

Andros 2024, September 12-15

PROGRAM















Contents

Sponsors	3
Welcome Letter	7
Chair of the Scientific Committee	8
September 12, 2024	9
CANCER PART A	9
CANCER PART B	10
September 13, 2024	12
RADIATION DIAGNOSIS, THERAPIES AND NANOPARTICLES	12
REDOX REGULATION AND EXPOSOMES	13
WOUND HEALING	14
September 14, 2024	16
ARTIFICIAL INTELLIGENCE AND DISEASES	16
CELLULAR SENESCENCE - AGING	16
OXIDATIVE STRESS – DISEASES	18
SKIN PHOTOBIOLOGY	18
NATURAL PRODUCTS – ANTIOXIDANTS & DISEASES	19
Conclusions	19
September 15, 2024	20
Sunday	20
Excursion	20
Excursion	



Sponsors







































































Ζαννάκη Λασκαρώ Στεφάνου Λασκαρώ



30+ XPONIA EPEYNAS

ΑΝΤΙΟΞΕΙΔΩΤΙΚΟΥΣ ΟΡΟΥΣ

+ KAINIKEΣ
MEAETEΣ

7 + ΔΙΠΛΩΜΑΤΑ ΕΥΡΕΣΙΤΕΧΝΙΑΣ



We've been inspiring your projects and working with you to create products

made in France since 1989







Dear Participants, dear Colleagues,

on behalf of the Organizing Committee and the 11th International Conference on Oxidative Stress in Skin Biology and Medicine 2024 (Oxstress2024) which will be held in Andros, Greece, September 12-15, 2024.

Welcome to the fascinating world of oxidative stress and its impact on skin health and disease. This conference will explore these phenomena and their treatments on the historic and beautiful Cycladic island of Andros. We cordially invite you to enjoy both the scientific and social aspects of the conference.

Dedicated to the Memory of our Beloved Ifigenia Geitona – Polychronopoulou

Prof Dr. Michael Christou Rallis





Prof Dr. Jean Kanitakis



He is a professor of dermatology, actively working in both clinical and research fields. He has published more than 450 scientific articles and serves as the editor-in-chief or as a member of the editorial boards of numerous international journals, including the European Journal of Dermatology, where he has been editor-in-chief since 2011. He is, or has been, a member of some of the most recognized dermatological societies. Currently, he is focused on vascularized tissue transplantation and skin cancer research.

Members of the Scientific Committee

Members of the Organizing Committee

- Black Homer (USA)
- Burke Karin (USA)
- Fisher-Fodor Eva (Romania)
- Houée-Lévin Chantal (France)
- Gruber Florian (Austria)
- Kletsas Dimitris (Greece)
- Korac Aleksandra (Serbia)
- Korac Bato (Serbia)
- Nikolaou Anna (England)
- Sastre Juan (Spain)
- Scharffetter-Kochanek Karin (Germany)
- Sies Helmut (Germany)
- Stratigos Alexandros (Greece)
- Theophanides Theophilos (Greece)
- Valacchi Giuseppe(USA)
- Veves Aristides (USA)
- Werner Sabine (Switzerland)
- Wondrak Georg (USA)
- Zouboulis Christos (Germany)

- Anastassopoulou Jane
- Alexandratou Eleni
- Barda Christina
- Chanialaki Aikaterini
- Chondrogianni Niki
- Dania Fotini
- Karampasi Christina
- Korachai Kalliopi
- Korachai Dimitra
- Lyggitsou Georgia
- Mendonis Sotirios
- Papantonaki Anastasia Ioanna
- Papageorgiou Spiridon
- Petri Aspasia
- Petrou Athina
- Polychronopoulos Evangelos
- Rallis Michail
- Skaltsa Helen
- Statha Dimitra
- Svoliantopoulos Ioannis
- Tagka Anna
- Tarazi Evangelia
- Theophanides Theophilos
- Varvaresou Athanasia
- Vitsos Andreas
- Zouridaki Eftychia



September 12, 2024 Thursday

9:00-10:00	Registration Welcome - Breakfast
10:00-10:30	Opening ceremony Welcome from authorities
10:30-10:45	J. Anastasopoulou In memory of Ifigenia Geitona – Polychronopoulou Opening Conference Lecture
10:45-11:30	J. Kanitakis Skin Cancer in Organ Transplant Recipients

