**Curriculum vitae di MARCO RINALDO OGGIONI, nato a Legnano (Italia) 01/01/1965, Cittadino Italiano e Tedesco. CF GGNMCR65A01E514T.**

**CONTATTO**

Dipartimento di Farmacia e Biotecnologie FaBiT, Via Irnerio 42, 40126 Bologna [marcorinaldo.oggioni@unibo.it](mailto:marcorinaldo.oggioni@unibo.it)

**POSIZIONE**

2020- Professore Ordinario (BIO/19), Dipartimento di Farmacia e Biotecnologie FaBiT, Università di Bologna, Bologna, Italia (tempo definito)

2013- Chair in Microbial Genetics, Department of Genetics and Genome Biology, University of Leicester, Leicester (tempo definito)

**POSIZIONI PRECEDENTI**

2015-21 Honorary Consultant Microbiologist, University Hospitals of Leicester NHS Trust, Leicester, UK.

2013-21 Chair in Microbial Genetics, Dept Genetics and Genome Biology, Univ. of Leicester, Leicester (tempo pieno)

1993-2013 Dirigente Medico, Azienda Ospedaliera Universitaria Senese e professore a contratto Università di Siena, Siena, Italia.

**QUALIFICAZIONI**

2023- Registrazione con I‘Ordine dei Medici di Bologna

2022- Steering group Italian Society of General Microbiology SIMGBM

2019- Fellow of the Royal Society of Biology FRSB

2019- Fellow of the International Society of Antimicrobial Chemotherapy FISAC

2016-21 Affiliate member Royal College of Pathologists

2015-18 Chair of the ESCMID Study Group for Infectious Diseases of the Brain (ESGIB)

2015- Fellow of the UK Higher Education Academy FHEA

2015-22 Registration with the UK General Medical Council with Specialist registration in Medical Microbiology

1994 Specialisation Degree in Microbiology and Virology, University of Siena, Italy

1990 Medical Degree, Medical School of the University of Verona, Italy

**FINANZIAMENTI (correnti)**

IT

2023-26 PRIN PNRR grant P2022M8KYE. The innate immune reaction to invasive infection in human organs. PI.

2023-26 Fondazione Fibrosi Cistica FFC grant FFC#13/2023. Aptides for the prevention of Pseudomonas infections. CoI.

2023-26 EU grant GAP-101131231 AMRAMR. CoI

2023-26 Ricerca Finalizzata RF-2021-12375437. RNA vaccine for S. pneumoniae and MTB. CoI.

2022-25 EU grant PNRR PE13 PE0000007 INF-ACT grant. Emerging Infectious Diseases. CoI

2022-25 PRIN 2020 grant 202089LLEH. The CoDiCo (colonisation to disease concepts) project. PI.

2022-23 Fondazione del Monte. Avifauna migratoria e rischio di spillover virale. CoI.

UK

2022-27 BRC NIHR203327. Leicester NIHR Biomedical Research Centre. Contributor.

2022-25 BHF Project Grant PG/22/11117. Epigenetic phase variation of periodontal bacteria CoI.

2019-23 BBSRC studentship grant 2266943. The fundamental steps in the pathophysiology of meningitis. PI

2019-23 Australian Research Council DP190102980. Linking bacterial sugar metabolism and cell-to-cell signalling. CoI.

**TRIAL CLINICI:**

2021-24 Tissue Models for Liver Disease (TIMOLD), REC: 21/PR/0287, IRAS 293486. End date: 13/05/2024. CI

2018-24 Tissue Models for Invasive Disease (TIMID), ClinicalTrials.gov NCT04620824, REC 18/EM/0057, IRAS 219992, End date: 28/02/2024. CI

2019-21 Pollution and Health (PHN), REC 19/NW/0584, IRAS 264311, End date: 31/08/2021. CI

**BREVETTI:**

2009Antigenic protein fragments of *Streptococcus pneumoniae*, International patent WO/2009/115509.

