Curriculum Vitae et Studiorum

Place Rome
Date 2015 January 26

Part I – General Information

Full Name	Antonio Coluccia
Date of Birth	xxxxxxxxxxx
Place of Birth	xxxxxxxxxxx
Citizenship	xxxxxxxxxxx
Permanent Address	xxxxxxxxxxx
Mobile Phone Number	xxxxxxxxxxx
E-mail	xxxxxxxxxxx
Spoken Languages	Mother tongue Italian, good knowledge of English and basic knowledge of French

Part II – Education

Type	Year	Institution	Note
University graduation	2004	Sapienza University of Rome	Experimental thesis title: Synthesis of Non Nucleosidic Reverse Transcriptase inhibitors as anti HIV.
PhD studies	2004-2007	Sapienza University - Istituto Pasteur Fondazione Cenci Bolognetti Rome	Title of the research project: development of Non Nucleosidic Inhibitors of HIV Reverse Transcriptase by Docking and 3-D QSAR approach
Post Doc Studies	2008-2010	Welsh School of Pharmacy of Cardiff (UK)	Design of tubulin polymerization inhibitors by docking and molecular dynamics studies

Part III – Accademic Appointments

IIIA – Accademic Appointments

Start	End	Institution	Position
2008	2010	Welsh School of Pharmacy of Cardiff (UK)	Post Doc Visitor researcher
2010	2012	Dept. Chimica e Tecnologie del Farmaco	Post Doc researcher
2012	2013	Dept. Chimica e Tecnologie del Farmaco	One year founded researcher
2013	2014	Dept. Chimica e Tecnologie del Farmaco	One year founded researcher

IIIB – Other Appointments

Course	Date
Seventh European Workshop in Drug Design	Università degli Studi di Siena February 14-18 2010, Siena.
Scuola Parvus Introduzione alla chemiometria con specific riferimento al trattamento delle	Dip. di Chimica e Tecnologie Farmaceutiche. February 12-18 2005 Genova

variabili

Part IV – Teaching experience

Year	Institution	Lecture/Course
2013-2014	Department of physical and chemical science University of L'Aquila	Medicinal Chemistry
2014-2015	Department of physical and chemical science University of L'Aquila	Medicinal Chemistry

Part V - - Society memberberships, Awards and Honors

Year	Title
2012	Awarded by Department of physical and chemical science University of L'Aquila of the Nomina Cultore della Materia (Chimica Farmaceutica)
Since 2005	Member of Italian Chemical Society (number14545)
Since 2012	Reviewer activity for Journal of Chemical Information and Modelling, American Chemical Society, Washington, USA
Since 2013	Reviewer activity for European Journal of Medicinal Chemistry, Elsevier France edition, Paris, Fr.

Part V - Funding Information [grants as PI-principal investigators or I-investigator]

Year	Title	Program
2008	Investigator (P.I Prof Romano Silvestri)	PRIN 2008
2010	Investigator (P.I Dr Giuseppe La Regina)	FIRB Futuro e Ricerca
2011	Investigator (P.I Prof Romano Silvestri)	Progetto di Ateneo Sapienza
2012	Investigator (P.I Prof Romano Silvestri)	Progetto di Ateneo Sapienza

Part VI – Research Activities

Keywords	Brief Description
Computer aided drug design	The research is focused on the use of computer-aided techniques in the design and discovery of novel small molecules acting as drugs The research activity takes advantage from both ligand and structure based methods. The main fields of CADD application are the anti-cancer and anti viral compounds.
Design and optimisation of novel anti-tubulin agents.	Microtubules are involved in a wide number of cellular functions, such as division, shape maintenance, and intracellular transport. The major protein component found in microtubules is tubulin. Inhibition of microtubule function using tubulin-targeting agents is a validated approach to anti-cancer therapy. We have recently reported the discovery of a novel series of arylthioindoles as potent inhibitors of tubulin polymerisation, which also shown a comparable inhibition of MCF-7 human breast carcinoma cells growth with colchicine and combretastatine. The aim of this project is to optimise the

	structure and improve the activity of this novel class of compounds with the aid of computer based techniques
HIV-1 non-nucleoside reverse transcriptase inhibitors	The anti-HIV-1 activity of indolyl aryl sulfones (IASs) against the NNRTI-resistant mutants is correlated to the presence of a 3-(3,5-dimethylphenyl)sulfonyl moiety. The antiretroviral potency may be modulated by the substituents at the nitrogen of the 2-carboxamide and at the positions 4-7 of the indole. The aim of this research project is to optimise the IAS structure to obtain novel agents endowed with broad spectrum of activity against HIV-1 WT and mutant strains carrying the most common resistance mutations.

