Curriculum Vitae – Prof. Mauro Magnani

MAGNANI Prof. Mauro, Italian, Professor of Biochemistry Emeritus

EDUCATION AND PROFESSIONAL CAREER: Graduate in Biology, University of Urbino, 1976; Visiting Researcher, Dept. Biochemistry, Univ. Birmingham, 1980; Visiting Prof. Dept. Biolgy, Haifa, Israel, 1983; Asst. Prof. Univ. Urbino, 1977-82; Assoc. Prof., 1982-1986; Full Prof. of Biochemistry 1986 – 2023: since then, Professor of Biochemistry Emeritus.

PROFESSIONAL MEMBERSHIPS: Vice President of the Federation of the European Biochemical Societies (FEBS); Italian Society of Biochemistry and Molecular Biology (President 2017-2018; actually President Emeritus); Int. Ass. Biomed. Gerontol.; Int. Soc. For The Use of Resealed Erythrocytes (President 1991-1993); Red Cell Research Group; European Haematology Association; International Society for Antiviral Research; AAAS; American Society of Human Genetics; International Society for Antiviral Research; International Society for Nucleosides, Nucleotides and Nucleic Acids, etc.

GOVERNACE EXPERIENCES: Member of the "Consiglio di Amministrazione" University of Urbino; 1995-2001 Dean, Faculty of Sciences University of Urbino; 1998-2005 Director Interuniversity Consortium for Biotechnology (CIB), from November 2006 member of the board and Vice-Director; 2001-2009 Vice Rector of the University of Urbino. Sept 2011-October 2019 member of the administrative council of the "Stazione Zoologica Anton Dohrn" Napoli, nominate by the Minister of University and Research, Rome. From 2020 member of the Scientific Council of "Stazione Zoologica Anton Dohrn". Member of the Scientific Council of Biogem; Member of the Administrative Council Fondazione Giovanni Lorenzini representing the MUR.

ENTERPRENERIAL ACTIVITIES AND RECOGNITIONS: Co-founder and board member of two start-up companies: Diatheva SrL was founded in 2002 and is now operated by 18 researchers (www.diatheva.com); EryDel SpA was founded in 2007 funded by three VC founds (www.erydel.com), StartUp of the year 2018, and acquired by Quince Therapeutics (https://quincetx.com/) in October 2023. Include in the official list of professional biologist with n. 017484. Technical Director nominated by the "Agenzia Italiana del Farmaco, AIFA" with n. AIDT-19/2005; Awarded "Genomic Pioneers" by HUGO and Ocimum (2008), member of "Accademia Raffaello" (2008), Paul Harris Fellow from The Rotary Foundation (2007). Included in the list of "Top Italian Scientists", Scientific Committee Biogem; International Advisory Board Center for Life Sciences Nazarbayev University, Astana. World's Top 2% Scientists list by John P. A. Ioannidis (Stanford University, United States of America) et al, 2020, Chair of Quince's Scientific Advisory Board (2023), Member of the National Committee for Biosafety, Biotechnology and Life Sciences, Presidency of the Italian Government, Italian Delegate at the EC Economy Security Strategy (Ad hoc Group Meeting on Risk Assessment of Biotechnologies) 2023-2024; Italian Delegate OECD Synthetic Biology Expert Focus Group 2023-2024.

REFEREE: Different Programmes of the E.U.; The International Science Foundation (U.S.A.); Czech Academy of Sciences; The Executive Agency for Higher Education, Research, Development and Innovation Funding of Romania; Deutsche Forschungsgemeinschaft (DFG; German Research Foundation), Dutch Cancer Society; Swiss National Science Foundation; Innovation and Technology Commission The Government of Hong Kong; Israeli Ministry of Science, Technology; Health Research Charities & Heath Research Board Ireland; BBSRC UK; Fondation pour la

