BIOSKETCH

Francesco Galli

1. General information.

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Dr Galli (October 21, 1967) is PhD in biochemistry and pharmacology now appointed as aggregate professor in biochemistry and nutrition at the Department of Pharmaceutical Sciences, University of Perugia, Italy. At present, he is head of unit and group leader at the Laboratory of clinical biochemistry and nutrition of this Department.

Scientific and research activity has covered different areas of biochemistry, cell biology, toxicology and nutrition. Main topics of projects running at the Dr Galli's lab are:

- metabolism and therapeutic applications of fat soluble vitamins, mainly vitamin E and K
- analytical and biological investigation of antioxidants and micronutrients (phenolics, Selenium, etc.)
- glutathione-S-transferase and glutathione metabolism in cardiovascular comorbidity and anemia of chronic kidney disease
- oxidative stress and malnutrition of kidney disease and cystic fibrosis patients;
- melatonin (cyto-protection and immuno-inflammatory effects);
- free radical derived post-translational modification of proteins relevant to food chemistry and medicine (mainly associated with uremic toxicity and micro-inflammation),
- biocompatibility of biomaterials for extracorporeal therapies such as hollow-fiber haemodialyser membranes (including vitamin E-bonded and ultra-high flux protein-leaking dialysers).

1. Scientific collaborations and appointments:

- Dr Galli is ordinary member since 1997 and Committee member elect (2006 2010, and 2013-present) of the Society for Free Radical Research-Europe branch (SFRR-E).
- 2013 Dr Galli founded the scientific and research network of the Mediterranean Diet (MEDINET)
- He is currently member of the Editorial Board of the biochemistry journals: Amino Acids and Redox Biology.
- A number of collaborations (more than 30 since 2002) with research groups of national and international
 Universities and research centers have been established some of which are still active as documented in the
 recent list of publications.
- 2. Research activity and external activity as scientific advisor of R&D centers and companies:
 - a. Pharmaceutical and chemical companies:
- Belco S.p.a., Modena, Italia
- Baxter per le divisioni Italia ed Europa.
- Terumo Co., Japan;
- Asahi Medical, Japan,
- Toray Industries, Japan;
- Joycare, Ancona, Italia
- B-Braun, Italia
- MyGenomix, Italia
 - b. Food and nutrition companies:

- Casa Buitoni, S. Sepolcro, Arezzo, Italy (Nestlè group)
- Molini Spigadoro SpA, Bastia Umbra, Italy
- Monini SpA, Spoleto, Italy
- AR-Alimentare, Marsciano, Perugia;
- CERB (Centro di Eccellenza per la Ricerca sulla Birra), Pantalla, Perugia, Italy
- DSM (ex Roche, nutritional division), Switzerland
- Malaysian Palm Oil Board (MPOB), Malaysia
- 3. Scientific and economic impact of research work at Dr Galli's Lab:
 - a. Scientific production (see the enclosed list):
 - more than 200 publications in scientific journals with peer reviewing system and books
 - active contribution as invited as speaker and chair to national and international scientific meetings

(last 5 years: 2009-2014)

Cumulative record of original and review papers = (27+27) 54,

Cumulative IF: 216, Average IF = 4.6, HI = 28

b. Research budget:

- As main and contributing investigator in national and international research projects, Dr Galli has raised from 2005 to 2012 a total budget of research (Galli's lab and external partners) of 1.2 million or Euro.
- In 2013 dr Galli has been granted as co-leading scientist in the frame of the Technology Cluster AgriFood program of the Italian Ministry of University and Research Health and Nutrition Area (11 millions of Euro of total budget, 1 million as research and teaching budget allocated at the University of Perugia).

Publications (some of the recent ones):

