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Personal Information City, Country of Birth: Lucca, Italy Citizenship: Italian Languages: Italian, English,

### Education

1999: Degree in CTF (Chimica e Tecnologie Farmaceutiche), University of Pisa, Italy, 2003: PhD in Drug design and discovery

### **Appointments/Affiliations**

-2017 Licence as Full Professor in Medicinal chemistry

-2015 Associate Professor, Department of Pharmacy, University of Pisa

-2014 Visiting Professor, Dept. of Pharmaceutical Science, Sun Yat-Sen University, Guangzhou, China

-2007 Assistant Professor, Department of Pharmaceutical Science, University of Pisa

-2003 Research Associate in the Medicinal Chemistry Laboratory at the University of Pisa -2003 PhD in Drug Discovery, Univ. of Pisa.

## 2. AWARD AND FELLOWSHIPS:

- 2020 Sofinnova-Telethon Partners on Life Sciences: passed to second stage (not retained for funding)

- 2017 GSK Discovery Partnerships with Academia: passed to second stage (not retained for funding).

- 2013 Young Researcher Award (University) by Univ. of Pisa (< 40)

- 2013 Certificate of merit by Special Committee (Pari Opportunità – Unipi)

- 2011 Young Researcher Award by Univ. of Pisa, for young chemistry researcher (< 40)
- 2011 Certificate of Appreciation from ACS Publications

- 2009 Awarded with "Farmindustria Award" by Farmindustria and SCI - Divisione Chimica Farmaceutica

## PATENTS

- 2020: Patent n° WO2020229014A1, Novel thyromimetics with a biphenylmethane scaffold and their use
- 2019: US Patent n° US2019160049 2-oxo-1,2-dihydropyridine-3-carboxamide compounds and their use as dual inhibitors of PDK1/AUR-A
- 2019: Patent n° WO2019129403 H2S-based therapeutic agents for the treatment of neurodegenerative diseases
- 2018: US Patent n° US2018155320 2-oxo-1,2-dihydropyridine-3-carboxamide compounds and their use as inhibitors of PDK1
- 2017: Patent n°BR112017009613 New molecules for bone tissue regeneration

- 2017: Patent n°: WO2017211946 2-oxo-1,2-dihydropyridine-3-carboxamide compounds and their use as dual inhibitors of PDK1/AurA
- 2017: Patent n°: EP3204002 Pharmaceutical combination for the treatment of tumors.
- 2015: Patent n°: WO2015151068A1 Synthetic analogues of 3-iodothyronamine (T1AM) and uses thereof.
- 2015: Patent n°: CN104860847 Dimer of rivastigmine and caffeic acid or ferulic acid, preparation method and drug composition thereof
- 2009: Patent n°: US20090093493A1 1-phenylalkoxy-2-β-phenylethyl derivatives as P-Glycoprotein (P-GP) inhibitors useful in drug resistance events.
- 2008: Patent n°: ITPI20060103 Pharmacodynamic hybrids endowed of hypoglycemic and NOdonor activities obtained combining hydroxylated derivatives of Glibenclamide and nitrooxysubstituted carboxylic acids
- 2008: Patent n°: ITPI20060083 Nitrogenous N-substituted 4-spiro-heterocyclic 2, 2dimethylchromane derivatives
- 2007: Patent n°: IT2006RM0217A1 1-fenilalcossi-2-B-feniletilderivati quali inibitori della glicoproteina P (GP-P) utilizzabili in casi di farmacoresistenza

# 3. SCIENTIFIC IMPACT AND PRODUCTION

- >115 articles in ISI peer-reviewed journals (published or in press)
- 14 patents + 4 Chapters of books
- more than 150 congress communications.
- h-index: 29 (from Scopus database); 33 (from Google Scholar)
- 2482 total citations (Scopus 27th June 2022); 3223 (from Google Scholar 27th June 2022).

## 4. FUNDING ID

-2021 TELETHON GRANT PROJECT End date 2024. Role: Partecipant

-2020 Ricerca Salute 2018 grant from Regione Toscana. End date: 2023. Role: Unit Resp.

-2019 PRIN 2017 grant from the Italian Ministry of Research. End date: 2022. Role: Partecipant

-2019 Dimostratori Tecnologici grant from Univ. of Pisa. End date: 2020. Role: P.I.

-2018 POR-FSE 2017 Regione Toscana. End date: 2020. Role: P.I.

-2015 PRA2016 grant from University of Pisa. End date 2016. Role: Partecipant

-2013 MAECI ITALIA-CINA grant from the Italian Ministry of Foreign Affairs. End date 2015. Role: Co-Investigator

-2012 Futuro in Ricerca grant from MIUR. End date: 2015. Role: Unit Resp

-2011 PRIN2010 grant from the Italian Ministry of Research. End date: 2013. Role: Unit Resp.

# 5.TECHNICAL SKILLS AND COMPETENCES:

She has >15 years of experience in research projects focused on the design and development of novel chemical entities for several diseases. Since 2010, Prof. Rapposelli has been independently initiating research projects and leading a drug design and discovery team. She led a MedChem team which is recognized by its multidisciplinary expertise spawned over the fields of drug discovery and other pharmaceutical sciences. The group led several projects for the development of novel chemical entities for neurodegenerative disorders, cancer, and hepatic diseases. Cooperates with several national and internationals research groups, spin-off, and SMEs in the research of new lead-compounds. The MedChem team will perform the design and synthesis of the novel chemical entities and the in vitro evaluation of several DMPK properties.

Editorial Board member As Associate Editor at Frontiers in Chemistry, Frontiers in Pharmacology, Frontiers in Oncology; Scientific Reports and as Section Board Member at MDPI-Molecules. Member of CISUP Facility, (a UNIPI Center which shares instrumentation facilities and services for X-ray crystallography, microscopy technique with the assistance of dedicated staff). Organizer of the first International Workshop Accelerating the Drug Discovery Process (ADDP, 2019). Selected reviewer for several research programs: the Portuguese Foundation for Science and technology (FCT), the Croatian Science Foundation research, PRIN and Futuro in Ricerca Projects (MIUR-Italy). Reviewer for different international scientific journals (JMC, Eur J Med Chem, Molecules, Antioxidants, Drug design and Discovery, Bioorganic Chemistry, Bioorg. Med Chem)

# 6. OTHER EXPERIENCE AND PROFESSIONAL MEMBERSHIPS

-2021 Editor of Research topic in Frontier in Oncology (ISSN 2234943X)- Section Pharmacology of anticancer drugs)

-2020 Editor of Research Topic in Frontier in Chemistry (ISSN 22962646)- Section Medicinal and Pharmaceutical Chemistry

-2020 Co-Guest Editor of Molecules (ISSN 1420-3049) - Section: Organic Chemistry

-2019 Special Issue Editor of Molecules (ISSN 1420-3049 – Section: Medicinal Chemistry.

-2016 Member of MuTaLig COST Action (CA15135)

-2016 Member of American Chemical Society (ACS)- Division of Medicinal Chemistry

-2015 Member of Technical Program Committee of ICBMC 2016, Singapore.

-2014 Member of Tech Committee on the Int. Conference on Pharm Sciences (ICPS2015), Dubai

-2013 Member of Technical Committee for the SCDDD2014, Dubai

-2011 Guest Editor of Current Topics in Medicinal Chemistry (ISSN 1568-0266)

-2010 Invited Editor for the book Multifunctional Drugs; [ISBN 978-81-7895-495-0].

-2000 - Member, Italian Division of Medicinal Chemistry (SCI)