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Founder and Executive Chairman of the International Society of Microbiota
Chairman of the scientific committee of Targeting Mitochondria and Microbiota
World Societies

Actual clinical interests and projects at INSERM Unit 1016

- Clinical interests focus on the impact of oxidative stress and inflammation on chronic diseases
- Studying the intriguing relation between mitochondria and microbiota
  https://www.ncbi.nlm.nih.gov/pubmed/26500226
  https://www.isanh.net/news/34-news/518-microbiota-controls-mitochondria-metabolism-targeting- microbiota-mitochondria-inter-talk-by-marvin-edeas
- How to evaluate mitochondria function and microbiota signatures in diseases?
  http://www.springer.com/la/book/9781493922567 http://www.springer.com/us/book/9781493922871
  https://www.ncbi.nlm.nih.gov/pubmed/23562877
- How to target mitochondria by drugs, Nrf2 modulators, and redox molecules?
  https://www.ncbi.nlm.nih.gov/pubmed/21918914
  https://www.ncbi.nlm.nih.gov/pubmed/19833072
- How to modulate gut microbiota quality, quantity and diversity?
  https://www.ncbi.nlm.nih.gov/pubmed/26500226
  https://www.ncbi.nlm.nih.gov/pubmed/26429302
- Effect of phages therapy on the microbiota quality
- Effects of microbiota metabolites on mitochondria activities
  https://www.ncbi.nlm.nih.gov/pubmed/30301167
- A clinical study to investigate the mitochondria and microbiota relationship in hemodialysis patients
  https://www.ncbi.nlm.nih.gov/pubmed/30301167
- Biotech Projects:
  - Non-invasive biomarkers in chronic diseases
  - Olfactory Receptors modulations outside the nose
    https://digital-olfaction.com/news/targeting-olfactory-receptors-by-agonists-aromas-microbiota-or-digital-scents-myth-or-reality/

Qualifications and Clinical Experiences

After Marvin Edeas obtained his certificate as infectious diseases specialist in 1994 at University Paris Descartes, in the department of Pr J.P. Viard, he obtained in 1996 his Doctorate of the University of Paris Sud, Hospital Antoine Béclère, in the department of Pr A. Lindenbaum, with a jury composed of Pr G. Hazebroucq, Pr L. Montagnier, Pr J.F Delfraissy, Pr M. Martin.

From 2004 to 2011, Marvin Edeas teached at the University of Paris 13 Bobigny, at Dumenat Department and from 2010 to 2013 with the University of Poitiers, Department of Physiology.

In 1990-1992 at Hospital Armand Trousseau, Marvin Edeas worked on the impact of hyperoxia on pneumocytes with Pr A. Clement, from the department of lung diseases. His first paper was published on the Journal of Clinical Investigations about the inhibition of lung epithelial cell proliferation by hyperoxia and the posttranscriptional regulation of proliferation-related genes. It was the first

initiation of Marvin Edeas in the field of oxidative stress.
https://www.ncbi.nlm.nih.gov/pubmed/1430207

Following this experience from 1993 to 1996, Marvin Edeas worked with Pr Jacques Emerit, head of the department of internal medicine at Hospital de la Pitié Salpêtrière, about inflammation and gastrointestinal diseases. He initiated with Pr Emerit the strategic role of SOD in inflammatory gastrointestinal diseases.

With Pr JP. Villard from 1993 to 1995, in the department of HIV infections at University Paris Descartes, they validated a work initiated about HIV infection and AIDS patients. This experience allowed Marvin Edeas to initiate the role of oxidative stress and co-infections in AIDS patients

From 1993 to 1999, at University of Paris Sud, Hospital Antoine Béclère, Marvin Edeas worked with Pr A. Lindenbaum and undertake long studies to investigate the mecanistics of HIV latency in AIDS asymptomatic patients and how can we activate HIV by many factors.
https://www.ncbi.nlm.nih.gov/pubmed/11237285
https://www.ncbi.nlm.nih.gov/pubmed/10525130
https://www.ncbi.nlm.nih.gov/pubmed/9414085
https://www.ncbi.nlm.nih.gov/pubmed/9118004
https://www.ncbi.nlm.nih.gov/pubmed/9863501
https://www.ncbi.nlm.nih.gov/pubmed/9215803

In 1997, Marvin Edeas identified with Dr I. Emerit the Clastogenic factors in plasma of HIV-1 infected patients which can activate HIV-1 replication in vitro: inhibition by superoxide dismutase. https://www.ncbi.nlm.nih.gov/pubmed/9215803

In the same time, Marvin Edeas collaborated with Dr E. Peltier from the Hôpital A. Béclère, Department of Pathology, to understand how extra-cellular SOD can protect lymphocytes from oxidative stress. https://www.ncbi.nlm.nih.gov/pubmed/8997518

The first clinic study was done with Pr Emerit and Pr Bricaire to investigate the impact of Antiretroviral therapy on hyperlactatemia in AIDS patients and whether antioxidants supplementation can reduce antiretroviral therapy-induced chronic stable hyperlactatemia.
https://www.ncbi.nlm.nih.gov/pubmed/12818471
https://www.ncbi.nlm.nih.gov/pubmed/14739060

In 1998, Marvin Edeas organized the first world congress on SOD with Pr Joe McCord (Known-for discovery of SOD). Three meetings about SOD were organized with Joe McCord at Institut Pasteur, Paris. https://isanh.com/?q=node/27
https://www.ncbi.nlm.nih.gov/pubmed/15862706

In 2004, Marvin Edeas put together Joe McCord and Luc Montaignier during the SOD conference. During the conclusion, a journalist suggested that both of them be awarded by the Nobel Prize: Luc Montagnier for his discoveries on HIV and Joe McCord for his SOD identification.

