



10th BenBedPhar scientific meeting
NRF2: physiology, pathology, pharmacology, and clinical development
6-8th June, 2025, Galway, Ireland

Organizers and contact persons

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Overview.

We are excited to announce the 9th BenBedPhar Meeting, themed “**NRF2: physiology, pathology, pharmacology, and clinical development**” This scientific gathering serves as a crucial platform for experts in the field to convene and discuss advancements in understanding the NRF2 pathway’s role in health and disease.

Topics will include: Mechanisms of regulation of NRF2 and its gene targets, Role of NRF2 in physiology and pathology. , Impact of NRF2 in degenerative diseases and ageing, Pharmacological activation and inhibition of NRF2- Basic to clinical to economical translation of NRF2 therapeutics, NRF2 Biomarkers of drug response With the ultimate goal of facilitating critical connections necessary for advancing the NRF2 field, BenBedPhar continues its mission to provide a dynamic space for researchers to collaborate, share findings, and foster connections across various life science disciplines. We remain steadfast in our commitment to promoting young researchers and encourage them to present their work.

Program

Satellite meeting to the Society for Free Radical Research International meeting

- **Friday morning, June 6:** Management Committee meeting (for members only)
- **Friday afternoon, June 6, and Saturday, June 7:** Satellite Symposium (open also to all delegates of the 22nd Biennial SFRRI Conference without additional registration fee)
- **Saturday, June 7:** Dinner (for BenBedPhar members only)
- **Sunday, June 8:** Excursion (for BenBedPhar members only)

Friday, 6th June -Management Committee meeting (for members only)	
14:00-16:30	<p>BenBedPhar Session 1 (HBB LLT)</p> <p>Speakers:</p> <p>Masayuki Yamamoto, Tohoku University, Sendai, Japan <i>Thirty years since NRF2 discovery</i></p> <p>Mihaela Matovina, Rudjer Boskovic Institute, Croatia <i>DPP3 as a Modulator of NRF2-KEAP1 Pathway: Insights From CRISPR-Cas9 Knockout and Gene Expression Analysis</i></p> <p>Elke Heiss, University of Vienna, Austria <i>NRF2 in dialogue with amp-activated kinase and cellular energy metabolism</i></p> <p>Hozumi Motohashi, Tohoku University Graduate School of Medicine, Japan <i>Metabolic and immunological features of NRF2-activated cancers</i></p>
16:30-17:00	Coffee, poster viewing, exhibition (HBB)
17:00-19:00	<p>BenBedPhar Session 2 (HBB LLT)</p> <p>Speakers:</p> <p>Albena Dinkova-Kostova, University of Dundee, UK <i>Pharmacological inhibition of KEAP1 by cysteine-targeting electrophiles and non-electrophilic protein-protein interaction inhibitors</i></p> <p>Iveta Bernatova, Slovak Academy of Science, Slovakia <i>Dimethyl fumarate reduces plasma triglycerides in hereditary hypertriglyceridemic rats exposed to social stress</i></p> <p>Andreas Daiber, University Mainz, Germany <i>Prevention of environmental stress and damage by activation of nuclear factor erythroid 2-related factor (NRF2) and associated pathways</i></p> <p>Katja M Kanninen, University of Eastern Finland, Finland <i>Temporal assessment of the NRF2 antioxidant response signaling induced by air pollution exposure</i></p>

