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: Roma

Stato Civile:

Dipartimento Chimica e Tecnologie del Farmaco

Indirizzo P.le A. Moro 5, 00185 Roma

Telefono uff./lab./ **0649913392/0649913891/**

Fax **0649693268**

E-mail antonello.mai@uniroma1.it

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), Regional Editor delle riviste "Mini Reviews in Medicinal Chemistry" (Bentham) e "Medicinal Chemistry" (Bentham) e Associate Editor di Clinical Epigenetics (Springer Nature) e Journal of Enzyme Inhibition and Medicinal Chemistry.

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 al 2018, il prof. Mai è stato Coordinatore del Dottorato in Scienze Farmaceutiche, afferente alla Scuola di Dottorato in Biologia e Medicina Molecolare (BEMM), in Sapienza Università di Roma.

Dal 2013 al 2019, il prof. Mai è stato 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.
Dal 2016, il prof. Mai è Esperto di Sistema per le Visite di Accreditamento ANVUR degli Atenei italiani.

ATTIVITA' DIDATTICA

1) Chimica Farmaceutica e Tossicol. 2, CTF, dal 2011 ad oggi
2) Chimica Farmaceutica e Tossicol. 3, CTF, dal 2007 ad oggi
3) Chimica Farmaceutica Computazionale, Biotecnologie Farmaceutiche, dal 2019 ad oggi in codocenza
4) Analisi dei Medicinali/Analisi Chimico Farmaceutica e Tossicologica 1, CTF, dal 1998 al 2010
5) Biotecnologie Farmaceutiche, Biotecnologie (2002-2004)
6) Chimica Farmaceutica, Biotecnologie (2003-2006)
7) Chimica Farmaceutica e Tossicol. 2, Farmacia (2005)
8) Chimica Tossicologica, CTF (2005, 2006)
9) Modulo di Chimica Farmaceutica in Master in Bioinformatica (2002-2005)
10) Modulo di Chimica Farmaceutica 1 in SSFO (2007-2018)

ATTIVITA' SCIENTIFICA

L'attività di ricerca del prof. Antonello Mai, espressa in oltre 300 pubblicazioni, 7 brevetti ed oltre 400 comunicazioni a congressi, 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.

INDICI BIBLIOMETRICI: totale pubblicazioni = 325 (Scopus, 04.12.2020);
IF >800, IF medio 5,5;
h-index = 56 (Scopus, 04.12.2020).
citazioni totali: 10.615
citazioni totali senza autocitazioni: 8.043

