

HNE CLUB

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MANAGEMENT COMMITTEE

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Henry Forman (USA)

Tilman Grune (Germany)

Giovanni Mann (UK)

Anne Negre-Salvayre (France)

Dennis R Petersen (USA)

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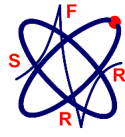
Valery Bochkow (Austria)

R Jörg Schaur (Austria), Special consultant and HNE Club founder

Giuseppe Poli (Italy), HNE Club founder



UNIVERSITY OF GENOA



INTERNATIONAL



EUROPE



Scientific local organization:

Cinzia Domenicotti
Roberta Ricciarelli
Barbara Marengo
Susanna Penco
Anna Lisa Furfaro
Stefania Vernazza
Mariapaola Nitti



Thursday, October 10th

19:00 Welcome Reception
Restaurant "I Tre Merli"

Old Harbour - Porto Antico - Calata Cattaneo 17, Genoa



SCIENTIFIC PROGRAMME



Friday, October 11th

Meeting Venue: Dept of Economics - Old Harbour - *Via Francesco Vivaldi, 5*



8:30 Registration and Welcome address

Session 1 – Lipid Oxidation: from the lab to medicine

*Chairpersons: Maria Fedorova (Technical University of Dresden, Germany),
Mariapaola Nitti (University of Genoa, Italy)*

09:00 - 09:30 Immune memory against toxic aldehydes

Koji Uchida (University of Tokyo, Japan)

09:30 - 10:00 Targeting reactive lipid carbonyls to improve plasma lipoprotein function

Sean Davies (Vanderbilt University, Nashville, USA)

10:00 - 10:30 Involvement of lipid peroxidation byproducts in neurological conditions: from clinical severity to pathological mechanisms

Alessandra Pecorelli (University of Ferrara, Italy)

10:30 - 11:00 A role for HNE in dermal skin aging

Anne Negre-Salvayre (CNRS, Toulouse, France)

11:00 - 11:30 *Coffe break*

11:30 - 11:50 Collagen modified by senescence-associated lipids – A microenvironment promoting disturbed inflammatory responses and senescence propagation

Sarah Jelleschitz (Medical University of Vienna, Austria)

11:50 - 12:10 Effect of cannabigerol and 3-O-ethyl ascorbic acid on kinase base signaling modified by 4-hydroxynonenal in UVB irradiated keratinocytes

Agnieszka Gęgotek (Medical University of Białystok, Poland)

Session 2 – HNE: from its discovery to the present

Chairman: Giovanni Mann (King's College, London, UK)



12:15 – 13:00 **Hermann Esterbauer Lecture**

4-Hydroxynonenal at the crossroad between lean and obesity

Morana Jaganjac (Ruđer Bošković Institute, Zagreb, Croatia)

13:00 – 14:00 *Lunch*

Session 3 – HNE and oxidized lipids in pathophysiology- part I

Chairpersons: Huveyda Basaga (Sabanci University, Istanbul, Turkey),

Tilman Grune (German Institute Human Nutrition, Potsdam, Germany)

14:00 - 14:20 Click chemistry approach to study redox metabolism

Palina Nepachalovich (Technical University, Dresden, Germany)

14:20 - 14:40 Bioactive lipid mediators in cell-cell communications

Gabriele Lombardi Bendoula (Technical University, Dresden, Germany)

14:40 - 15:00 4-Hydroxynonenal modulates blood–brain barrier permeability

Marina Cindric (University Hospital Centre Zagreb, Croatia)

15:00 - 15:20 New insights into differences in cholesterol homeostasis between ApoE3 and ApoE4 Astrocytes

Erica Staurenghi (University of Turin, Italy)

15:20 – 15.40 Effects of palmitate and oleate on autophagy

Christiane Ott (German Institute Human Nutrition, Potsdam, Germany)

15:40 - 16:00 Hydroxytyrosol of olive oil prevents oxysterol-induced neuroinflammation in Alzheimer's disease through SIRT1 induction

Gabriella Testa (University of Turin, Italy)

16:00 - 16:30 *Coffe break*

Chairpersons: Giuseppe Valacchi (University of Ferrara, Italy),

Cinzia Domenicotti (University of Genoa, Italy)

16:30 - 16:50 Can polyphenols counteract the deleterious effects of 4-HNE in an in vitro model of colorectal cancer initiation?

Emma Cogo (INRAe, Toulouse, France)

16:50 - 17:10 4-Hydroxy-nonenal as mediator of air pollutants-induced skin oxinflammation

Francesca Ferrara (University of Ferrara, Italy)

17:10 – 17:30 4-Hydroxynonenal-mediated modulation of potassium current in human pulmonary cells exposed to environmental ozone

Mascia Benedusi (University of Ferrara, Italy)

17:30 – 17:50 Contribution of HNE to the pathology of viral and bacterial diseases

Wojciech Łuczaj (Medical University of Białystok, Poland)



17:50 – 18:10 New in vitro reconstructed tissue models for studying drug kinetics

Silvia Letasiova (MatTek IVLSL, Bratislava, Slovakia)

18:10 – 18:30 Human cytochrome CYP4F11 alkylation by 4-HNE in malaria: the impact on lipid metabolism and immune response

Oleksii Skorokhod (University of Turin, Italy)

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20:00

Meeting Dinner

Restaurant “I Tre Merli”

Old Harbour - Porto Antico - Calata Cattaneo 17, Genoa



MEETING'S SPONSORS

University of Genoa

Society for Free Radical Research International

Society for Free Radical Research Europe

MatTech IVLSL

Saturday, October 12th



SESSION 4 – Lipid oxidation and ferroptosis

*Chairpersons: José Viña (University of Valencia, Spain),
Valery Bochkov (University of Graz, Austria)*

9:00 – 9:30 Ferroptosis: an oxidative strategy to fight neuroblastoma chemoresistance
Barbara Marengo (University of Genoa, Italy)

9:30 – 10:00 Oxysterol-induced ferroptosis in neuronal cells - as an etiology of ALS and Niemann-Pick disease
Noriko Noguchi (Doshisha University, Kyoto, Japan)

10:00 – 10:30 Aldehyde dehydrogenase 2 modulates ferroptosis in myocardial infarction
Huiyong Yin (University of Hong Kong, Hong Kong, China)

10:30– 11:00 Selenium metabolism in cancer: implication to poor prognosis and ferroptosis sensitivity
Yoshiro Saito (Tohoku University, Sendai, Japan)

11:00 – 11:30 *Coffe break*

SESSION 5 – HNE and oxidized lipids in pathophysiology- part II

*Chairpersons: Elżbieta Skrzydlewska (Medical University of Białystok, Poland),
Roberta Ricciarelli (University of Genoa, Italy)*

11:30 – 11:50 Detection and structural analysis of lipid-derived radicals and ox PCs
Kenichi Yamada (Kyushu University, Fukuoka, Japan)

11:50 – 12:10 Pharmacological interactions of pro-inflammatory effects induced by oxidized phospholipids and cytokines
Olga Oskolkova (University of Graz, Austria)

12:10 – 12:30 Biological activities of reactive carboxyl species-nucleophiles Michael adducts
Giancarlo Aldini (University of Milan, Italy)

12:30 – 12:50 Lipotoxicity pathways and cytoprotective treatments in metabolic obesity and hepatocellular steatosis
Anna Migni (University of Perugia, Italy)

12:50 – 13:10 Effects of electrophilic drugs and natural products on the spectrum of pro- and anti-inflammatory genes induced by cytokines and PAMPs
Valery Bochkov (University of Graz, Austria)

13:10 **Concluding remarks**