



DIPARTIMENTO DI CHIMICA E TECNOLOGIE DEL FARMACO
CURRICULUM DIDATTICO-SCIENTIFICO DEL PROF. ANTONELLO MAI

DATI PERSONALI

Nome e Cognome **ANTONELLO MAI**

Luogo e data di nascita:

Stato Civile:

Dipartimento Chimica e
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Settore Scientifico-Disciplinare: CHIM/08 (03D1)

ATTUALE POSIZIONE

➤ **Prof. Ordinario SSD CHIM/08 (Chimica Farmaceutica)**

CARRIERA E TITOLI

2011 Prof. Ordinario di Chimica Farmaceutica, SSD CHIM/08
1998 Prof. Associato di Chimica Farmaceutica, SSD CHIM/08
1992 PhD in Scienze Farmaceutiche, Sapienza Università di Roma
1990 Funzionario Tecnico

Editorial Boards: Il prof. Antonello Mai è Chair Editor di "ChemMedChem" (Wiley) e Regional Editor delle riviste "Mini Reviews in Medicinal Chemistry" (Bentham) e "Medicinal Chemistry" (Bentham).

Honors: Il prof. Mai dal 1992 è membro della SCI (Società Chimica Italiana). Dal 2004 to 2009 è stato membro dell'Executive Committee della Divisione di Chimica Farmaceutica della SCI. Dal 2009 al 2014 il prof. Mai è stato membro dello Scientific Committee della European School of Medicinal Chemistry (ESMEC). Dal 2015 è membro dell'Executive Committee della European Federation of Medicinal Chemistry (EFMC).

Dal 2012, il prof. Mai è Coordinatore del Dottorato in Scienze Farmaceutiche, afferente alla Scuola di Dottorato in Biologia e Medicina Molecolare (BEMM), in Sapienza Università di Roma.

Dal 2013, il prof. Mai è Presidente del Corso di Laurea Magistrale a Ciclo Unico in Chimica e Tecnologia Farmaceutiche, Facoltà di Farmacia e Medicina, Sapienza Università di Roma.



Dal 2014, il prof. Mai è membro della Commissione Istruttoria per i Dottorati di Ricerca di Sapienza Università di Roma, che assicura la qualità dei Dottorati di Ricerca Sapienza preparandoli ad hoc per l'approvazione da parte dell'ANVUR.

ATTIVITA' DIDATTICA

- 1) Chimica Farmaceutica e Tossicol. 2, CTF, dal 2011 ad oggi
- 2) Analisi dei Medicinali/Analisi Chimico Farmaceutica e Tossicologica 1, CTF, dal 1998 al 2010
- 3) Biotecnologie Farmaceutiche, Biotecnologie (2002-2004)
- 4) Chimica Farmaceutica, Biotecnologie (2003-2006)
- 5) Chimica Farmaceutica e Tossicol. 2, Farmacia (2005)
- 6) Chimica Farmaceutica e Tossicol. 3, CTF, dal 2007 ad oggi
- 7) Chimica Tossicologica, CTF (2005, 2006)
- 8) Modulo di Chimica Farmaceutica in Master in Bioinformatica (2002-2005)
- 9) Modulo di Chimica Farmaceutica 1 in SSFO (dal 2007 ad oggi)

ATTIVITA' SCIENTIFICA

L'attività di ricerca del prof. Antonello Mai, espressa in oltre 240 pubblicazioni, 7 brevetti ed oltre 400 comunicazioni a congressi [h-index = 44 (Scopus, Nov24, 2016)], può essere riferita a quattro settori fondamentali: a) progettazione e sintesi di piccole molecole come modulatori di targets epigenetici coinvolti nel controllo di trascrizione genica (HDACs, HATs, SIRTs, HMTs, HDMs, DNMTs). Potenzialità terapeutiche nel campo dell'oncologia e delle malattie neurodegenerative e muscolari; b) ricerche su sostanze attive sul S.N.C.; c) ricerche su sostanze ad attività antivirale (inibitori specifici della trascrittasi inversa dell'HIV-1); d) ricerche su sostanze ad attività antibatterica, antimicobatterica ed antifungina. Le ricerche sono state e sono attualmente svolte dal prof. Mai presso il Dipartimento di Chimica e Tecnologie del Farmaco, Sapienza Università di Roma, avvalendosi di un gran numero di collaborazioni nazionali e internazionali, testimoniate dai lavori pubblicati in comune.

