24th International Conference on Laboratory Medicine and Pathobiology
An Expert Forum on Innovation in Clinical and Laboratory Medical Sciences

ISE2020
July 3-8
Samos Island, Greece
24th International Conference on Laboratory Medicine and Pathobiology

_An Expert forum on Innovation in Clinical and Laboratory Medical Sciences_

July 3-8, 2020
Chios Island, Greece

ISE2020

Under the auspices of the:

International Society for Enzymology

IFCC
International Federation of Clinical Chemistry and Laboratory Medicine

National and Kapodistrian University of Athens
Acknowledgements:

- Special Account for Research Grants, National and Kapodistrian University of Athens.
Organizing Committee:
Diamandis E.P, Scorilas A

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Scorilas A., Avgeris M., Kontos C.K,
Adamopoulos P.G, Diamantopoulos M., Panoutsopoulos K.,
Papadimitriou M, Tsiakanikas P.

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Scorilas A. (Athens, Greece)
Yousef G.M. (Toronto, Canada)
Dear Colleagues

Following the successful International Society for Enzymology Annual Conference 2019 in the island of Chios, Greece, we are now announcing the next ISE Annual Conference, entitled "The 24th International Conference on Laboratory Medicine and Pathobiology: An Expert forum on Innovation in Clinical and Laboratory Medical Sciences". The conference will take place in the nice island of Samos, Greece, between the dates Friday July 3 - Tuesday July 8, 2020. Samos Island is a very beautiful and interesting place with exceptional beaches, medieval villages and long history (e.g. Samos is the Pythagora's Homeland - the first pure mathematician, born in 569 BC). The conference will be held in the nice, on the beach hotel, [Samos Bay Hotel by Gagou Beach](http://ise.biol.uoa.gr).

As usual, the guiding principles of this Annual Conference are: Top science related to all aspects of laboratory medicine, in a wonderful location, with a limited number of participants. The ISE2020 conference will cover a wide range of themes including, but not limited to: New biomarkers for cancer and other diseases, informatics, automation, genomics, proteomics, epigenomics, transcriptomics, other omics, enzymes in health and disease, theranostics, micro RNAs, long non-coding RNAs, quality assurance, patient safety and harmonization. Presentations on specific diseases are also welcome.

As last year, the meeting will be restricted to a maximum of 50 registrants, on a first-come-first served basis. All participants will be responsible for their expenses and will be invited to present on a topic of their choice, if they wish, as time permits. The meeting expenses will be covered from the registration fees. Spouses and other family members are also welcome.

Please take time to visit the old city of Samos, the Pythagorion and its surroundings as well as some of the island’s wonderful beaches and villages. You may also combine your trip with a stop in Athens. The meeting will incorporate a visit to the glorious ancient, city of Ephesus in Turkey.

We are looking forward to seeing you, your colleagues and your families in Samos for a wonderful scientific meeting and an overall enjoyable experience.

Information: [http://ise.biol.uoa.gr](http://ise.biol.uoa.gr)

With best wishes
Sincerely,
The Organizers:
Dr. Eleftherios P. Diamandis
Dr. Andreas Scorilas
CONTENTS

Scientific Programme

Invited Speakers’ Abstracts

Poster Abstracts
Day 1-Friday, 3rd July 2020

15:00 - 17:30 Registration

17:30 - 18:00 Opening Ceremonies
Eleftherios P. Diamandis & Andreas Scorilas

18:00 - 18:30 History of Samos Island (I. Prassas)

18:30 - 19:00 Greek Music - Game Quiz (E.P Diamandis)

19:00 - 19:30 Opening Mixer
Day 2- Saturday, 4th July 2020

**Session I**: Coordinators:
Andreas Scorilas & George Yousef

09:30 - 09:50. **Cancer Immunotherapy biomarkers**
Eleftherios P. Diamandis,

09:50 - 10:10. **Robotics meet artificial intelligence**
Ivan Brandslund

10:10 – 10:50 Questions & Discussion

10:50 -11:30 BREAK (e-poster viewing)

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**Session II**: Coordinators:
Ivan Brandslund & Maria Valeria Esposito

11:30 - 11:50. **The changing paradigm between ageing and diseases**
Francesco Salvatore

11:50 -12:10. **Donor-derived cell-free DNA in organ transplantation: a value proposition**
Michael Oellerich

12:10 - 13:00 Questions & Discussion

13:00 -16:00 Lunch
**Session III:** coordinators: Michael Oellerich & Naciye Leyla Acan

16:00-16:20. Making Sense of Missense: Developing an RNA sequencing approach for genomic variant interpretation  
Lianna Kyriakopoulou

16:20-16:40. Identification and molecular characterization of new transcripts of the human BCL2 family members.  
Christos Kontos

16:40-17:00. Functional role of cancer predisposition  
Maria Valeria Esposito

17:00-17:30. Questions & Discussion
Day 3-Sunday, 5th July 2020

Session IV: Coordinators:
Petr Jarolim & Spiros Garbis

09:30-09:50. Recent advances in cardiac troponins
Mario Plebani

09:50-10:10. Brain-derived neurotrophic factor in dementias
Margaret Fahnestock

10:10 - 10:50 Questions & Discussion

10:50 -11:30 BREAK (e-poster viewing)

Session V: Coordinators:
Mario Plebani & Margaritis Avgeris

11:30-11:50. High sensitivity and ultrasensitive cardiac troponin assays in the clinical laboratories
Petr Jarolim

11:50-12:10. Quantitative phosphoproteomics dereplicated pharmacology of leucettin analogy L41 on the correction of cognitive deficits in down syndrome mouse models
Spiros D. Garbis
12:10-12:30 Looking away from the PSA: The proteomics quest for precision biomarkers in prostate cancer.

Nina Fanaropoulou

12:30-13:00 Questions & Discussion

13:00 – Free afternoon
Day 5- Monday, 6th July 2020

Session VI: Coordinators: George Yousef & Ioannis Prassas

09:30 - 09:50. The Beetroot, the Camel and the Prius: A Modern Understanding of Diabesity
Steven Boyages

09:50 - 10:10. Postprandial Dyslipidemia and Intestinal Dysfunction in Obese and Insulin Resistant Adolescents
Khosrow Adeli

10:10 - 10:50. Questions & Discussion

10:50 -11:30 BREAK (e-poster viewing)

Session VII: Coordinators: Francesco Salvatore & Panagiotis Adamopoulos

11:30-11:50. History of cancer immunotherapy
Naciye Leyla Acan

Margaritis Avgeris

12:10 - 13:00. Questions & Discussion

13:00 -16:00 BREAK (e-poster viewing)
Session VIII: Coordinators:  
Khosrow Adeli & Steven Boyages

16:00-16:20. Translational Laboratory Medicine  
George Yousef

Panagiotis Adamopoulos

16:40-17:00. Developing novel KLK-based skin therapeutics  
Ioannis Prassas

17:00 - 17:30 Questions & Discussion
Session IX: Coordinators: Andreas Scorilas & Eleftherios Diamandis

09:30-10:00. Closing Remarks of the ISE2020 – the ISE2021 meeting

10:00-10:30. Questions & Discussion

10:30-13:00. ISE Board meeting
ABSTRACTS...