



# Final Conference and Working Groups Meeting



## Agenda

April **04-06, 2024 Chania**, Greece

#### **EuNet-INNOCHRON | CA18233**

European Network for Innovative Diagnosis and Treatment of Chronic Neutropenias









## Day 1 - April 4th

08:30 - 09:30 COST ACTION EuNet-INNOCHRON Overview & Achievements. Helen A. Papadaki (Action's Chair)
09:30 - 10:00 COST ASSOCIATION: Opportunities for funding (Inga Dadeshidze)
10:00 - 10:30 Coffee Break

10:30 - 13:00 EHA & EuNet-INNOCHRON SESSION (chair: Helen Papadaki, Carlo Dufour)

- · EHA Community (Antonio Almeida, Helen Parker, Volodymyr Lotushko)
- The interaction of EuNet-INNOCHRON with EHA SWG on Granulocytes and Constitutional BM Failure Syndromes (Carlo Dufour, SWG Chair)
- The EHA-EuNet-INNOCHRON Guidelines on Neutropenias (Francesca Fioredda)
- EHA SWG on Diagnosis in hematological diseases. Can we study neutropenias with flow cytometry (Francesco Buccisano, SWG Chair)
- Discussion

13:00 - 14:30 Lunch Break

14:30 - 15:15 Keynote Speaker

An unexpected voyage through the ribosome

A.J. Warren, Professor of Haematology, University of Cambridge

[chair: Carlo Dufour, Helen Papadaki]

15:15 - 17:15 Young EuNet-INNOCHRON

[Chairs: Maksim Klimiankou, Valentino Bezzerri]

#### Research in frame of Young EuNet-INNOCHRON Initiative

- · Exome sequencing of patients and families with genetically unclassified neutropenia (Maksim Klimiankou, Ivan Tesakov)
- · Screening of acquired AML/MDS associated genetic lesions in patients with severe neutropenia (Maksim Klimiankou)
- Novel therapeutic approaches for Shwachman-Diamond syndrome (Christian Boni)
- Discussion

## Day 1 - April 4th

#### Young EuNET-INNOCHRON Activities

- · Online Discussion Club (Valentino Bezzerri)
- How to never stop learning and sharing knowledge the case of ECI meetings. (Young-EuNET-INNOCHRON member)
- The closing remarks, future perspective, directions. (Maksim Klimiankou and Valentino Bezzerri.)
- Discussion

17:15 - 17:30 Coffee Break

17:30 - 18:30 NOVEL AREAS IN NEUTROPENIA RESEARCH (PART I)

(chair: Helen Papadaki, Carlo Dufour)

#### Artificial Intelligence in the diagnosis and prognosis of neutropenias

- Biomarker signature discovery, Prognostic, and Diagnostic Modelling in the era of Automated Machine Learning (Ioannis Tsamardinos)
- Artificial Intelligence for the differential diagnosis of neutropenias (Giacomo Cavalca)

**END OF DAY 1** 

Social event



#### **Local Organiser**

Prof Helen Papadaki

- Haemopoiesis Research Lab University of Crete
- Haemopoiesis Department University Hospital of Heraklion





## Day 2 - April 5th

#### 08:00 - 17:30 WORKING GROUPS MEETING

08:00 - 09:30 WG1 session: Congenital Neutropenias

(Chairs: Alan Warren, Karl Welte)

- Differential pathomechanisms of congenital versus cyclic neutropenia (Karl Welte)
- Mouse model of Congenital Neutropenia/AML (Jeremy Haaf)
- Probing the molecular basis of SDS (Vassilis Kargas)

09:30 - 11:00 WG2 session: Acquired Neutropenias

(Chairs: Petter Höglund, Juergen Bux, Francesca Fioredda)

- Autoantibody diagnostics in autoimmune neutropenia: a methods comparison (Paul Ratcliffe)
- · Immunomonitoring and studies of T cells in adult neutropenia patients (Petter Höglund)
- · Udpdate on long-lasting and late-onsent Neutropenia in children (Maria Carla Giarratana)
- · Persistent leukoneutropenia in survivors after cancer (Andrea Beccaria)
- WES in chronic idiopatic neutropenia of adults and children (Grigorios Tsaknakis, Alice Grossi)

11:00 - 11:30 Coffee Break

11:30 - 13:00 WG3 session: Mechanisms of Leukaemic Evolution

(Chairs: Ivo Touw, Cristina Mecucci)

