

Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) **Antonello Mai**
Address(es) Department of Drug Chemistry and Technologies, Sapienza University of Rome, P.le A. Moro 5, 00185 Rome, Italy
Telephone(s) 0039 06 49913392 **Mobile:** 0039 338 8524607
Fax(es) 0039 06 49693268
E-mail antonello.mai@uniroma1.it
Nationality italian
Date of birth 14-11-1962
Gender male

Occupational field (S s/d) CHIM/08 – Medicinal Chemistry

Work experience

Dates	<ol style="list-style-type: none"> 1) From 1998 to present 2) From 1990 to 1998 3) From 1987 to 1991
Occupation or position held	<ol style="list-style-type: none"> 1) Associate Professor in Medicinal Chemistry 2) Technical Official 3) PhD Student
Main activities and responsibilities	<ol style="list-style-type: none"> 1) Design and synthesis of small molecules as histone modifying enzymes modulators and chemical probes; design and synthesis of HIV-1 non-nucleoside reverse transcriptase inhibitors; design and synthesis of anti-MAO agents 2) design and synthesis of HIV-1 non-nucleoside reverse transcriptase inhibitors; design and synthesis of CNS active agents; design and synthesis of antimicrobial compounds 3) synthesis of HIV-1 non-nucleoside reverse transcriptase inhibitors; synthesis of CNS active agents; synthesis of antimicrobial compounds
Name and address of employer	<ol style="list-style-type: none"> 1) Department of Drug Chemistry and Technologies, Faculty of Pharmacy and Medicine, Sapienza University of Rome, Italy. Before: Department of Pharmaceutical Studies, Faculty of Pharmacy, Sapienza University of Rome, Italy 2) Department of Pharmaceutical Studies, Faculty of Pharmacy, Sapienza University of Rome, Italy 3) Department of Pharmaceutical Studies, Faculty of Pharmacy, Sapienza University of Rome, Italy
Sector	Medicinal Chemistry

Education and training

Dates

- 1) 2010
- 2) 1998
- 3) 1992
- 4) 1990

Title of qualification awarded	1) Fit to be appointed as Full Professor in Medicinal Chemistry 2) Associate Professor in Medicinal Chemistry 3) PhD in Pharmaceutical Sciences 4) Technical Officer																														
Name and type of organisation providing education and training	1) Department of Drug Chemistry and Technologies, Faculty of Pharmacy and Medicine, Sapienza University of Rome 2) Department of Drug Chemistry and Technologies, Faculty of Pharmacy and Medicine, Sapienza University of Rome. Before: Department of Pharmaceutical Studies, Faculty of Pharmacy, Sapienza University of Rome, Italy 3) Department of Pharmaceutical Studies, Faculty of Pharmacy, Sapienza University of Rome, Italy 4) Department of Pharmaceutical Studies, Faculty of Pharmacy, Sapienza University of Rome, Italy																														
Personal skills and competences	Methods for drug design and discovery; methods for "hit to lead" development; methods for lead optimization; design and synthesis of biologically active compounds																														
Mother tongue(s)	italian																														
Other language(s)	english																														
Self-assessment	<table border="1"> <thead> <tr> <th colspan="4">Understanding</th> <th colspan="4">Speaking</th> <th colspan="2">Writing</th> </tr> <tr> <th colspan="2">Listening</th> <th colspan="2">Reading</th> <th colspan="2">Spoken interaction</th> <th colspan="2">Spoken production</th> <th colspan="2"></th> </tr> </thead> <tbody> <tr> <td>A2</td> <td>Basic User</td> <td>B1</td> <td>Independent User</td> <td>A2</td> <td>Basic User</td> <td>A2</td> <td>Basic User</td> <td>C1</td> <td>Proficient User</td> </tr> </tbody> </table>	Understanding				Speaking				Writing		Listening		Reading		Spoken interaction		Spoken production				A2	Basic User	B1	Independent User	A2	Basic User	A2	Basic User	C1	Proficient User
Understanding				Speaking				Writing																							
Listening		Reading		Spoken interaction		Spoken production																									
A2	Basic User	B1	Independent User	A2	Basic User	A2	Basic User	C1	Proficient User																						
<i>European level (*)</i>																															
	(*) Common European Framework of Reference for Languages																														
Additional information	<p>Prof. Mai made many experiences abroad as lecturer (2004, Copenhagen; 2005, Antwerp; 2006, Istanbul; 2007, Madrid; 2008, Carefree (AZ, USA); 2009, Nice and Madrid; 2010, Bruxelles, 2011, Saarbrücken; 2012, Tahoe-USA).</p> <p>From 1992 Prof. Mai is member of the SCI (Società Chimica Italiana). From 2004 to 2009, he was member of the Executive Committee of the Medicinal Chemistry Division of the SCI. From 2009 to present, he is member of the Scientific Committee of the European School of Medicinal Chemistry (ESMEC). From 2009 to present, he is member of the Scientific Committee of the PhD in Pharmaceutical Sciences of Sapienza University of Rome</p> <p>Prof. Mai is in the Editorial Boards of some medicinal chemistry journal such as 'Mini Reviews in Medicinal Chemistry' (Bentham), "Medicinal Chemistry" (Bentham), and "ChemMedChem" (Wiley).</p>																														
Receiving																															
Annexes	List any items attached.																														
Scientific Publication																															