Collaboration with Pr L. Robert, Hotel Dieu Hospital, Paris, was held to investigate the role of glycation and oxidative stress on many chronical.
https://www.ncbi.nlm.nih.gov/pubmed/20031340
https://www.ncbi.nlm.nih.gov/pubmed/19896300
https://www.ncbi.nlm.nih.gov/pubmed/19896302

Awards

Marvin Edeas received the Sidaction Award for his project on HIV infection in 1994.

Expert

Marvin Edeas is an expert for the following agencies:

Agence de Biomédecine
www.agence-biomedecine.fr

AERES: Agence d'Evaluation de la Recherche et de l'Enseignement Supérieur
www.aeres-evaluation.fr

National Science Centre in Krakow, Poland
https://www.ncn.gov.pl/?language=en

Patents

Marvin Edeas obtained two patents at Hospital Antoine Béclère:

Use of oyster flesh enzymatic hydrolysates for preparing compositions eliminating free radicals European Patent
EP1207892
Kind Code: B1
http://www.google.ch/patents/US6841171

Cosmetic composition containing oyster flash enzymatic hydrolysates United States
Patent Application 20050074423
Kind Code: A1
http://www.google.ch/patents/US7270807

He successfully identified Nrf-2 modulators who can induce antioxidants defence system (which were isolated from proteins and peptides).
The translation of this research was realized by the creation of a start-up who commercialized this peptide.

National & International Conferences

Marvin Edeas is involved in many scientific societies and journals, among them:

Founder and President of the Scientific Committee of the International Society of the Antioxidants in Nutrition and Health
www.isanh.com

President of the Scientific Committee of the Paris Redox World Congress
www.isanh.net

President of the Scientific Committee of the Glycation & Maillard Reaction World Congress
www.glycation-site.com

Founder and past President of the World Mitochondria Society Co-Editor on
Chief of the Journal of World Mitochondria Society
Chairman of the scientific committee of Targeting Mitochondria World Conference
www.targeting-mitochondria.com

President of Mitochondria and Microbiota Task Force
Chairman of the scientific committee of Targeting Microbiota World Conference
www.microbiota-site.com

Books Edited

Marvin Edeas edited three important books:

Mitochondrial Medicine: Volume 1 - Probing Mitochondrial Function
V. Weissig, M. Edeas
Springer Science (2015) – pp 1-480
http://www.springer.com/la/book/9781493922567

Mitochondrial Medicine: Volume 2 - Manipulating Mitochondrial Function
V. Weissig, M. Edeas
Springer Science (2015) – pp 1-447
http://www.springer.com/us/book/9781493922871

Superoxide dismutases: Recent advances and clinical applications
M. Edeas
Editions Mel Paris, 1999
https://www.amazon.fr/Superoxide-dismutases-advances-clinical-applications/dp/2951372507

Publications

Microbiota and Phage Therapy: Future Challenges in Medicine.
Paule A, Frezza D, Edeas M.
Med Sci (Basel). 2018 Oct 5;6(4). pii: E86. doi: 10.3390/medsci6040086.

Microbiota Quality and Mitochondrial Activity Link with Occurrence of Muscle Cramps in Hemodialysis Patients using Citrate Dialysate: A Pilot Study.
Durand PY, Nicco C, Serteyn D, Attaf D, Edeas M.
Blood Purif. 2018;46(4):301-308. doi: 10.1159/000490612.

Microbiota-mitochondria inter-talk: consequence for microbiota-host interaction. Saint-Georges-Chaumet Y, Edeas M.
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Targeting microbiota-mitochondria inter-talk: Microbiota control mitochondria metabolism. Saint-Georges-Chaumet Y, Attaf D, Peltier E, Edeas M.
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Weissig V, Edeas M.
Methods Mol Biol. 2015;1265:v-xiv.

Mitochondrial medicine. Preface.
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Targeting mitochondria: strategies, innovations and challenges: The future of medicine will come through mitochondria.
Edeas M, Weissig V.
Mitochondrion. 2013 Sep;13(5):389-90. doi: 10.1016/j.mito.2013.03.009. PMID: 23562877

Polyphenols and human health: a prospectus.
Visioli F, De La Lastra CA, Andres-Lacueva C, Aviram M, Calhau C, Cassano A, D'Archivio M, Faria A, Favé G, Fogliano V, Llorach R, Vitaglione P, Zoratti M, Edeas M.
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Strategies to target mitochondria and oxidative stress by antioxidants: key points and perspectives. Edeas M.
Pharm Res. 2011 Nov;28(11):2771-9. doi: 10.1007/s11095-011-0587-2. PMID: 21918914

Maillard reaction, mitochondria and oxidative stress: potential role of antioxidants. Edeas M, Attaf D, Mailfert AS, Nasu M, Joubet R.
Pathol Biol (Paris). 2010 Jun;58(3):220-5.