- · Disease Models Guiding Treatment Strategies (Ivo Touw)
- · New Tetraploidy in Immunodeficiency Syndrome (Thijs van Bergen)
- New insights on Monosomy 7 (Anair Graciela Lema Ferandez)
- · Somatic RUNX1 Variants and Hypocellular Bone Marrow in MDS and AML (Antonio Pierini)

13:00 - 14:00 Lunch Break

14:00 - 15:30 WG4 session: Investigation of Targets for Novel Therapies

(Chairs: Julia Skokowa, Joanna Cichy)

- · Inhibitors of serine proteases in neutrophil differentiation and function (Joanna Cichy)
- · Low-density neutrophils and conventional neutrophils: the relation between neutrophil diversity and function in the mouse model of psoriasis-like dermatitis (Joanna Skrzeczynska-Moncznik)
- Tuning G-CSF activity by de novo protein design (Julia Skokowa)

15:30 - 16:00 Coffee Break





## Day 2 - April 5th

16:00 - 17:30 WG5 session: CNP Patient Registries and Biobanking

(Chairs: Cornelia Zeidler, Kostas Stamatopoulos)

- · An update on the Severe Chronic Neutropenia International Registry Genotype/phenotype correlation and long-term outcome of CN patients with different genetic backgrounds (Cornelia Zeidler)
- · Information management systems for biobanks (Evangelia Minga)
- · Data protection in biobanking (Vasilios Chouvardas)
- ISO 20387:2018 The key to quality biobanking (Maria Karypidou)

#### 17:30 - 18:15 Chair's invited honorary speakers

(chair Helen Papadaki)

- Relative Energy Deficiency in Sports and Neutropenias
   (Christos S. Mantzoros, MD, DSc, Professor of Medicine, Harvard Medical School, Chief of
   Nutrition, Beth Israel Deaconess Medical Center, Endocrinology, Diabetes and Metabolism at the
   Boston VA Healthcare System)
- Frontiers for the study of severe chronic neutropenia (David C.Dale, MD, Professor of Medicine, Department of Medicine, University of Washington, Seattle, Washington, USA)

#### **END OF DAY 2**

#### Social event



#### **VENUE:**

Center of Mediterranean Architecture Katexaki Square, 73132 Chania, Crete, Greece

## Day 3 - April 6th

08:30 - 10:30 NOVEL AREAS IN NEUTROPENIA RESEARCH (PART II)

[chairs: Karl Welte, Hannah Tamary]

#### The role of neutrophils in systemic Autoinnflammatory and Autoimmune Diseases

- Autoinnflammatory Diseases (Panagiotis Skendros)
- Autoimmune Diseases (George Bertsias)

#### Drug-induced neutropenias - old and new drugs but novel mechanisms

- New comers of drug-induced neutropenia (Jan Palmblad)
- · Cellular and Molecular Drivers of Immunomodulatory Drug-Induced Neutropenia (Christina Simoglou Karali)

10:30 - 11:00 Coffee Break

11:00 - 12:00 ORAL PRESENTATION OF SELECTED ABSTRACTS

(chairs: Michail Spanoudakis, Maksim Klimiankou)

12:00 - 13:30 POSTERS PRESENTATION

(chairs: Valentino Bezzerri, Irene Mavroudi)

13:30 - 14:15 Lunch Break

#### 14:15 - 15:15 INDUSTRY SESSION

(chair: Julia Skokowa, Katarina Zmajkovicova)

- · X4 Pharmaceutical (Katarina Zmajkovicova)
- · 4omics: Revolutionizing the Landscape of Biological Data: 4omics Solutions (Maria Tsagiopoulou, Nikolaos Pechlivanis)
- Just Add Data Bio: an Automated Machine Learning platform for Biomarker Discovery, Prognosis, and Diagnosis (Ioannis Tsamardinos)

#### 15:15 - 16:00 PATIENTS ORGANIZATION SESSION

(chair: Cornelia Zeidler, Valentino Bezzerri )

- · Italian SDS patients Organization, AISS (Igor Fanton)
- · Shwachman-Diamond Syndrome Alliance (Eszter Hars)

16:00 - 16:30 Coffee Break

## Day 3 - April 6th

16:30 - 19:00

How I investigate neutropenias based on the EHA & EUNET-INNOCHRON Guidelines in real life