Recherche Medicale (FR); Target Project "Biotechnology" of the National Research Council (C.N.R.); Member of the Project "Patologia clinica e terapia dell'infezione da HIV" of the Italian Ministry of Health; PRIN and FIRB Projects of Italian Ministry of University and Research; Member of Committee Post Genoma (C.N.R); Member "Comitato Educazione, Formazione e Ricerca" Ministero Politiche Comunitarie; Member "Comitato Nazionale per la Biosicurezza e le Biotecnologie" Presidenza Consiglio dei Ministri; Include in the "Albo degli Esperti" of M.I.U.R. and EU Eureka projects; Biotechnology programmes of the regions Piemonte, Sardegna, Emilia Romagna, Trentino, Campania.

CURRENT RESEARCH: Red blood cell as drug-delivery systems and as circulating bioreactors; Development and delivery of biologics; Drug efficacy, resistance, and drug toxicity; Pharmacogenetic profiling; Nanomaterials in drug delivery and imaging; Recombinant vaccine production; HIV-persistence and reservoirs.

PUBLICATIONS: over 500 articles published in international refereed scientific journals (for a complete list see PubMed);

H index = 80 Citations = 26,583

https://scholar.google.com/citations?user=WY1MmwUAAAAJ&hl=en

Co-editor of three books:

"Red Blood Cell Aging", Plenum Press, N.Y., 1991, pp. 383.

"The Use of Resealed Erythrocytes as Carriers and Bioreactors", Plenum Press, N.Y., 1992, pp. 361.

"Erythrocyte Engineering for Drug Delivery and Targeting", Landes Bioscience, 2002.

PATENTS:

1) Europen Patent EP 0517986B1

M. Magnani, L. Rossi "Transformed erythrocytes, process for preparing the same, and their use in pharmaceutical compositions"

US Patent 5,753,221

M. Magnani, L. Rossi "Transformed erythrocytes, process for preparing the same, and their use in pharmaceutical compositions"

CA2102619 A1

"Erythrocytes transformes, leur procede de preparation, et utilisation dans les compositions pharmaceutiques"

2) US Patent N. 6.139.836 DE69732225D1, DE69732225T2, EP0882448A1, EP0882448B1 Mauro Magnani, Ivo Panzani, Leonardo Bigi, Andrea Zanella "Method of encapsulating biologically active agents within erythrocytes, and apparatus therefor".

3) European Patent N. EP98830479.6

M. Magnani, G. Brandi, A. Fraternale, A. Casabianca "Pharmaceutical composition or composition package containing a pyrimidine nucleoside analogue and a purine nucleoside analogue".

4) Brevetto C.N.R. N. RM92 A 000377

M. Magnani "Antigeni legati alla superficie esterna di eritrociti e procedimento per la loro preparazione"

5) Brevetto C.N.R. N. RM 93 A 000474

M. Magnani "Eritrociti incorporanti alcool ossidasi e loro uso nelle intossicazioni da metanolo"

- 6) Brevetto C.N.R.
- M. Magnani, L. Rossi, G. Brandi, E. Millo, G. Damonte, U. Benatti, A. De Flora "Profarmaco di acyclovir e suo uso in composizioni farmaceutiche"
- 7) Brevetto di Invenzione N. MI2002A01196 06/06/1996 EP1395595A1, EP1395595B1, US7645788, US20040214876, WO2002098881A1, CA2449877 A1US Patent n. 7,645,788 B2 Granted
- M. Magnani, C. Fiorucci, P. Filippone, G. Brandi, M. Paiardini. "Derivato tetramerico dell'indol-3 carbinolo ad attività anticancerogena e metodo di sintesi del derivato stesso". "Tetramerous derivative of indole-3-carbinol with anti-carcinogenic activity and method of synthesis of said derivative"
- 8) Brevetto di Invenzione N. TO2001A01077 16/11/2001
- M. Magnani, F. Graziano, A. Ruzzo "Mutazioni della linea germinale nel promotore del gene della E-caderina e metodi di diagnosi per individuare una maggiore suscettibilità al carcinoma gastrico".