CANCER PART A

Chairpersons: A. Stratigos, H. Black	
11:45-12:10	M. Benedusi
	Melanoma and pollution
12:10-12:35	E. Fischer-Fodor
	The metal-mediated cell death as therapeutic target in malignant
	melanoma
12:35-13:00	M. Karabinis
	Exploring the Interplay between Oxidative Stress and Skin Cancer
13:00-13:25	C. Demonakos
	Oxidative stress conveys differential effects in lung versus breast cancer
	cells via the endoplasmic reticulum molecular chaperone GRP78
13:25-13:50	M. Krstic-Demonacos'
	Dynamic modelling for personalized cancer care



13:50-14:50	Lunch break
Chairperson: I.	Chairperson: J. Kanitakis, K. Thermos-Katerinopoulou
Special lectures	H. Black
14:50-15:25	Oxidative Stress and ROS Linking Diabetes and Cancer
15:25-15:45	G.Truscott
	Astaxanthin: Photochemistry, Radical Scavenging and Skin Whitening

CANCER PART B

Chairpersons: G. Vallacchi, C. Demonakos

Experimental Squamous Cell Carcinoma

16:10-16:35 B. Korac

Breast cancer and redox-metabolic reprogramming

The role of NRF2 in the cross-talk between the breast cancer and the skin

16:35-16:50	Coffee Break
16:50-17:15	E. Polychronopoulos
	European Cancer Registries. The Greek Component. Cancer Prevention Treatment Screening vs Palliative Care
17:15-17:40	T. Gimisis
	A novel DNA lesion arising from oxidation of thymidine

17:40-18:20	Round Table
	Skin Cancer: Prevention and Treatment
	Chair H. Black
	J. Kanitakis, C. Demonakos, B. Korac, G. Valacchi



18:20-19:30 Poster Session I

Chairpersons: Th. Theophanides, J. Anastassopoulou

18:20 – 18:25	Antioxidants in ancient pharmacopoeia	S. Geronikolou
18:25 – 18:30	Chloroaluminum phthalocyanine encapsulated in chitosan nanoparticles: synthesis, characterization and evaluation for photodynamic cancer therapy	I. Alagiannis
18:30 – 18:35	FTIR spectroscopy as a fast non-invasive technique for skin cancer differentiation	A. Markouizou
18:35 – 18:40	Continuous versus pulsed irradiaton using curcumin in photodynamic therapy treatment of skin cancer	E. Oikonomou
18:40 – 18:45	Investigating the role of the subparafascicular thalamic nucleus in the processing of soft touch sensation in mice	K. Ioneskou
18:45 – 18:50	Development and efficacy of a face cream based on caffeine derivatives. Anti-aging effects with a split-face, randomized controlled trial	S. Pitsava
18:50 – 18:55	Nicotine transdermal transduction in patients suffering from chronic fatigue due to post-covid19 syndrome	E. Griva
18:55 – 19:00	Formulation of nicotinamide for topical administration and evaluation of <i>in vitro</i> permeation	C. Xyta
19:00 – 19:05	A study on the photodynamic activity of metal phthalocyanines and their hybrid materials with doped carbon quantum dots	D. Tsakiroglou
19:05 – 19:10	Preliminary results of the development and the establishment of efficacy of a topical skin formulation containing plant stem cells culture	V. Gardiki
19:10 – 19:15	Preliminary study on a nevus-induction model in mice	A.I. Papantonaki
19:15 – 19:20	<i>In vivo</i> study of dermatological effects following acute or chronic exposure to a home-use UVC mercury lamp for disinfection	C. Karampasi
19:20 – 19:25	Investigating the wound healing potential of low-power 661 nm laser light in a hairless murine model with melanin	D. Statha
19:25 – 19:30	Enhanced skin wound healing through repurposing valsartan and sacubitril: a preliminary study	D. Statha



8:00-9:00 Breakfast

RADIATION DIAGNOSIS, THERAPIES AND NANOPARTICLES

Chairpersons: E. Alexandratou, A. Petri

9:00-9:25	R. Catalano
	A novel approach for in situ determination of ROS in cosmetics and evaluating the advantages of encapsulating photosensitive active ingredients
9:25-9:50	K. Rolfes
	UVB radiation-induced skin carcinogenesis and the impact of low dose UVA irradiation
9:50-10:15	I. Baldea
	Chemo-magnetic hyperthermia mediated by iron oxide nanoclusters linked with doxorubicin induces effective cell cycle arrest and apoptosis on breast cancer spheroids
10:15-10:40	A. Karagianni
	Carbon dots and their interaction with zinc phthalocyanine derivative as photosensitizers against skin cancer
10:40-11:05	T. Ren Jie
	Impact of therapeutic and synchrotron imaging X-ray exposure on collagen I and associated proteins
11:05-11:20	Coffee break
11:20-11:45	C. Houée-Lévin
	Flash vs. Conventional irradiation for cancer therapies
11:45-12:10	R. Gorodetsky