(Chair: David C.Dale, Francesca Fioredda, Jan Palmblad, Sophia Polychronopoulou, Michail Spanoudakis)

- · Case 1: Elena Solomou
- · Case 2. Elena Turini
- · Case 3: Alma Cili
- · Case 4: Jelena Roganovic
- · Case 5: Orna Steinberg

19:00 - 19:30 FINAL REMARKS

**END OF MEETING** 

Tutors/Speakers/Chairs	Affiliation	City	Country
Antonio Almeida	The European Hematology Association (EHA)/President, Hospital da Luz	Lisboa	Porgugal
Andrea Beccaria	Hematology Unit-IRCCS Istituto Giannina Gaslini	Genova	Italy
Georgios Bertsias	Rheumatology, Clinical Immunology and Allergy, University Hospital of Heraklion, Greece, University Hospital of Heraklion	Heraklion	Greece
Valentino Bezzerri	Link Campus University, Rome and Cystic Fibrosis Center of Verona, Azienda Ospedaliera Universitaria Integrata di Verona	Rome	Italy
Christian Boni	Cystic Fibrosis Center of Verona, Azienda Ospedaliera Universitaria Integrata	Verona	Italy
Francesco Buccisano	Department of Biomedicine and Prevention, Tor Vergata University of Rome	Rome	Italy
Juergen Bux	Ruhr University Bochum	Bochum	Germany
Giacomo Cavalca	Giannina Gaslini Hospital & Italian Institute of Technology	Genova	Italy
Vasilios Chouvardas	Institute of Applied Biosciences, The Centre for Research and Technology, Hellas	Thessaloniki	Greece
Joanna Cichy	Department of Immunology, Faculty of Biochemistry, Biophysics and Biotechnology, Jagiellonian University	Krakow	Poland
Alma Cili	Clinic of Hematology, University of Medicine, University Hospital center "Mother Teresa"	Tirane	Albania
Inga Dadeshidze	Science Officer at COST Association, European Cooperation in Science and Technology	Brussels	Belgium
David C Dale	Department of Medicine, University of Washington	Seattle, WA	USA
Carlo Dufour	Hematology Unit, IRCCS Istituto Giannina Gaslini, Children Research Hospital	Genova	Italy
Igor Fanton	AISS – Associazione Italiana Sindrome di Shwachman	Verona	Italy

Tutors/Speakers/Chairs	Affiliation	City	Country
Francesca Fioredda	Hematology Unit, IRCCS Istituto Giannina Gaslini, Children Research Hospital	Genova	Italy
Maria Carla Giarratana	Hematology Unit, IRCCS Istituto Giannina Gaslini, Children Research Hospital	Genova	Italy
Alice Grossi	Hematology Unit, IRCCS Istituto Giannina Gaslini, Children Research Hospital	Genova	Italy
Jeremy Haaf	Division of Translational Oncology, Department of Hematology, Oncology, Clinical Immunology and Rheumatology, University Hospital Tübingen	Tübingen	Germany
Eszter Hars	Shwachman-Diamond Syndrome Alliance (Founder and CEO)	Massachusetts	the USA
Petter Höglund	Center for Hematology and Regenerative Medicine (HERM), Departments of Hematology and Clinical Immunology and Transfusion Medicine , Karolinska University Hospital Huddinge	Stockholm	Sweden
Vassilis Kargas	Cambridge Institute for Medical Research, University of Cambridge,	Cambridge	UK
Maria Karypidou	Institute of Applied Biosciences, The Centre for Research and Technology, Hellas	Thessalonikki	Greece
Maksim Klimiankou	Department of Oncology, Hematology, Immunology, and Rheumatology, University Hospital Tuebingen	Tübingen	Germany
Anair Graciel Lema Fernandez	Department of Clinical and Experimental Medicine, Università degli Studi di Perugia	Perugia	Italy
Volodymyr Lotushko	European Board for Accreditation in Hematology (EBAH) and Community Development Manager, the EHA	The Hague	the Netherlands
Christos Mantzoros	Beth Israel Deaconess Medical Center and Boston VA Healthcare System, Harvard Medical School, Boston	Boston,MA	the USA
Irene Mavroudi	Haemopoiesis Research Lab University of Crete / Haemopoiesis Department University Hospital of Heraklion	Heraklion	Greece
Cristina Mecucci	Hematology and Bone Marrow Transplantation Unit, Department of Medicine, Molecular Medicine Laboratory, University of Perugia	Perugia	Italy
Evangelia Minga	Institute of Applied Biosciences, The Centre for Research and Technology, Hellas	Thessalonikki	Greece
Jan Palmblad	Department of Medicine Karolinska Institutet, The Hematology Center, Karolinska University Hospital Huddinge	Stockholm	Sweden
Helen Papadaki	Haemopoiesis Research Lab University of Crete / Haemopoiesis Department University Hospital of Heraklion	Heraklion	Greece
Helen Parker	Community Lead, the European Hematology Association (EHA) Cancer Genomics, School for Cancer Sciences, Faculty of Medicine, University of Southampton	Southampton	UK
Nikolaos Pechlivanis	4omics (Co-founder/ CTO)	Thessaloniki	Greece
Antonio Pierini	Department of Medicine, University of Perugia	Perugia	Italy
Sophia Polychronopoulou	Department of Pediatric Hematology/Oncology, Aghia Sophia Children's Hospital	Athens	Greece
Paul Ratcliffe	Center for Hematology and Regenerative Medicine (HERM), Department of Medicine Huddinge, Karolinska Institutet	Stockholm	Sweden
Jelena Roganovic	Division of Hematology, Oncology and Clinical Genetics, Department of Pediatrics, University Hospital Center Rijeka	Rijeka	Croatia