PUBBLICAZIONI SCIENTIFICHE 2011-2020

1. Zwergel C, Di Bello E, Fioravanti R, Conte M, Nebbioso A, Mazzone R, Brosch G, Mercurio C, Varasi M, Altucci L, Valente S, Mai A. Novel Pyridine-Based Hydroxamates and 2'-Aminoanilides as Histone Deacetylase Inhibitors: Biochemical Profile and Anticancer Activity. ChemMedChem. 2020 Nov 21. doi: 10.1002/cmdc.202000854.
2. Miele E, Po A, Mastronuzzi A, Carai A, Besharat ZM, Pediconi N, Abballe L, Catanzaro G, Sabato C, De Smaele E, Canettieri G, Di Marcotullio L, Vacca A, Mai A, Levrero M, Pfister SM, Kool M, Giangaspero F, Locatelli F, Ferretti E. Downregulation of miR-326 and its host gene β-arrestin1 induces pro survival activity of E2F1 and promotes medulloblastoma growth. Mol Oncol. 2020 Sep 13. doi: 10.1002/1878-0261.12800.
3. Cassandri M, Fioravanti R, Pomella S, Valente S, Rotili D, Del Baldo G, De Angelis B, Rota R, Mai A. CDK9 as a Valuable Target in Cancer: From Natural Compounds Inhibitors to Current Treatment in Pediatric Soft Tissue Sarcomas. Front Pharmacol. 2020 Aug 13;11:1230. doi: 10.3389/fphar.2020.01230.
4. Fiorentino F, Mai A, Rotili D. Lysine Acetyltransferase Inhibitors From Natural Sources. Front Pharmacol. 2020 Aug 12;11:1243. doi: 10.3389/fphar.2020.01243.
5. Tomaselli D, Mautone N, Mai A, Rotili D. Recent advances in epigenetic proteolysis targeting chimeras (Epi-PROTACs). Eur J Med Chem. 2020 Dec 1;207:112750. doi: 10.1016/j.ejmech.2020.112750.
6. Fioravanti R, Tomassi S, Di Bello E, Romanelli A, Plateroti AM, Benedetti R, Conte M, Novellino E, Altucci L, Valente S, Mai A. Properly Substituted Cyclic Bis-(2-bromobenzylidene) Compounds Behaved as Dual p300/CARM1 Inhibitors and Induced Apoptosis in Cancer Cells. Molecules. 2020 Jul 8;25(14):E3122. doi: 10.3390/molecules25143122.
7. Di Bello E, Zwergel C, Mai A, Valente S. The Innovative Potential of Statins in Cancer: New Targets for New Therapies. Front Chem. 2020 Jun 18;8:516. doi: 10.3389/fchem.2020.00516.
8. Fioravanti R, Mautone N, Rovere A, Rotili D, Mai A. Targeting histone acetylation/deacetylation in parasites: an update (2017-2020). Curr Opin Chem Biol. 2020 Jun 29;57:65-74. doi: 10.1016/j.cbpa.2020.05.008.
9. Coutinho Carneiro V, de Abreu da Silva IC, Amaral MS, Pereira ASA, Silveira GO, Pires DDS, Verjovski-Almeida S, Dekker FJ, Rotili D, Mai A, Lopes-Torres EJ, Robaa D, Sippl W, Pierce RJ, Borrello MT, Ganesan A, Lancelot J, Thiengo S, Fernandez MA, Vicentino ARR, Mourão MM, Coelho FS, Fantappié MR. Pharmacological inhibition of lysine-specific demethylase 1 (LSD1) induces global transcriptional deregulation and ultrastructural alterations that impair viability in Schistosoma mansoni. PLoS Negl Trop Dis. 2020 Jul 1;14(7):e0008332. doi: 10.1371/journal.pntd.0008332.
10. Carafa V, Russo R, Della Torre L, Cuomo F, Dell'Aversana C, Sarno F, Sgueglia G, Di Donato M, Rotili D, Mai A, Nebbioso A, Cobellis G, Chambery A, Altucci L. The Pan-Sirtuin Inhibitor MC2494 Regulates Mitochondrial Function in a Leukemia Cell Line. Front Oncol. 2020 May 21;10:820. doi: 10.3389/fonc.2020.00820.
11. Schiavi S, Melancia F, Carbone E, Buzzelli V, Manduca A, Peinado PJ, Zwergel C, Mai A, Campolongo P, Vanderschuren LJMJ, Trezza V. Detrimental effects of the 'bath salt' methylenedioxypyrovalerone on social play behavior in male rats. Neuropsychopharmacology. 2020 Jun 7. doi: 10.1038/s41386-020-0729-5.
12. Iacovino LG, Reis J, Mai A, Binda C, Mattevi A. Diphenylene Iodonium Is a Noncovalent MAO Inhibitor: A Biochemical and Structural Analysis. ChemMedChem. 2020 May 27. doi: 10.1002/cmdc.202000264.
13. Matutino Bastos T, Botelho Pereira Soares M, Haddad Franco C, Alcântara L, Antonini L, Sabatino M, Mautone N, Holanda Freitas-Junior L, Moraes CB, Ragno R, Rotili D, Schenkman S, Mai A, Silvio Moretti N. Identification of Inhibitors to Trypanosoma cruzi Sirtuins Based on Compounds Developed to Human Enzymes. Int J Mol Sci. 2020 May 22;21(10):3659. doi: 10.3390/ijms21103659.
14. Tomaselli D, Steegborn C, Mai A, Rotili D. Sirt4: A Multifaceted Enzyme at the Crossroads of Mitochondrial Metabolism and Cancer. Front Oncol. 2020 Apr 15;10:474. doi: 10.3389/fonc.2020.00474.
15. Ravasio R, Ceccacci E, Nicosia L, Hosseini A, Rossi PL, Barozzi I, Fornasari L, Zuffo RD, Valente S, Fioravanti R, Mercurio C, Varasi M, Mattevi A, Mai A, Pavesi G, Bonaldi T, Minucci S. Targeting the scaffolding role of LSD1 (KDM1A) poises acute myeloid leukemia cells for retinoic acid-induced differentiation. Sci Adv. 2020 Apr 8;6(15):eaax2746. doi: 10.1126/sciadv.aax2746.