Regeneration and repair of systemic and local radiation damages by the injection of expended allogeneic placental stromal cells



REDOX REGULATION AND EXPOSOMES

Chairpersons: B. Korac, D. Kletsas

	,
12:10–12.35	G. Valacchi
	Skin health from the inside out: Blueberries protection against UV damage
12.35-13:00	E. Esposito
	Nanovesicles as Tools to Protect the Skin against Environmental Stressors
13:00-13:25	Fr. Ferrara
	Cutaneous inflammasome involvement in outdoor stressors exposure
13:25-13:50	T. Haarmann-Stemmann
	Combustion-derived air pollutants induce oxidative and inflammatory stress in the skin: Mechanistic insights
13:50-14:15	S. Lohan
	Two methods to show antipollution properties of cream formulations
14:15-15:15	Lunch break
Special lecture 15:15-16:00	Chairperson: A. Ntalianis G. Vasilopoulos Contemporary challenges in Bioethics
16:00-16:25	Chairperson: I. Baldea K.E. Burke Treatment of All Solid and Liquid Tumors: T-Cell Immunotherapy with Enhanced Specificity and Memory



WOUND HEALING

Chairpersons: A. Veves, E. Zouridaki

16:25-16:50 H. Weavers

Live-imaging of wound repair in flies reveals mechanisms underlying resilience to oxidative stress

16:50-17:15 A. Veves

Use of modified mRNA topical treatments and repurposed drugs for the management of diabetic foot ulceration.

17:15-17:40 M. Bei

Novel repurposed drugs: an innovative treatment for skin wound healing

17:40-18:05 A. Vitsos

Wound Healing Efficacy Of Gel-Based Dressings Containing PycnogenolTM And Ceratothoa Oestroides Extracts: An In Vivo Study

18:05-18:30 P. Hiebert

Regulation of ecm by NRF2 during skin aging and tissue repair

18:30-18:55 V. Pekovic-Vaughan

NRF2 signalling in the skin at the crossroads between circadian clock and extracellular matrix regulation

18:55-19:10 Coffee Break

Poster Session II

19:10-20:00 Chairpersons: P. Hiebert,

E. Polychronopoulos



19:10 – 19:15	Plants of Lamiaceae family: valuable source of natural antioxidants	H. E. Katerinopoulos
19:15 – 19:20	The phenolic content of Greek <i>Salvia</i> taxa and their antioxidant properties	M. Anagnostou
19:20 – 19:25	<i>In vitro</i> and <i>in vivo</i> study of plant extracts with ethnopharmacological interest: effect on a psoriasis model	Z. Kardasi
19:25 – 19:30	Bioactivities of seed extracts from a cretan <i>Ceratonia</i> siliqua cultivar: studies on phenolic compounds	M.Souma
19:30 – 19:35	Wound healing potential of herbal hydrogel formulations of <i>Cedrus brevifolia</i> extracts in mice	G. Lyggitsou
19:35 – 19:40	Cedrus brevifolia: in vivo investigation of wound healing properties of resin, bark and needle extracts	G. Lyggitsou
19:40 – 19:45	Therapeutic effects of <i>Dioscorea communis</i> paste on experimental gingivitis and dental caries	A.I. Papantonaki
19:45 – 19:50	Preventive effect of <i>Dioscorea communis</i> gel on experimental gingivitis and dental caries	A.I. Papantonaki
19:50 – 19:55	Green synthesis of nanocomposite hydrogels for application in photodynamic therapy (PDT)	F. Kalogeropoulou
19:50 – 19:55	Anti-inflammatory activity of Echinochrom A nanofibers in UV induced dermatitis	G. Svoliantopoulos