Saturday, 7th June

09:00-10:30	<p>BenBedPhar Session 3 (HBB LLT)</p> <p><u>Speakers:</u> Brigitte Buttari, Istituto Superiore di Sanità, Italy <i>Sex Differences in NRF2-Mediated Stress Response and Autophagy in MASLD and MASH Models: Implications for Therapeutic Strategies</i> Ian Copple, University of Liverpool, UK <i>Advances and challenges translating the NRF2 science to the clinic</i> Anna-Lisa Levonen, University of Eastern Finland, Finland <i>Biomarkers of NRF2 activation in non-small cell lung carcinoma</i></p>
10:30-11:00	Coffee, poster viewing, exhibition (HBB)
10:30-11:00	<p>BenBedPhar Session 4 (HBB LLT)</p> <p><u>Speakers:</u> Ana S Falcão, Universidade NOVA de Lisboa, Portugal <i>Preclinical testing of dimethyl fumarate as a repurposing therapeutic approach for early age-related macular degeneration</i> Isabel Lastres-Becker, Universidad Autonoma de Madrid, Spain <i>Targeting Pyroptosis: Exploring the Role of Dimethyl Fumarate in TAU-Driven Neuroinflammation and Neurodegeneration</i> Gerasimos P. Sykiotis, University of Lausanne, Switzerland <i>Dissecting oxidation-dependent and oxidation-independent components of thyroid autoregulation.</i> Antonio Cuadrado, Autonomous University of Madrid, Spain. <i>Targeting transcription factor NRF2 for brain protective therapy in Alzheimer's disease</i></p>
13:00-14:30	Lunch, poster viewing, exhibition (HBB)
14:30-16:30	<p>BenBedPhar Session 5 (HBB LLT)</p> <p><u>Speakers:</u> Erkan Tuncay, Ankara University, Turkey <i>Mitochondrial Transplantation Activates Nrf2 to Restore Cardiac Function in Heart Failure</i> Harry van Goor, University of Groningen, Netherlands <i>Thiosulfate as modulator of oxidative stress through NRF2 signaling</i> Anna Grochot-Przeczek, Jagiellonian University, Poland <i>Endothelial deletion of miRNA-34a blocks aortic aneurysm development in NRF2 KO mice – focus on endothelial cell proliferation</i> Noemi Mencarelli, University of Chieti-Pescara, Italy <i>NRF2 modulation in macrophages as therapeutic strategy for tendon healing in tendinopathy</i></p>
16:30-17:00	Coffee, poster viewing, exhibition (HBB)
17:00-19:00	<p>BenBedPhar Session 6 (HBB LLT)</p> <p><u>Speakers:</u> Sharadha Dayalan Naidu, University of Dundee, United Kingdom <i>Regulation of microRNAs by Nrf2 activation in fibrosis</i> Ana I Rojo, Universidad Autónoma de Madrid, Spain <i>NRF2 as a Therapeutic Target in ALS: Insights into RNA Metabolism and Redox Homeostasis</i> Aleksandra Piechota-Polanczyk, Jagiellonian University, Poland <i>Transcriptionally Inactive Nrf2 Causes Colon Dysfunction in Female Mice: The Role of Estrogens</i> Angela M. Valverde, Sols-Morreale Biomedical Research Institute, Spain</p>

	<i>Uncovering interactions between the NRF2 pathway and the plasticity of liver progenitor cells in liver diseases</i>
19:00-19:10	Farewell

Posters

Jialin Feng

The anti-inflammatory cyclopentenone prostaglandin 15-deoxy- Δ 12,14-PGJ2 (15d-PGJ2) inhibits transcription factor Bach1

María Monsalve

Aripiprazole, but Not Olanzapine, Alters the Response to Oxidative Stress in Fao Cells by Reducing the Activation of Mitogen-Activated Protein Kinases (MAPKs) and Promoting Cell Survival

Santiago Cuevas

Effect of the DJ-1/Nrf2 Pathway on NLRP3 Inflammasome Activation and High Salt Diet-Induced Blood Pressure Elevation

Sónia Pinho

Exploring mediterranean diet-derived phytochemicals as nrf2 activators to mitigate obesity-related inflammation

Susana G Martins

Laminin- α 2 chain deficiency leads to multi-organ oxidative stress

Laureano de la Vega Novel insights into the BACH1-NRF2 axis; new target genes and inhibitors

Milica Markelic

Antiferroptotic effects of h2s donors against diabetic injury of β -cells in vivo and in vitro

Michel-Edwar Mickael

Does Nrf2 Modulate Chemokines Responsible for Regulation of Treg Infiltration of the Brain in Depression

Susana Cadenas

Therapeutic potential of the Nrf2/ARE pathway in doxorubicin-induced cardiotoxicity

Tuba Tüylü Küçükkinç

NRF2 Suppression by Itopride Enhances Cisplatin Sensitivity in MCF-7 Cells

Ángel J. García-Yagüe

A new inhibitor of the interaction β -TrCP1/NRF2 as the efficient treatment of anti-inflammatory responses

Ana Čipak Gašparović

Glucose and glicerol regulation of aquaporins and NRF2 expression in breast cancer cell lines

Alicja Sznarkowska

Isoform-specific NRF2 knockdown reveals presence of NRF2 isoform 2 in cells