1. Sbardella, G.; Mai, A.; Bartolini, S.; Castellano, S.; Cirilli, R.; Rotili, D.; Milite, C.; Santoriello, M.; Orlando, S.; Sciamanna, I.; Serafino, A.; Lavia, P.; Spadafora, C. [Modulation of cell differentiation, proliferation, and tumor growth by dihydrobenzoxopyrimidine non-nucleoside reverse transcriptase inhibitors.](#) *J Med Chem* **2011**, *54*, 5927-5936. IF: 5.207.
2. Cheng, D.; Valente, S.; Castellano, S.; Sbardella, G.; Di Santo, R.; Costi, R.; Bedford, M. T.; Mai, A. [Novel 3,5-bis\(bromohydroxybenzylidene\)piperidin-4-ones as coactivator-associated arginine methyltransferase 1 inhibitors: enzyme selectivity and cellular activity.](#) *J Med Chem* **2011**, *54*, 4928-4932. IF: 5.207.
3. Rotili, D.; Altun, M.; Kawamura, A.; Wolf, A.; Fischer, R.; Leung, I. K.; Mackeen, M. M.; Tian, Y. M.; Ratcliffe, P. J.; Mai, A.; Kessler, B. M.; Schofield, C. J. A photoreactive small-molecule probe for 2-oxoglutarate oxygenases. *Chem Biol* **2011**, *18*, 642-654. IF: 5.838.
4. Stronach, E. A.; Alfraidi, A.; Rama, N.; Datler, C.; Studd, J. B.; Agarwal, R.; Guney, T. G.; Gourley, C.; Hennessy, B. T.; Mills, G. B.; Mai, A.; Brown, R.; Dina, R.; Gabra, H. HDAC4-regulated STAT1 activation mediates platinum resistance in ovarian cancer. *Cancer Res* **2011**, *71*, 4412-4422. IF: 8.234.
5. Lewis, M. G.; DaFonseca, S.; Chomont, N.; Palamara, A. T.; Tardugno, M.; Mai, A.; Collins, M.; Wagner, W. L.; Yalley-Ogunro, J.; Greenhouse, J.; Chirullo, B.; Norelli, S.; Garaci, E.; Savarino, A. Gold drug auranofin restricts the viral reservoir in the monkey AIDS model and induces containment of viral load following ART suspension. *AIDS* **2011**, *25*, 1347-1356. IF: 6.348.
6. Rotili D, Tarantino D, Artico M, Nawrozkij MB, Gonzalez-Ortega E, Clotet B, Samuele A, Esté JA, Maga G, Mai A. [Diarylpyrimidine-Dihydrobenzoxopyrimidine Hybrids: New, Wide-Spectrum Anti-HIV-1 Agents Active at \(Sub\)-Nanomolar Level.](#) *J Med Chem* **2011**, *54*, 3091-3096. IF: 5.207.
7. Colussi C, Rosati J, Straino S, Spallotta F, Berni R, Stilli D, Rossi S, Musso E, Macchi E, Mai A, Sbardella G, Castellano S, Chimenti C, Frustaci A, Nebbioso A, Altucci L, Capogrossi MC, Gaetano C. [N^ε-lysine acetylation determines dissociation from GAP junctions and lateralization of connexin 43 in normal and dystrophic heart.](#) *Proc Natl Acad Sci U S A* **2011**, *108*, 2795-2800. IF: 9.771.
8. Rotili, D.; Altun, M.; Hamed, R. B.; Loenarz, C.; Thalhammer, A.; Hopkinson, R. J.; Tian, Y. M.; Ratcliffe, P. J.; Mai, A.; Kessler, B. M.; Schofield, C. J. [Photoactivable peptides for identifying enzyme-substrate and protein-protein interactions.](#) *Chem Commun* **2011**, *47*, 1488-1490. IF: 5.787.