Part VII – Summary of Scientific Achievements

Product Type	Number	Database	Start	End
Papers [international]	32	SCOPUS	2004	2015

Fonte: SCOPUS – www.scopus.com

Total Impact factor	120,75
Total Citations	723
Average Citations per Product	22,6
Hirsch (H) index	15
Normalized H Index*	1,36

*H index divided by the accademic seniority (time span from graduation)

Part IX – Selected Publications

1) **Authors:** Famiglini V, La Regina G, **Coluccia A**, Pelliccia S, Brancale A, Maga G, Crespan E, Badia R, Riveira-Muñoz E, Esté JA, Ferretti R, Cirilli R, Zamperini C, Botta M, Schols D, Limongelli V, Agostino B, Novellino E, Silvestri R.
Publication Title: Indolylarylsulfones Carrying a Heterocyclic Tail as Very Potent and Broad Spectrum HIV-1 Non-nucleoside Reverse Transcriptase Inhibitors.
Journal Title: *Journal Medicinal Chemistry*
Year, *number*, pages: **2014**, 11;*57*(23):9945-57.
ISSN 0022-2623, American Chemical Society, Washinton, USA.
ISI IF 2013: 5,480; Citation 0

2) **Authors:** La Regina G, Bai R, **Coluccia A**, Famiglini V, Pelliccia S, Passacantilli S, Mazzoccoli C, Ruggieri V, Sisinni L, Bolognesi A, Rensen WM, Miele A, Nalli M, Alfonsi R, Di Marcotullio L, Gulino A, Brancale A, Novellino E, Dondio G, Vultaggio S, Varasi M, Mercurio C, Hamel E, Lavia P, Silvestri R.
Publication Title: New pyrrole derivatives with potent tubulin polymerization inhibiting activity as anticancer agents including hedgehog-dependent cancer.
Journal Title: *Journal Medicinal Chemistry*
Year, *number*, pages: **2014,** 4;*57*(15):6531-6552.
ISSN 0022-2623, American Chemical Society, Washington, USA.
ISI IF 2013: 5,480; Citation 0

3) **Authors:** Marzaro G, **Coluccia A,** Ferrarese A, Brun P, Castagliuolo I, Conconi MT, La Regina G, Bai R, Silvestri R, Hamel E, Chilin A.
Publication Title: Discovery of biarylaminoquinazolines as novel tubulin polymerization inhibitors.
Journal Title: *Journal* of Medicinal Chemistry
Year, *number*, pages: **2014,** 12;*57*(11):4598-4605.
ISSN 0022-2623, American Chemical Society, Washington, USA.
ISI IF 2013: 5,480; Citation 0

4) **Authors:** La Pietra V, La Regina G, **Coluccia A,** Famiglini V, Pelliccia S, Plotkin B, Eldar-Finkelman H, Brancale A, Ballatore C, Crowe A, Brunden KR, Marinelli L, Novellino E, Silvestri R.
Publication Title: Design, synthesis, and biological evaluation of 1-phenylpyrazolo[3,4-e]pyrrolo[3,4-g]indolizine-4,6(1H,5H)-diones as new glycogen synthase kinase-3β inhibitors.
Journal Title: *Journal Medicinal Chemistry*
Year, *number*, pages: **2013,** 27;56(24):10066-78.
ISSN 0022-2623, American Chemical Society, Washington, USA.
ISI IF 2012: 5,614; IF 2013: 5,480; Citation 4