The Maillard reaction. From nutritional problems to preventive medicine. Robert L, Labat-Robert J, Robert AM.
Pathol Biol (Paris). 2010 Jun;58(3):200-6. doi: 10.1016/j.patbio.2009.09.004.

The Maillard reaction, its nutritional and physiopathological aspects. Introduction. Edeas M, Robert L.
Pathol Biol (Paris). 2010 Jun;58(3):199

Anti-oxidants, controversies and perspectives: how can the failure of clinical studies using anti-oxidants be explained?
Edeas M.
J Soc Biol. 2009;203(3):271-80. Epub

First International Conference on Therapies of Obesity: perspectives for pharmaceutical and natural products (Paris Anti Obesity Therapies 2006), May 18-19 2006, Institut Pasteur, Paris, France.
Edeas M.
Pediatr Endocrinol Rev. 2006 Dec-2007 Jan;4(2):163-8.

SOD, oxidative stress and human pathologies: a brief history and a future vision. McCord JM, Edeas MA.

Biomed Pharmacother. 2005 May;59(4):139-42.

Neurodegenerative diseases and oxidative stress. Emerit J,
Edeas M, Bricaire F.
Biomed Pharmacother. 2004 Jan;58(1):39-46.

Could antioxidant supplementation reduce antiretroviral therapy-induced chronic stable hyperlactatemia? Lopez O, Bonnefont-Rousselot D, Edeas M, Emerit J, Bricaire F.
Biomed Pharmacother. 2003 May-Jun;57(3-4):113-6.

Effect of ethyl esterification of phenolic acids on low-density lipoprotein oxidation. Chalas J, Claise C, Edeas M, Messaoudi C, Vergnes L, Abella A, Lindenbaum A. Biomed Pharmacother. 2001 Feb;55(1):54-60.

Oxidized-LDL induce apoptosis in HUVEC but not in the endothelial cell line EA.hy 926.
Claise C, Edeas M, Chaouchi N, Chalas J, Capel L, Kalimouttou S, Vazquez A, Lindenbaum A. Atherosclerosis. 1999 Nov 1;147(1):95-104.

Protective effects of the lipophilic redox conjugate tocopheryl succinyl-ethyl ferulate on HIV replication. Edeas MA, Claise C, Vergnes L, Khalfoun Y, Barthelemy S, Labidalle S, Lindenbaum A.
FEBS Lett. 1997 Nov 24;418(1-2):15-8.

Comparison of oxidized low-density lipoprotein toxicity on EA.hy 926 cells and human vein endothelial cells: influence of antioxidant systems.
Claise C, Chalas J, Edeas M, Abella A, Khalfoun Y, Laurent D, Lindenbaum A. Cell Mol Life Sci. 1997 Feb;53(2):156-61.

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Arbault S, Edeas M, Legrand-Poels S, Sojic N, Amatore C, Piette J, Best-Belpomme M, Lindenbaum A, Vuillaume M.
Biomed Pharmacother. 1997;51(10):430-8.

Clastogenic factors in plasma of HIV-1 infected patients activate HIV-1 replication in vitro: inhibition by superoxide dismutase.
Edeas MA, Emerit I, Khalfoun Y, Lazizi Y, Cernjavski L, Levy A, Lindenbaum A. Free Radic Biol Med. 1997;23(4):571-8.

Oxidized low-density lipoprotein induces the production of interleukin-8 by endothelial cells. Claise C, Edeas M, Chalas J, Cockx A, Abella A, Capel L, Lindenbaum A.
FEBS Lett. 1996 Dec 2;398(2-3):223-7.

Immunocytochemical study of uptake of exogenous carrier-free copper-zinc superoxide dismutase by peripheral blood lymphocytes.
Edeas MA, Peltier E, Claise C, Khalfoun Y, Lindenbaum A. Cell Mol Biol (Noisy-le-grand). 1996 Dec;42(8):1137-43.

Protective effects of exogenous copper-zinc superoxide dismutase on the TNF-alpha induced oxidative stress and HIV replication.
Edeas M, Peltier E, Claise C, Khalfoun Y, Lindenbaum A; International Conference on AIDS. Int Conf AIDS. 1996 Jul 7-12; 11: 59 (abstract no. Mo.A.1024).

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Edeas M, Khalfoun Y, Lazizi Y, Vergnes L, Labidalle S, Postaire E, Lindenbaum A. C R Seances Soc Biol Fil. 1995;189(3):367-73. French.

Inhibition of lung epithelial cell proliferation by hyperoxia. Posttranscriptional regulation of proliferation- related genes.
Clement A, Edeas M, Chadelat K, Brody JS. J Clin Invest. 1992 Nov;90(5):1812-8.