meeting of the Sphingolipid Club – New Frontiers of Sphingolipids, Perugia, March 19-20, 2022
- 2021 - Antagonizing S1P3 Receptor with Cell-Penetrating Pepducins in Skeletal Muscle Fibrosis. XXVII National Meeting Italian Society of Chemistry, Virtual meeting, September 14-23, 2021
- 2020 - Severino B. Organizing Committee Member at the 3rd European Chemistry Conference held during October 12, 2020 Virtual Conference.
- 2019 - SAIDs-H₂S releasing hybrids: synthesis and biological evaluation in inflammatory diseases. XXVI National Meeting in Medicinal Chemistry NMMC-Milano, July 16-19, 2019
- 2018 - A hydrogen sulfide-releasing dexamethasone derivative attenuates atopic dermatitis severity signs and the associated oxidative stress markers in mice. 5th World Congress on the Biology of Hydrogen sulphide Toronto, Canada May 31 - June 3, 2018
- 2016 - Targeting S1P3 receptor with cell-penetrating pepducins: synthesis, biological evaluation and NMR studies. XXIV National Meeting in Medicinal Chemistry and 10th Young Medicinal Chemists Symposium Perugia, Italy September 11-14, 2016.
- 2016 - Synthesis and pharmacological evaluation of hydrogen sulphide-releasing hybrids and their evaluation in vitro. 4th International Conference on the Biology of Hydrogen sulphide Naples, Italy June 3-5, 2016
- 2015 - Identification of a Novel Selective CSE inhibitor through a combined pharmacological and metabolomic approach. 3rd European Conference on the Biology of Hydrogen Sulfide, Athens May 3-6, 2015
- 2009 - Design and Synthesis of Protease Activated Receptor-1 Ligands Containing 4-Amino-2-Benzazepin-3-ones as Conformationally Restricted Dipeptide Mimetics. NPCF – III Meeting Workshop. Lucca, February 13-14, 2009
- 2007 - Peptidi e peptidomimetici come inibitori di proteasi. I Meeting NPCF Università degli Studi di Salerno, February 22-23, 2007

ADDITIONAL INFORMATION

Publication

Total number of publications in peer-review journals 111 (SCOPUS)

publications in the last 10 years: 56

total number of citations: 2007

Selected papers in the last 5 years

- Scognamiglio, Antonia; Cerqua, Ida; Citi, Valentina; Martelli, Alma; Spezzini, Jacopo; Calderone, Vincenzo; Rimoli, Maria Grazia; Sodano, Federica; Caliando, Giuseppe; Santagada, Vincenzo; Fiorino, Ferdinando; Frecentese, Francesco; Perissutti, Elisa; Magli, Elisa; Simonelli, Martina; Corvino, Angela; Roviezzo, Fiorentina; **Severino, Beatrice**, Isothiocyanate-Corticosteroid Conjugates against asthma: Unity makes strength, *European Journal of Medicinal Chemistry (Elsevier)*, 275, 116636, (2024).
- Corvino, Angela; Granato, Elisabetta; Scognamiglio, Antonia; Fiorino, Ferdinando; Frecentese, Francesco; Magli, Elisa; Perissutti, Elisa; Santagada, Vincenzo; Cirino, Giuseppe; Cerqua, Ida; Pavese, Rocco; Petti, Antonio; Pavese, Francesca; Petti, Francesco; Roviezzo, Fiorentina; **Severino, Beatrice**; Caliando, Giuseppe, A New Process for the Synthesis of Budesonide 21-Phosphate and Evaluation in a Murine Model of Inflammation, *Molecules (MDPI)*, 29(18), 4514, (2024)
- Corvino, Angela; Scognamiglio, Antonia; Fiorino, Ferdinando; Perissutti, Elisa; Santagada, Vincenzo; Caliando, Giuseppe; **Severino, Beatrice**, Pills of Multi-Target H₂S Donating Molecules for Complex Diseases, *International Journal of Molecular Sciences (MDPI)*, 25(13), 701, (2024).
- Corvino, A.; Citi, V.; Fiorino, F.; Frecentese, F.; Magli, E.; Perissutti, E.; Santagada, V.; Calderone, V.; Martelli, A.; Gorica, E.; Brogi, S.; Colombo, F. F.; Capello, C. N.; Araujo Ferreira, H. H.; Rimoli, M. G.; Sodano, F.; Rolando, B.; Pavese, F.; Petti, A.; Muscara, M. N.; Caliando, G.; **Severino, B.** H₂S donating corticosteroids: Design, synthesis and biological evaluation in a murine model of asthma, *Journal of Advanced Research (Elsevier)*, 35, 267-277, (2022).
- Magli, E.; Fattorusso, C.; Persico, M.; Corvino, A.; Esposito, G.; Fiorino, F.; Luciano, P.; Perissutti, E.; Santagada, V.; **Severino, B.**; Tedeschi, V.; Pannaccione, Anna; Pignataro, G.; Caliando, G.; Annunziato, L.; Secondo, A.; Frecentese, F., New Insights into the Structure-Activity Relationship and Neuroprotective Profile of Benzodiazepinone Derivatives of Neurounina-1 as Modulators of the Na⁺/Ca²⁺ Exchanger Isoforms, *Journal of Medicinal Chemistry (American Chemical Society)*, 64,24, 17901-17919, (2021)
- Corvino, A.; Cerqua, I.; Lo Bianco, A.; Caliando, G.; Fiorino, F.; Frecentese, F.; Magli, E.; Morelli, E.; Perissutti, E.; Santagada, V.; Cirino, G.; Granato, E.; Roviezzo, F.; Puliti, E.; Bernacchioni, C.; Lavecchia, A.; Donati, C.; **Severino, B.**, Antagonizing S1P3 Receptor with Cell-Penetrating Pepducins in Skeletal Muscle Fibrosis, *International Journal of Molecular Sciences (MDPI)*, 22(16), (2021).
- Corvino, Angela; Frecentese, Francesco; Magli, Elisa; Perissutti, Elisa; Santagada, Vincenzo; Scognamiglio, Antonia; Caliando, Giuseppe; Fiorino, Ferdinando; **Severino, Beatrice**, Trends in H₂S-donors chemistry and their effects in cardiovascular diseases. *Antioxidants (MDPI)*, 10(3), 429, (2021).
- Citi, V.; Corvino, A.; Fiorino, F.; Frecentese, F.; Magli, E.; Perissutti, E.; Santagada, V.; Brogi, S.; Flori, L.; Gorica, E.; Testai, L.; Martelli, A.; Calderone, V.; Caliando, G.; **Severino, B.**, Structure-activity relationships study of isothiocyanates for H₂S releasing properties: 3-Pyridyl-isothiocyanate as a new promising cardioprotective agent, *Journal of Advanced Research (Elsevier)*, 27, 41-53, (2021).

13/02/2025

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