5) **Authors:** Mead RJ, Higginbottom A, Allen SP, Kirby J, Bennett E, Barber SC, Heath PR, **Coluccia A**, Patel N, Gardner I, Brancale A, Grierson AJ, Shaw PJ.
Publication Title: S[+] Apomorphine is a CNS penetrating activator of the Nrf2-ARE pathway with activity in mouse and patient fibroblast models of amyotrophic lateral sclerosis.
Journal Title: *Free Radical Biology & Medicine*
Year, *number*, pages: **2013,** 19(61C), 438-452
ISSN: 0891-5849, Elsevier Science INC, New York, USA.
ISI IF 2012: 5.271; IF 2013: 5,710; Citation 8

6) **Authors:** La Regina G, Bai R, Rensen WME, Di Cesare E, **Coluccia A,** Piscitelli F, Famiglini V, Reggio A, Nalli M, Pelliccia S, Da Pozzo E, Costa B, Granata I, Porta A, Maresca B, Soriani A, Iannitto ML, Santoni A, Li J, Conca MM, Chen F, Ni Y, Brancale A, Dondio G, Vultaggio S, Varasi M, Mercurio C, Martini C, Hamel E, Lavia P, Novellino E, Silvestri R.
Publication Title: Towards Highly Potent Cancer Agents by Modulating the C-2 Group of the Arylthioindole Class of Tubulin Polymerization Inhibitors
Journal Title: *Journal Medicinal Chemistry.*
Year, *number*, pages: **2013,** 56(10), 123-149.
ISSN: 0022-2623, American Chemical Society, Washington, USA.
ISI IF 2012: 5,614; IF 2013: 5,480; Citation 19

7) **Authors:** La Regina G, **Coluccia A,** Brancale A, Piscitelli F, Famiglini V, Cosconati S, Maga G, Samuele A, Gonzalez E, Clotet B, Schols D, Esté, AJ, Novellino E, Silvestri R.
Publication Title: New Nitrogen Containing Substituents at the Indole-2-carboxamide Yield High Potent and Broad Spectrum Indolylarylsulfone HIV-1 Non-Nucleoside Reverse Transcriptase Inhibitors.
Journal Title: *Journal Medicinal Chemistry.*
Year, *number*, pages: **2012,** 55(14), 6634-6638.
ISSN: 0022-2623, American Chemical Society, Washington, USA.
ISI IF 2012: 5,614; IF 2013 5,408; Citation 17

8) **Authors**: La Regina G, Bai R, Rensen W, **Coluccia A,** Piscitelli F, Gatti V, Bolognesi A, Lavecchia A, Granata I, Porta A, Maresca B, Soriani A, Iannitto ML, Mariani M, Santoni A, Brancale A, Ferlini C, Dondio G, Varasi M, Mercurio C, Hamel E, Lavia P, Novellino E, Silvestri R.
Publication Title: Design and Synthesis of 2-Heterocyclyl-3-arylthio-1H-indoles as Potent Tubulin Polymerization and Cell Growth Inhibitors with Improved Metabolic Stability.
Journal Title: *Journal of Medicinal Chemistry*.
Year, *number*, pages: **2011**, *54*(24), 8397-8406.
ISSN: 0022-2623, American Chemical Society, Washington, USA.
ISI IF 2011: 5,248; ISI IF 2013: 5,480; Citation 15

9) **Authors**: **Coluccia A,** Sabbadin D, Brancale A.
Publication Title: Molecular modelling studies on arylthioindoles as potent inhibitors of tubulin polymerization.
Journal Title: *European Journal of Medicinal Chemistry*
Year, *number*, pages: **2011**, *46*(8), 3519-3525.
ISSN: 0023-5234, Elsevier France edition, Paris, Fr.
ISI IF 2011: 3.346; ISI IF 2013: 3.432; Citation 5

10) **Authors**: La Regina G, **Coluccia A,** Brancale A, Piscitelli F, Gatti V, Maga G, Samuele A, Pannecouque C, Schols D, Balzarini J, Novellino E, Silvestri R.
Publication Title: Indolylarylsulfones as HIV-1 Non-Nucleoside Reverse Transcriptase Inhibitors: New Cyclic Substituents at Indole-2-carboxamide.
Journal Title: *Journal of Medicinal Chemistry*
Year, *number*, pages: **2011**, *54*(6), 1587-1598.
ISSN: 0022-2623, American Chemical Society, Washington, USA.
ISI IF 2011: 5,248; ISI IF 2013: 5,480; Citation 32