**TEMI DI RICERCA:** I progetti di ricerca del gruppo di MR Oggioni si concentrano su due linee principali: 1) La prima indaga le fasi iniziali dell’interazione tra batteri patogeni e cellule, tessuti o organi durante le infezioni invasive. Questo studio utilizza modelli di infezione in vitro, in vivo ed ex vivo sui quali vengono effettuate analisi molecolari e di microscopia confocale. Lo scopo di questa ricerca è individuare nuovi approcci terapeutici e di prevenzione 2) Una seconda tematica di ricerca di genetica e genomica microbica è indirizzata allo studio dei meccanismi molecolari epigenetici di regolazione dell'espressione genica nei batteri. Il mio gruppo indaga inoltre meccanismi di antibiotico-resistenza

**PUBLICAZIONI (ultimi 5 anni) (orcid.org/0000-0003-4117-793X):**

* Kwun MJ, AV Ion, MR Oggioni, SD Bentley, NJ Croucher. Moonlighting proteins activate transformation in multidrug-resistant Streptococcus pneumoniae epigenetic phase variants. bioRxiv 2022 Mar 08. doi: https://doi.org/10.1101/2022.03.07.483185
* Apte S, S Bhutda, S Ghosh, K Sharma, TE Barton, S Dibyachintan, O Sahay, S Tang, AR Sinha, J Rakshit, S Roy, A Datey, S Santra, J Joseph, S Sasidharan, S Hammerschmidt, D Chakravortty, MR Oggioni, MK Santra, DR Neill, A Banerjee. A novel innate pathogen sensing strategy involving ubiquitination of bacterial surface proteins. Science Advances. 2023 Mar 22;9(12):eade1851. doi: 10.1126/sciadv.ade1851.
* Kanani T, J Isherwood, K ElSamani, WY Chung, K West, MR Oggioni, G Garcea, A Dennison. Development of a novel ex vivo porcine hepatic segmental perfusion proof-of-concept model towards more ethical translational research. Cureus. 2023 Feb 18. 15(2): e35143. DOI 10.7759/cureus.35143.
* Kanani T, J Isherwood, E Issa, WY Chung, M Ravaioli, MR Oggioni, G Garcea, A Dennison. A Narrative Review of the Applications of Ex-vivo Human Liver Perfusion. Cureus. 2023 Feb 09; 15(2):e34804. DOI: 10.7759/cureus.34804
* Kwun MJ, AV Ion, H-C Cheng, JC D’Aeth, S Dougan, MR Oggioni, DA Goulding, SD Bentley, N Croucher. Post-vaccine epidemiology of serotype 3 pneumococci identifies transformation inhibition through prophage-driven alteration of a non-coding RNA. Genome Medicine. Genome Medicine. 2022 Dec 20;14(1):144. doi: 10.1186/s13073-022-01147-2
* Yesilkaya H, MR Oggioni, PW Andrew. Streptococcus pneumoniae: captain of the men of death and financial burden. Microbiology (Reading). 2022 Dec 2;168(12):001275. doi: 10.1099/mic.0.001275.
* Oggioni MR, U Koedel. The glymphatic systems: a potential key player in bacterial meningitis. mBio. 2022 Oct 26;13(6):e0235022. doi: 10.1128/mbio.02350-22.
* Nyazika TK, L Sibale, J Phiri, M De Ste Croix, Z Jasiunaite, C Mkandawire, R Malamba, A Kankwatira, M Manduwa, D Ferreira, TS Nyirenda, MR Oggioni, HC Mwandumba, KC Jambo. Intracellular survival of Streptococcus pneumoniae in human alveolar macrophages is augmented with HIV infection. Frontiers in Immunology. 2022 Sept 20; 13:992659. doi: 10.3389/fimmu.2022.992659.
* Hames RG, Z Jasiunaite, G Ercoli, JJ Wanford, D Carreno, K Straatman, L Martinez-Pomares, H Yesilkaya, S Glenn, ER Moxon, PW Andrew, CP Kyriacou, MR Oggioni. Diurnal differences in intracellular replication within splenic macrophages correlates with the outcome of pneumococcal infection. Frontiers in Immunology. 2022 Jun 2; 13:907461. doi: 10.3389/fimmu.2022.907461.
* An H, C Qian, Y Huang, J Li, X Tian, J Feng, J Hu, Y Fang, F Jiao, Y Zeng, X Huang, X Meng, X Liu, X Lin, Z Zeng, M Guilliams, A Beschin, J Wang, MR Oggioni, JM Leong, J-W Veening, H Deng, R Zhang, H Wang, J Wu, Y Cui, J-R Zhang. Functional vulnerability of liver macrophages to capsules defines virulence of blood-borne bacteria. Journal of Experimental Medicine. 2022 Mar 08;219(4): e20212032. doi: 10.1084/jem.20212032..