9. Borbone, E.; Berlingieri, M. T.; De Bellis, F.; Nebbioso, A.; Chiappetta, G.; Mai, A.; Altucci, L.; Fusco, A. Histone deacetylase inhibitors induce thyroid cancer-specific apoptosis through proteasome-dependent inhibition of TRAIL degradation. *Oncogene* **2010**, *29*, 105-116. IF: 7.414.
10. Liu, Z.; Mai, A.; Sun, J. Lysine acetylation regulates Bruton's tyrosine kinase in B cell activation. *J. Immunol.* **2010**, *184*, 244-254. IF: 5.745.
11. Pasco, M. Y.; Rotili, D.; Altucci, L.; Farina, F.; Rouleau, G. A.; Mai, A.; Néri, C. Characterization of sirtuin inhibitors in nematodes expressing a muscular dystrophy protein reveals muscle cell and behavioral protection by specific sirtuin analogues. *J. Med. Chem.* **2010**, *53*, 1407-1411. IF: 5.207.
12. Spallotta, F.; Rosati, J.; Straino, S.; Nanni, S.; Grasselli, A.; Ambrosino, V.; Rotili, D.; Valente, S.; Farsetti, A.; Mai, A.; Capogrossi, M. C.; Gaetano, C.; Illi, B. Nitric oxide Determines Mesodermic Differentiation of Mouse Embryonic Stem Cells by Activating Class IIa Histone Deacetylases: Potential Therapeutic Implications in a Mouse Model of Hindlimb Ischemia. *Stem Cells* **2010**, *28*, 431-442. IF: 7.871.
13. Zhu, H.; Shan, L.; Schiller, P. W.; Mai, A.; Peng, T. Histone deacetylase-3 activation promotes TNF- α expression in cardiomyocytes during lipopolysaccharide stimulation. *J. Biol. Chem.* **2010**, *285*, 9429-9436. IF: 5.328.
14. Colussi, C.; Berni, R.; Rosati, J.; Straino, S.; Vitale, S.; Spallotta, F.; Baruffi, S.; Bocchi, L.; Delucchi, F.; Rossi, S.; Savi, M.; Rotili, D.; Quaini, F.; Macchi, E.; Stilli, D.; Musso, E.; Mai, A.; Gaetano, C.; Capogrossi, M. C. The Histone Deacetylase Inhibitor Suberoylanilide Hydroxamic Acid Reduces Cardiac Arrhythmias In Dystrophic Mice. *Cardiovasc. Res.* **2010**, *87*, 73-82. IF: 6.051.
15. Binda, C.; Valente, S.; Romanenghi, M.; Pilotto, S.; Cirilli, R.; Karytinov, A.; Ciossani, G.; Botrugno, O. A.; Forneris, F.; Tardugno, M.; Edmondson, D. E.; Minucci, S.; Mattevi, A.; Mai, A. Biochemical, structural, and biological evaluation of tranylcypromine derivatives as inhibitors of histone demethylases LSD1 and LSD2. *J. Am. Chem. Soc.* **2010**, *132*, 6827-6833. IF: 9.019.
16. Palacios, D.; Mozzetta, C.; Consalvi, S.; Caretti, G.; Saccone, V.; Proserpio, V.; Marquez, V. E.; Valente, S.; Mai, A.; Forcales, S. V.; Sartorelli, V.; Puri, P. L. [TNF/p38 \$\alpha\$ /polycomb signaling to Pax7 locus in satellite cells links inflammation to the epigenetic control of muscle regeneration.](#) *Cell Stem Cell* **2010**, *7*, 455-469. IF: 25.943.