Tutors/Speakers/Chairs	Affiliation	City	Country
Christina Simoglou Karali	MRC Weatherall Institute of Molecular Medicine, Radcliffe Department of Medicine and National Institute of Health Research (NIHR) Oxford Biomedical Research Centre, University of Oxford	Oxford	UK
Panagiotis Skendros	Department of Internal Medicine, University Hospital of Alexandroupolis/ Laboratory of Molecular Hematology, Department of Medicine, Democritus University of Thrace,	Alexandroupolis	Greece
Julia Skokowa	Department of Oncology, Hematology, Immunology, and Rheumatology, University Hospital Tuebingen	Tübingen	Germany
Joanna Skrzeczynska- Moncznik	Department of Immunology, Jagiellonian University	Krakow	Poland
Elena Solomou	Internal Medicine-Hematology, University of Patras Medical School	Rion	Greece
Michail Spanoudakis	Department of Hematology, Warrington and Halton Teaching Hospitals NHS foundation Trust,	Warrington	UK
Kostas Stamatopoulos	Centre for Research and Technology Hellas (CERTH)	Thessaloniki	Greece
Orna Steinberg Shemer	Department of Pediatric Hematology-Oncology, Schneider Children's Medical Center of Israel	Petah Tiqva	Israel
Hannah Tamary	The Rina Zaizov Hematology/Oncology Division, Schneider Children's Medical Center of Israel & Sackler School of Medicine, Tel Aviv University	Petah Tiqva	Israel
Ivan Tesakov	Department of Oncology, Hematology, Immunology, and Rheumatology, University Hospital Tuebingen	Tübingen	Germany
Ivo Touw	Department of Hematology, Erasmus University Medical Center	Rotterdam	the Netherlands
Maria Tsagiopoulou	40mics (Co-founder / CEO)	Thessaloniki	Greece
Grigorios Tsaknakis	Haemopoiesis Research Lab, University of Crete	Heraklion	Greece
loannis Tsamardinos	Computer Science Department of University of Crete / JADBio - Gnosis DA S.A(CEO & Co-Founder)	Heraklion	Greece
Elena Turini	Pediatric Oncology and Hematology Unit,University Hospital of Parma	Parma	Italy
Thijs van Bergen	Erasmus University Medical Center	Rotterdam	the Netherlands
Alan Warren	Cambridge Institute for Medical Research ; Department of Haematology, University of Cambridge; Wellcome Trust-Medical Research Council Stem Cell Institute, University of Cambridge,	Cambridge	UK
Karl Welte	Department of Pediatric Hematology, Oncology and Bone Marrow Transplantation, University Children's Hospital Tübingen	Tübingen	Germany
Cornelia Zeidler	Hannover Medical School; Director, SCNIR-European branch	Hannover	Germany
Katarina Zmajkovicova	X4 Pharmaceuticals (Austria) GmbH (Group Leader)	Vienna	Austria



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