8:00-9:00 Breakfast

ARTIFICIAL INTELLIGENCE AND DISEASES

Chairpersons: A. Korac, A. Tagka

9:00–09.25 E. Mylonas

Antioxidant and anti-inflammatory role of statins on cardiovascular artery plaque formation and sclerosis: Mathematical model of statin prevention

and concentration risk factors

09.25-09.50 A. Kyritsi

Machine Learning Algorithms Toward Unveiling Patterns of Contact

Sensitization from Medicines and Excipients: Analyzing Data from a

Prospective Study

09.50-10:15 L. Baciou

When AI needs to meet reality

CELLULAR SENESCENCE - AGING

Chairpersons: M. Meinke, L. Baciou

10:15-10:40 I. Trougakos

A systems biology approach to study the proteostatic, mitostatic and

antioxidant responses machineries functional integration

10:40-11:05 A. Pecorelli

Cutaneous tight junctions responses to dietary oxysterols

11:05-11:30 D. Kletsas



11:30-11:45	Coffee break	
	Skin fibroblasts' responses to UVB: cell death, premature senescence or resistance?	
11:45-12:10	S. Letsiou	
	In vitro skin models. Current status and future perspectives	
12:10 -12:35	F. Gruber	
	Adaptations in lipids and metabolites in stress and aging	
12:35-13:00	H. Pratsinis	
	Antioxidant and dermoprotective activities of extracts from Cretan Ceratonia siliqua cultivars	
13:00-13:20	E. Cappuccio	
	Advanced Techniques for Detecting Senescent Cells in Dermatoporosis: A Non-Invasive Approach.	
13:20-13:40	A. Stiegler	
	Transglutaminase 2 deficient sebocytes display disturbed autophagy and lipid secretion.	
13:40-14:40	Lunch break	
Special lecture	Chairperson: I. Anastassopoulou	
14:40-15:00	I. Dadeshidze COST European Cooperation in Science and Technology and COST Actions: opportunities for biomedical networks and their impact. Chairperson: K. Mumcuoglu	
15:00-15:20	A. Ntalianis Bioethics in Artificial Intelligence	



OXIDATIVE STRESS – DISEASES

Chairpersons: H. Katerinopoulos, R. Sarkany

15:20-15:45 K. Thermos- Katerinopoulou

NADPH Oxidase Inhibitors as Therapeutics of the Early Events of

Diabetic Retinopathy

15:45-16:10 N. Chaikovskaia

Interval Hypoxic Hyperoxic training as a new approach in fighting

oxidative stress

SKIN PHOTOBIOLOGY

Chairpersons: I. Trougakos, C. Houee-Levin

16:10-16:35 R. Sarkany

An overview of some mechanisms of UV-induced damage in the skin. The

challenge of photoprotection.

16:35-17:00 M. Meinke

New insides about cutaneous sun damage - effects of age, skin type and

melanin distribution

17:00-17:25 D. Markovitsi

Radicals generated in DNA upon direct absorption of Low-Energy UV

radiation

17:25-17:40 Coffee break



NATURAL PRODUCTS – ANTIOXIDANTS & DISEASES

Chairpersons: H. Skaltsa, A. Catic-Dordevic

-	
17:40-18:05	K. Mumcuoglu
	Hirudotherapy in plastic surgery and the effect of leech extracts on oxidative stress
18:05-18:30	A. Catic-Dordevic
	Some aspects of in vivo effects of Mullein flower oil cream on human skin
18:30-18:55	H. Skaltsa
	The beneficial effects of pharmaceuticals Cannabis
18:55-19:15	M. Trapali
	Development of a LC-MS method for antioxidant molecules-polyphenols.
19:15-19:35	V.S. Lagouri
	Pomegranate's Gift to Skin: Unpacking the Anti-Aging and Anti- Inflammatory Power of Polyphenols
19:35-19:45	M.E Grafakou
	From Skin to Brain: Exploring Hypericum
19:45-19:55	G.E. Tsotsou and P.E. Paraskevopoulou
	A smartphone-based methodology for the
	extraction-free quantification of emulsion analytes
19:55- 20:05	C. Barda
	Therapeutic Potential of Essential Oils
20:05- 20:15	J. Kanitakis
	Conclusions

21:10... **Dinner**



Excursion

10.00 – 13:00	Community Service- Dermatological Cancer Screening for the Elderly
10.00 – 12:00	Goulandri's Museum of Modern Art
12:00 – 13:00	Guided visit to the town of Andros
13:00 – 15:00	Visit to Monastery of Panachrantos
	(10 th Century) - Lunch
15:00 – 17:00	Coffee in a Traditional Village
17:00-18:30	Walking Tour



CALAMINE

ACMED PRO TAZARENE

CROTAMITON HAIRGEN

KNESICALM OLIPROX

ACMED ECZAID BOSKIN

ACNAID BIONATAR

PROTOTYPE