16. Caroselli S, Zwergel C, Pirolli A, Sabatino M, Xu Z, Kirsch G, Mai A, Colotti G, Altieri F, Canipari R, Valente S, Ragno R. Discovery of the First Human Arylsulfatase A Reversible Inhibitor Impairing Mouse Oocyte Fertilization. ACS Chem Biol. 2020 Apr 14. doi: 10.1021/acschembio.9b00999.
17. Mautone N, Zwergel C, Mai A, Rotili D. Sirtuin modulators: where are we now? A review of patents from 2015 to 2019. Expert Opin Ther Pat. 2020 Apr 13:1-19. doi: 10.1080/13543776.2020.1749264.
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19. Tomassi S, Pfahler J, Mautone N, Rovere A, Esposito C, Passeri D, Pellicciari R, Novellino E, Pannek M, Steegborn C, Paiardini A, Mai A, Rotili D. From PARP1 to TNKS2 Inhibition: A Structure-Based Approach. ACS Medicinal Chemistry Letters 2020, in press, : https://dx.doi.org/10.1021/acsmedchemlett.9b00654.
20. Reis J, Massari M, Marchese S, Ceccon M, Aalbers FS, Corana F, Valente S, Mai A, Magnani F, Mattevi A. A closer look into NADPH oxidase inhibitors: Validation and insight into their mechanism of action. Redox Biol. 2020 Feb 15;32:101466. doi: 10.1016/j.redox.2020.101466.
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23. Nobile V, Palumbo F, Lanni S, Ghisio V, Vitali A, Castagnola M, Marzano V, Maulucci G, De Angelis C, De Spirito M, Pacini L, D'Andrea L, Ragno R, Stazi G, Valente S, Mai A, Chiurazzi P, Genuardi M, Neri G, Tabolacci E. Altered Mitochondrial Function in Cells Carrying a Premutation or Unmethylated Full Mutation of the FMR1 Gene. Hum Genet 2020, 139 (2), 227-245. DOI: 10.1007/s00439-019-02104-7.
24. Ferrari A, Longo R, Peri C, Coppi L, Caruso D, Mai A, Mitro N, De Fabiani E, Crestani M. Inhibition of Class I HDACs Imprints Adipogenesis Toward Oxidative and Brown-Like Phenotype. Biochim Biophys Acta Mol Cell Biol Lipids, 2020, 1865 (4), 158594. DOI: 10.1016/j.bbalip.2019.158594.
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29. Favia A, Salvatori L, Nanni S, Iwamoto-Stohl LK, Valente S, Mai A, Scagnoli F, Fontanella RA, Totta P, Nasi S, Illi B. The Protein Arginine Methyltransferases 1 and 5 Affect Myc Properties in Glioblastoma Stem Cells. Sci Rep 2019, 9 (1), 15925. DOI: 10.1038/s41598-019-52291-6
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32. Tomaselli D, Lucidi A, Rotili D, Mai A. Epigenetic Polypharmacology: A New Frontier for Epi-Drug Discovery. Med Res Rev 2020, 40 (1), 190-244. DOI: 10.1002/med.21600.

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