* Hames RG, Z Jasiunaite, JJ Wanford, D Carreno, WY Chung, AR Dennison and MR Oggioni. Analysing macrophage infection at the organ level. Methods in Molecular Biology, 2022;2414:405-431. doi: 10.1007/978-1-0716-1900-1\_22.
* Wanford JJ, R Hames, D Carreno, Z Jasiunaite, WY Chung, F Arena, V Di Pilato, K Straatman, K West, R Farzand, M Pizza, L Martinez-Pomares, PW Andrew, ER Moxon, AR Dennison, GM Rossolini, MR Oggioni. Interaction of Klebsiella pneumoniae with tissue macrophages in a murine infection model and ex-vivo porcine organ perfusions: an exploratory investigation. Lancet Microbe. 2021 Dec;2(12):e695-e703. doi: 10.1016/S2666-5247(21)00195-6.
* Carreno D, JJ Wanford, Z Jasiunaite, RG. Hames, WY Chung, AR. Dennison, K Straatman, L Martinez-Pomares, M Pareek, CJ Orihuela, MI Restrepo, WS Lim, PW Andrew, ER Moxon, MR Oggioni. 2021. Splenic macrophages as the source of bacteraemia during pneumococcal pneumonia. EBioMedicine. 2021 Oct 4;72:103601. doi: 10.1016/j.ebiom.2021.103601.
* Kanani T, K ElSamani, W Chung, M Cox, M Sahloul, J Isherwood, MR Oggioni, G Garcea, A Dennison. Ex-vivo normothermic perfusion of an abattoir-derived porcine hepatic segment as a model for scientific research. British Journal of Surgery, 2021 December 15. 108(S9):znab430.107, doi: 10.1093/bjs/znab430.107.
* Wysocka M, R Zamudio, MR Oggioni, J Gołebiewska, M Bronk, B Krawczyk. Genetic background and antibiotic resistance profiles of K. pneumoniae NDM-1 strains isolated from UTI, ABU and the GI tract, from one hospital in Poland, in relation to strains nationally and worldwide. Genes (Basel). 2021 Aug 22;12(8):1285. doi: 10.3390/genes12081285.
* Cumont A, R Zhang, Y Zheng, L Corscadden, MR Oggioni, C Li, R Liu, H Ye. Antibacterial properties of polycrystalline diamond films. Ceramics International. 2021 Aug 18;47:32562–32569. doi 10.1016/j.ceramint.2021.08.151
* Wysocka M, T Monteiro, C de Pina, D Gonçalves, S de Pina, A Ludgero-Correia, J Moreno, R Zamudio, N Almebairik, LJ Gray, M Pareek, DR Jenkins, M Aires De Sousa, H De Lencastre, S Beleza, II Araujo, T Conceição, MR Oggioni. Whole-genome analysis uncovers loss of blaZ associated to carriage isolates belonging to MRSA clone ST5-VI in Cape Verde. Journal of Global Antimicrobial Resistance. 2021 May 27;26:77-83. doi: 10.1016/j.jgar.2021.04.018.
* Cumont A, AR Pitt, PA Lambert, MR Oggioni, H Ye. Properties, mechanism and applications of diamond as an antibacterial material. Functional Diamond. 2021, 1(1): 1–28. doi: 10.1080/26941112.2020.1869434
* Huang X, J Wang, J Li, Y Liu, X Liu, Z Li, K Kurniyati, Y Deng, G Wang, J Ralph, M De Ste Croix, S Escobar-Gonzalez, R Roberts, J-W Veening, X Lan, MR Oggioni\*, C Li\*, J-R Zhang\*. Prevalence of Phase Variable Epigenetic Invertons among Host-Associated Bacteria. Nucleic Acids Research 2020 Nov 18; 48(20):11468-11485. doi: 10.1093/nar/gkaa907.
* Zamudio R, RD Haigh, JD Ralph, M De Ste Croix, T Tasara, K Zurfluh, MJ Kwun, AD Millard, SD Bentley, NJ Croucher, R Stephan, MR Oggioni. 2020. Lineage specific evolution and gene flow in Listeria monocytogenes is independent of bacteriophages. Environmental Microbiology. 2020 Dec; 22(12):5058-5072. doi 10.1111/1462-2920.15111.

*Autorizzo il trattamento dei dati personali contenuti nel mio curriculum vitae in base all’art. 13 del D. Lgs. 196/2003 e all’art. 13 del Regolamento UE 2016/679 relativo alla protezione delle persone fisiche con riguardo al trattamento dei dati personali.*