11) **Authors**: La Regina G, Sarkar T, Bai R, Edler MC, Saletti R, **Coluccia A,** Piscitelli F, Minelli L, Gatti V, Mazzoccoli C, Palermo V, Mazzoni C, Falcone C, Scovassi AI, Giansanti V, Campiglia P, Porta A, Maresca B, Hamel E, Brancale A, Novellino E, Silvestri R.

Publication Title: New Arylthioindoles and Related Bioisosteres at the Sulfur Bridging Group. 4. Synthesis, Tubulin Polymerization, Cell Growth Inhibition, and Molecular Modeling Studies.
Journal Title: *Journal of Medicinal Chemistry*
Year, *number*, pages: **2009**, *52*(23), 7512-7527.
ISSN: 0022-2623, American Chemical Society, Washington, USA.
ISI IF 2009: 4,802, ISI IF 2013: 5,480; Citation 39

12) **Authors**: Piscitelli F, **Coluccia A,** Brancale A, La Regina G, Sansone A, Giordano C, Balzarini J, Maga G, Zanoli S, Samuele A, Cirilli R, La Torre F, Lavecchia A, Novellino E, Silvestri R.
Publication Title: Indolylarylsulfones Bearing Natural and Unnatural Amino Acids. Discovery of Potent Inhibitors of HIV-1 Non-Nucleoside Wild Type and Resistant Mutant Strains Reverse Transcriptase and Coxsackie B4 Virus.
Journal Title: *Journal of Medicinal Chemistry*
Year, *number*, pages: **2009**, *52*(7), 1922-1934.
ISSN: 0022-2623, American Chemical Society, Washington, USA.
ISI IF 2009: 4,802, ISI IF 2013: 5,480; Citation 24

Congress Presentations

Product Type	Title	Congress	Date
Oral Communication	Mycobacterium Tuberculosis PknB inhibitors by in-silico approach.	XXII National meeting on Medicinal Chemistry. Roma	September, 13-16 2013
Oral Communication	Computational Studies of Colchicine site compounds.	II Computer Driven Drug Discovery. Genova	February, 4-6 2013
Oral Communication	V Nuove Prospettive in Chimica Farmaceutica. Trieste	Indolylarylsulfones as HIV-1 Non-Nucleoside RT Inhibitors	September, 13-16 2012

He also was co-authors of more than 30 poster presentations at national and international congress 2014 posters contributions are reported

Authors: La Regina G. Coluccia A, Passacantilli S, Famiglini V, Pelliccia S, Hamel E, Novellino E, Silvestri R.
Poster Title: 3-Aroyl-1-arylpyrroles as new anticancer agents.
Congress: XXV Italian Chemical Society National meeting September, 7-12 2014.

Authors: Coluccia A, La Regina G, Okuno A, Takikawa O, Silvestri R.
Poster Title: New Modulator of the tumor immune escape via Indoleamine 2,3-dioxygenase (IDO) inhibitors

Congress: XXV Italian Chemical Society National meeting September 7-12 2014

Authors: La Regina G. Coluccia A. Passacantilli S. Famiglini V. Pelliccia S., Hamel E., Novellino E. and Silvestri R.
Poster Title: 3-Aroyl-1-arylpyrroles: a New Class of Potent Inhibitors of Tubulin Polymerization.
Congress: Fifth European Workshop in Drug Synthesis May 18-23 2014 Siena

Authors: Famiglini V. La Regina G. Coluccia A. Brancale A. Esté J. A. Silvestri R.
Poster Title: New Indolylarylsulfones as Potent and Broad Spectrum HIV-1 Non-Nucleoside Reverse Transcriptase Inhibitors.
Congress: International Conference on Antiviral Research, May 12-16 2014 Raleigh, USA

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26/01/15

In fede

Antonio Coluccia