WO2003042409A2, WO2003042409A8 "Germ line mutation in the promoter of e-caderine and diagnostic method for finding a greater susceptibility to gastric carcinoma"

- 9) US20070270349 A1DE602004029191D1, EP1701973A1, EP1701973B1, US20120165248, WO2005063795A1 granted
- U. Benfatti, G. Brandi, E. Garaci, M. Magnani, E. Millo, AT. Palamara, L. Rossi "Derivati del Glutatione e loro utilizzi per il trattamento delle malattie virali" "Glutathione Derivatives and Their Uses for the Treatment of Viral Diseases"
- 10) EP2043697A2, US20100061937, WO2008003524A2
- M. Magnani, A. Antonelli . "Delivery of contrasting agents for magnetic resonance imaging"
- 11) CA2763695A1, EP2437736A2, US8734787, US20120141540, PCT/EP2010/003783 M. Magnani, L. Rossi, S. Biagiotti and M. Bianchi "*Drug Delivery Systems*" New Zealand Patent Application No. 596813 (granted)
- 12) CN102007141A, US20110319593, WO2009098094A1EP20090708997
- B. Ensoli, M. Magnani

Process for the production of biologically active HIV-1 tat protein

13) DEVELOPMENT OF A RECOMBINING CELL FACTORY FOR THE PRODUCTION OF GLUCOBRASSICINE \dots

IT ITRM20100062A1 Mauro Magnani et al. Consorzio Ricerche Applicate Biotec

- 14) US 20140202857 A1 EP2715344A1, WO2012160584A1
- Ugo Valbusa, Luca Repetto, Giuseppe FIrpo, Valentina Mussi, Paola Fanzio, Chiara Manneschi, Gian Paolo Tonini, Paola Scaruffi, Sara Stigliani, Michele Menotta, Mauro Magnani "Device and single-molecule analysis method by means of detection of the collisions of a target molecule on functionalized nanopores"
- 15) RM2015A000022; US 2018 / 0016637 A1; WO2016116850A1; EP3247805A1; IB2016050238 M. Magnani, S. Biagiotti, M. Menotta
- "Metodo di valutazione della risposta di pazienti affetti da atassia telangiectasia al trattamento con glucocorticoide" Method of evaluation of the response of patients with ataxia telangiectasia to treatment with glucocorticoids

16) Humanised antibodies against pathogenic fungi WO EP US US20230406912A1 Tomas DI MAMBRO Tania VANZOLINI Mauro Magnani Diatheva S.R.L

REVIEWER: Nature Biotechnology; Nature Communications; Biotechnology; Cell Biomaterials; Advances; Trends in Biotechnology; Drugs; Leukemia; European Journal Haematology; Biotechnology and Applied Biochemistry; Biochimica et Biophysica Acta; Blood; Journal of Cellular Engineering; Journal of Internal Medicine; Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology; Mechanisms of Ageing and Development; Antiviral Research; Journal of Chromatography; Journal of Biological Regulators and Homeostatic Agents; Life Sciences; Biochemistry; International Journal of Biochemistry and Cell Biology; Human Gene Therapy; European Journal of Biochemistry; Clinical Pharmacokinetics; Autoimmunity; Oncogene; Analytical Biochemistry; The Hematology Journal; Talanta, Sports Medicine, Cell Biology and Toxicology; Letters in Applied Microbiology; Haematologica; J. Controlled Release; Gene; Nanomedicine; Harmful Algae; Analytica Chimica Acta, AIDS Research and Treatment, Plos One, AAPS Pharm SciTech, etc.

<u>Editorial Board</u>: Current Drug Targets; Frontiers in Physiology: Red Blood Cell Physiology Section; Associate Editor Frontiers in Bioengineering.

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