PUBBLICAZIONI SCIENTIFICHE 2007-2016

(aggiornato al 28/07/2016)

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2. Chano T, Avnet S, Kusuzaki K, Bonuccelli G, Sonveaux P, Rotili D, Mai A, Baldini N. Tumour-specific metabolic adaptation to acidosis is coupled to epigenetic stability in osteosarcoma cells. *Am J Cancer Res* **2016**, 6, 859-875.
3. Stazi G, Zwergel C, Valente S, Mai A. LSD1 inhibitors: a patent review (2010-2015). *Expert Opin Ther Pat*. **2016**, 26, 565-580.
4. Di Martile M, Desideri M, De Luca T, Gabellini C, Buglioni S, Eramo A, Sette G, Milella M, Rotili D, Mai A, Carradori S, Secci D, De Maria R, Del Bufalo D, Triscioglio D. Histone acetyltransferase inhibitor CPTH6 preferentially targets lung cancer stem-like cells. *Oncotarget* **2016**, 7, 11332-11348.
5. Di Liddo R, Valente S, Taurone S, Zwergel C, Marrocco B, Turchetta R, Conconi MT, Scarpa C, Bertalot T, Schrenk S, Mai A, Artico M. Histone deacetylase inhibitors restore IL-10 expression in lipopolysaccharide-induced cell inflammation and reduce IL-1 β and IL-6 production in breast silicone implant in C57BL/6J wild-type murine model. *Autoimmunity* **2016**, Jan 20:1-11.
6. van den Bosch T, Boichenko A, Leus NG, Ourailidou ME, Wapenaar H, Rotili D, Mai A, Imhof A, Bischoff R, Haisma HJ, Dekker FJ. The histone acetyltransferase p300 inhibitor C646 reduces pro-



- inflammatory gene expression and inhibits histone deacetylases. *Biochem Pharmacol.* **2016**, *102*, 130-140.
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 8. Valente S, Mellini P, Spallotta F, Carafa V, Nebbioso A, Polletta L, Carnevale I, Saladini S, Triscioglio D, Gabellini C, Tardugno M, Zwergel C, Cencioni C, Atlante S, Moniot S, Steegborn C, Budriesi R, Tafani M, Del Bufalo D, Altucci L, Gaetano C, Mai A. 1,4-Dihydropyridines Active on the SIRT1/AMPK Pathway Ameliorate Skin Repair and Mitochondrial Function and Exhibit Inhibition of Proliferation in Cancer Cells. *J. Med. Chem.* **2016**, *59*, 1471-1491.
 9. Zwergel C, Valente S, Mai A. DNA Methyltransferases Inhibitors from Natural Sources. *Curr. Top. Med. Chem.* **2016**, *16*, 680-696.
 10. Wapenaar H, van der Wouden PE, Groves MR, Rotili D, Mai A, Dekker FJ. Enzyme kinetics and inhibition of histone acetyltransferase KAT8. *Eur. J. Med. Chem.* **2015**, *105*, 289-296.
 11. Erburu M, Muñoz-Cobo I, Domínguez-Andrés J, Beltran E, Suzuki T, Mai A, Valente S, Puerta E, Tordera RM. Chronic stress and antidepressant induced changes in Hdac5 and Sirt2 affect synaptic plasticity. *Eur. Neuropsychopharmacol.* **2015**, *25*, 2036-2048.
 12. Wang Q, Rosa BA, Nare B, Powell K, Valente S, Rotili D, Mai A, Marshall GR, Mitreva M. Targeting Lysine Deacetylases (KDACs) in Parasites. *PLoS Negl Trop Dis.* **2015**, *9*, e0004026.
 13. Piano V, Benjamin DI, Valente S, Nenci S, Marrocco B, Mai A, Aliverti A, Nomura DK, Mattevi A. Discovery of Inhibitors for the Ether Lipid-Generating Enzyme AGPS as Anti-Cancer Agents. *ACS Chem Biol.* **2015**, *10*, 2589-2597.
 14. Zwergel C, Valente S, Mai A. DNA Methyltransferases Inhibitors from Natural Sources. *Curr Top Med Chem.* 2015 Aug 25; PMID: 26303417.
 15. Di Pompo G, Salerno M, Rotili D, Valente S, Zwergel C, Avnet S, Lattanzi G, Baldini N, Mai A. Novel histone deacetylase inhibitors induce growth arrest, apoptosis, and differentiation in sarcoma cancer stem cells. *J. Med. Chem.* 2015, *58*, 4073-4079.
 16. Zwergel C, Valente S, Jacob C, Mai A. Emerging approaches for histone deacetylase inhibitor drug discovery. *Expert Opin. Drug Discov.* 2015, *10*, 599-613.
 17. Graziani G, Artuso S, De Luca A, Muzi A, Rotili D, Scimeca M, Atzori M G, Ceci C, Mai A, Leonetti C, Levati L, Bonanno E, Tentori L, Caccuri A M. A new water soluble MAPK activator exerts antitumor activity in melanoma cells resistant to the BRAF inhibitor vemurafenib. *Biochem Pharmacol.* 2015, *95*, 16-27.
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 23. Rodriguez V, Valente S, Rovida S, Rotili D, Stazi G, Lucidi A, Ciossani G, Mattevi A, Botrugno O A, Dessanti P, Mercurio C, Vianello P, Minucci S, Varasi M, Mai A. Pyrrole- and indole-containing tranlylcypromine derivatives as novel lysine-specific demethylase 1 inhibitors active on cancer cells. *Med. Chem. Commun.* 2015, *6*, 665-670.
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