17. Lara, E.; Mai, A.; Calvanese, V.; Altucci, L.; Lopez-Nieva, P.; Martinez-Chantar, M. L.; Varela-Rey, M.; Rotili, D.; Nebbioso, A.; Roperio, S.; Montoya, G.; Oyarzabal, J.; Velasco, S.; Serrano, M.; Witt, M.; Villar-Garea, A.; Imhof, A.; Mato, J. M.; Esteller, M.; Fraga, M. F. Salemide, a Sirtuin inhibitor with a strong cancer-specific proapoptotic effect. *Oncogene* **2009**, *28*, 781-791. IF: 7.414.
18. Savarino, A.; Mai, A.; Norelli, S.; El Daker, S.; Valente, S.; Rotili, D.; Altucci, L.; Palamara, A. T.; Garaci, E. "Shock and kill" effects of class I-selective histone deacetylase inhibitors in combination with the glutathione synthesis inhibitor buthionine sulfoximine in cell line models for HIV-1 quiescence. *Retrovirology* **2009**, *6*:52. IF: 5.236.
19. Nebbioso, A.; Manzo, F.; Miceli, M.; Conte, M.; Manente, L.; Baldi, A.; De Luca, A.; Rotili, D.; Valente, S.; Mai, A.; Usiello, A.; Gronemeyer, H.; Altucci, L. Selective class II HDAC inhibitors impair myogenesis by modulating the stability and activity of HDAC-MEF2 complexes. *EMBO Rep.* **2009**, *10*, 776-782. IF: 7.822.
20. Mai, A.; Valente, S.; Meade, S.; Carafa, V.; Tardugno, M.; Nebbioso, A.; Galmozzi, A.; Mitro, N.; De Fabiani, E.; Altucci, L.; Kazantsev, A. Study of 1,4-dihydropyridine structural scaffold: discovery of novel sirtuin activators and inhibitors. *J. Med. Chem.* **2009**, *52*, 5496-5504. IF: 5.207.
21. Illi, B.; Dello Russo, C.; Colussi, C.; Rosati, J.; Pallaro, M.; Spallotta, F.; Rotili, D.; Valente, S.; Ragone, G.; Martelli, F.; Biglioli, P.; Steinkuhler, C.; Gallinari, P.; Mai, A.; Capogrossi, M. C.; Gaetano, C. Nitric oxide modulates chromatin folding in human endothelial cells via protein phosphatase 2A activation and class II histone deacetylases nuclear shuttling. *Circ. Res.* **2008**, *102*, 51-58. IF: 9.504.
22. Mai, A.; Cheng, D.; Bedford, M. T.; Valente, S.; Nebbioso, A.; Perrone, A.; Brosch, G.; Sbardella, G.; De Bellis, F.; Miceli, M.; Altucci, L. Epigenetic multiple ligands: mixed histone/protein methyltransferase, acetyltransferase, and class III deacetylase (sirtuin) inhibitors. *J. Med. Chem.* **2008**, *51*, 2279-2290. IF: 5.207.
23. Nawrozkij, M. B.; Rotili, D.; Tarantino, D.; Botta, G.; Eremychuk, A. S.; Musmuca, I.; Ragno, R.; Samuele, A.; Zanolì, S.; Armand-Ugón, M.; Clotet-Codina, I.; Novakov, I. A.; Orlinson, B. S.; Maga, G.; Esté, J. A.; Artico, M.; Mai, A. 5-Alkyl-6-benzyl-2-(2-oxo-2-phenylethylsulfanyl)pyrimidin-4(3H)-ones, a series of anti-HIV-1 agents of the dihydro-alkoxy-benzyl-oxopyrimidine family with peculiar structure-activity relationship profile. *J. Med. Chem.* **2008**, *51*, 4641-4652. IF: 5.207.