- 1. Luchetti F. et al. Melatonin signaling and cell protection function. FASEB J. 2010.
- 2. Clerici C. et al. Novel Soy Germ Pasta Improves Endothelial Function, Blood Pressure, and Oxidative Stress in Patients With Type 2 Diabetes. Diabetes Care, 2011.
- 3. Galli F. et al. Oxidative stress and antioxidant therapy in cystic fibrosis. Biochim Biophys Acta Mol Bases Dis 2012.
- 4. Fusaro M. et al. Vitamin K, Vertebral Fractures, Vascular Calcifications and Mortality: Vitamin Italian (VIKI) Dialysis Study. J Bone Mineral Res, 2012.
- 5. Piroddi M. et al. Vitamin E: functional and biocompatibility modifier of synthetic hemodyaliser membranes An overview of the literature on vitamin E-modified hemodialyzer membranes. Am J Nephrol. 2012.
- 6. Pierpaoli E. et al. Effect of annatto-tocotrienols supplementation on the Development of Mammary Tumors in HER-2/neu Transgenic Mice. Carcinogenesis, 2013.
- 7. Bamonti L, Hosoya T, Pirker KF, Böhmdorfer S, Mazzini F, Galli F, Netscher T, Rosenau T, Gille L. Tocopheramines and tocotrienamines as antioxidants: ESR spectroscopy, rapid kinetics and DFT calculations. Bioorg Med Chem. 2013;21(17):5039-46.
- 8. Murdolo G. et al. Lipokines and oxysterols: Novel adipose-derived lipid hormones linking adipose dysfunction and insulin resistance. Free Rad Biol Med. 2013
- Galli F. et al. Blood thiol status and erythrocyte glutathione-S-transferase in chronic kidney disease patients on treatment with frequent (daily) hemodialysis. Free Rad Res 2013.
- Wallert M, Mosig S, Rennert K, Funke H, Ristow M, Pellegrino RM, Cruciani G, Galli F, Lorkowski S, Birringer M. Long-chain metabolites of α-tocopherol occur in human serum and inhibit macrophage foam cell formation in vitro. Free Radic Biol Med. 2014

Poster, oral communications and invited lectures

- (Invited) Viola V, Pierpaoli E, Piroddi M, Pilolli F, Provinciali M, Galli F, Anticancer activity of tocotrienols in p^{185neu} positive breast adenocarcinoma.
 2nd International Conference on Tocotrienols & Chronic Diseases. Las Vegas, NV, 13-14 July 2011.
- (Organizer of the meeting and Chair) Galli F. The functional nitroproteome of human plasma: a multidisciplinary approach. Symposium on: Posttranslational Protein Modifications Induced by Oxidative and Nitrative/Nitrosative Stress. 12th INTERNATIONAL CONGRESS ON AMINO ACIDS, PEPTIDES AND PROTEINS, Beijing, August 2, 2011.
- 3. (Organizer of the meeting and Chair) Galli F. Networking labs and competencies to strength the power of the next generation of studies on PTMs induced by oxidative and nitrative/nitrosative stress. Panel discussion at the Symposium: Posttranslational Protein Modifications Induced by Oxidative and Nitrative/Nitrosative Stress. 12th INTERNATIONAL CONGRESS ON AMINO ACIDS, PEPTIDES AND PROTEINS, Beijing, August 2, 2011.
- 4. (Invited) Galli F. Cholesterol oxidation, fatty acid profiling and vitamin E in cystic fibrosis. 1st ENOR Symposium: Oxysterols and Related Sterols in Chemistry, Biology & Medicine. Rome 22- 24 September, 2011
- 5. (Invited) Galli F. Lo stress ossidativo nel controllo del metabolismo Calcio Fosforo. I Seminario: Osteoporosi e Alterazioni del Metabolismo Minerale Osseo nella Malattia Renale Cronica. Isola San Servolo (VE) 13-15 Ottobre 2011.
- 6. (Invited) Galli F. Effect of anatto tocotrienols supplementation on the development of mammary tumors in HER-2neu transgenic mice. Annual Meeting of the Society for Free Radical Research Europe and International. London, 6-9 Sept 2012.
- 7. Ciffolilli S., Legnaioli S., Piroddi M., Pierpaoli E., Provinciali M., Galli F. (presenting Author Invited) On the Superiority of Hypomethyl (Delta- and Gamma-) Tocotrienols as Anticancer Agents in Neu-Positive Breast Cancer. *In:* Tocotrienols: Vitamin E Beyond Tocopherols, an American River Nutrition and the National Health Research Institute meeting as part of the 103rd Annual American Oil Chemists' Society (AOCS) Meeting, Long Beach, California, April 29, 2012.

- (selected oral) Galli F. Effect of anatto tocotrienols supplementation on the development of mammary tumors in HER-2neu transgenic mice. Annual Meeting of the Society for Free Radical Research Europe and International. London, 6-9 Sept 2012.

 Pilolli F., Legnaioli S., Bianconi M., Piroddi M., Galli F., Goracci G.. Natural and synthetic forms of vitamin E as inhibitors of secretory phospholipase
- A2 (sPLA2) in cystic fibrosis epithelial cells. 56th Meeting of the Italian society of Biochemistry and Molecular Biology, Chieti, 25-26 September 2012.