24. Colussi, C.; Mozzetta, C.; Gurtner, A.; Illi, B.; Rosati, J.; Straino, S.; Ragone, G.; Pescatori, M.; Zaccagnini, G.; Antonini, A.; Minetti, G.; Martelli, F.; Piaggio, G.; Gallinari, P.; Steinkuhler, C.; Clementi, E.; Dell'Aversana, C.; Altucci, L.; Mai, A.; Capogrossi, M. C.; Puri, P. L.; Gaetano, C. HDAC2 blockade by nitric oxide and histone deacetylase inhibitors reveals a common target in Duchenne muscular dystrophy treatment. *Proc. Natl. Acad. Sci. USA* **2008**, *105*, 19183-19187. IF: 9.771.
25. Ragno, R.; Simeoni, S.; Castellano, S.; Vicidomini, C.; Mai, A.; Caroli, A.; Tramontano, A.; Bonaccini, C.; Trojer, P.; Bauer, I.; Brosch, G.; Sbardella, G. Small Molecule Inhibitors of Histone Arginine Methyltransferases: Homology Modeling, Molecular Docking, Binding Mode Analysis, and Biological Evaluation. *J. Med. Chem.* **2007**, *50*, 1241-1253. IF: 5.207.
26. Mai, A.; Artico, M.; Rotili, D.; Tarantino, D.; Clotet-Codina, I.; Armand-Ugón, M.; Ragno, R.; Simeoni, S.; Sbardella, G.; Nawrozkij, M. B.; Samuele, A.; Maga, G.; Esté, J. A. Synthesis and biological properties of novel 2-aminopyrimidin-4(3H)-ones highly potent against HIV-1 mutant strains. *J. Med. Chem.* **2007**, *50*, 5412-5424. IF: 5.207.
27. Mai, A.; Rotili, D.; Tarantino, D.; Ornaghi, P.; Tosi, F.; Vicidomini, C.; Sbardella, G.; Nebbioso, A.; Miceli, M.; Altucci, L.; Filetici, P. Small-Molecule Inhibitors of Histone Acetyltransferase Activity: Identification and Biological Properties. *J. Med. Chem.* **2006**, *49*, 6897-6907. IF: 5.207.
28. Mai, A.; Massa, S.; Rotili, D.; Simeoni, S.; Ragno, R.; Botta, G.; Nebbioso, A.; Miceli, M.; Altucci, L.; Brosch, G. Synthesis and biological properties of novel, uracil-containing histone deacetylase inhibitors. *J. Med. Chem.* **2006**, *49*, 6046-6056. IF: 5.207.
29. Inoue, S.; Mai, A.; Dyer, M. J. S.; Cohen, G. M. Inhibition of Histone Deacetylase Class I but not Class II Is Critical for the Sensitization of Leukemic Cells to Tumor Necrosis Factor-Related Apoptosis-Induced Apoptosis. *Cancer Res.* **2006**, *66*, 6785-6792. IF: 8.234.
30. Mai, A.; Massa, S.; Rotili, D.; Cerbara, I.; Valente, S.; Pezzi, R.; Simeoni, S.; Ragno, R. Histone Deacetylation in Epigenetics: An Attractive Target for Anticancer Therapy. *Med. Res. Rev.* **2005**, *25*, 261-309. IF: 10.228.

Works

Textbooks (Chapters, etc.)

Mai, A. Hydroxamic acids: Biological properties and potential uses as therapeutic agents. *PATAI - The chemistry of hydroxylamines, oximes and hydroxamic acids, Vol. 2*, Chapter 12, pagg. 731-806. Edited by Z. Rappoport and J. F. Liebman 2011, John Wiley & Sons Ltd.

Ragno R.; Botta M.; Corelli F.; Mai A.; Massa S.; Porretta, G. C.; Artico, M. Comparative molecular field analysis of new human rhinovirus-14 inhibitors. *QSAR and Molecular Modelling: Concepts, Computational Tools and Biological Applications*, p. 488, F. Sanz, J. Giraldo and F. Manaut (Eds.) (1995).