



A4L_ACTIONS

Alliance for Life Sciences: From Strategies to Actions in Central and Eastern Europe

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D2.2 Mini-Conference Report

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1 SUMMARY

Work Package 2 of the A4L_ACTIONS project is dedicated to reinforcing collaboration in life sciences research and innovation, with incentives and opportunities for excellent researchers to initiate and intensify their collaboration with a view to creating project consortia with the Central and Eastern European participant core and intellectual origin. This objective is achieved through a cycle of **A4L Mini-Conferences**, which present the opportunity for excellent researchers to convene, discuss their research results and opportunities for collaboration, primarily the **A4L Seed Fund** call opened for all researchers from the A4L_Actions Partnership wishing to collaborate within the areas of research interest delineated by each of the Mini-Conference themes.

The present report will summarize the three Mini-Conferences of A4L_Actions:

- The first Mini-Conference on Cancer and Metabolic Disorders organized by the Biomedical Research Center of the Slovak Academy of Sciences in Smolenice on 3rd-5th October 2022.
- The second Mini-Conference on Health and the Environment organized by the Medical University of Lodz in Lodz, Poland on 24th-26th April 2023.
- The third Mini-Conference on Personalized Medicine organized by the University of Medicine and Pharmacy "*Carol Davila*" of Bucharest, Romania on 26th – 27th October 2023.

2 A4L_ACTIONS MINI-CONFERENCE FORMAT REQUIREMENTS

The Mini-Conferences of A4L_ACTIONS were planned as three small scientific symposia to take place in Slovakia (M18), Poland (M24) and Romania (M30), for up to 80 participants in total, including the minimum of 10 industry representatives.

Mini-Conference Venue	Participants	Invited Speakers	Industry Representatives
Smolenice	44	26	6
Lodz	75	26	8
Bucharest	51	26	2

Table 1: Attendance statistics

The intention behind the Mini-Conferences was to foster new connections and forge collaborations, and, in consequence, to contribute to the development of international project consortium cores driven by CEE partners. To incentivize the collaboration, the Alliance4Life’s seed fund call for small projects was opened for core groups based in A4L partner organisation, who wished to collaborate within the specific thematic scope of each Mini-Conference.

An integral part of each Mini-Conference was the Matchmaking session, which included the presentation of:

- available funding opportunities in international calls
- and of the internal Seed Fund call to support collaboration of A4L researchers from at least 3 partner organisations (the fund supports travel and consumables expenditures, with the exclusion of personnel costs).

Mini-Conferences bring together “the best of life science from CEE”, and as such, provide a unique thematic platform for the CEE-based industry representatives wishing to connect with the researchers. Therefore, a special session dedicated to the introduction of research-intensive companies (pharma, MedTech, and other) and start-ups has been designed as an intrinsic part of the Mini-Conference format.

FORMAT:

The Mini-Conference format covers the Opening session on Day 1, followed by the one-day lecture session on Day 2 and 3, accompanied by the match-making session tackling the current programming priorities of Horizon Europe and relevant domestic programmes with international dimension.

Each session included five lectures followed by Q&A and lasted 1.5 h.

The meeting format was on site only, to encourage the collaboration of Mini-Conference participants based on establishing personal contacts.

PARTICIPANTS:

Two research speakers per A4L partner, with 15 mins presentations on a topic corresponding with the Mini-Conference thematic scope. Talks should present main research achievements and potential development to applications (to attract the interest of industry representatives).

One industry speaker per A4L partner, with 8-10 min presentations followed by a round-table discussion.

The representatives of companies actively participated in the event with presentations and contributions to the discussion. Therefore, they were considered to be external speakers. Their travel expenses are covered from the A4L budget.

One representative of each partner, FG or Board member who can benefit from the meeting. Local organizers and members of the organizing committee.

COSTS:

Covered by the A4L partners: travel expenses of participants who are employees of the A4L partner institutions. Covered by the MUL: accommodation, food, and travel of “external” speakers who are not employees of the A4L partner institutions (e.g. industry speakers or external research speakers).

3 MINI-CONFERENCE ON CANCER AND METABOLIC DISORDERS ORGANIZED BY THE BIOMEDICAL RESEARCH CENTER OF THE SLOVAK ACADEMY OF SCIENCES IN SMOLENICE, SLOVAKIA

3.1 THEMATIC SCOPE

The speaker faculty and participants consisted of research and development leaders in the areas of cancer and metabolic disorders. The topics of the event included investigations of genetic, epigenetic and physiological mechanisms of diseases through preclinical, clinical and artificial intelligence approaches, as well as translation of newly acquired knowledge into advances in diagnostics and therapy.

The programme of this Mini-Conference reflected the current programming priorities of Horizon Europe within Cancer Mission and covered both scientific lectures, matchmaking workshop and discussion about future collaborations. **As a result, 4 projects of 14 successful Partner Research Groups received the Seed Funds.**

The scientific lectures in the Cancer and Metabolic Disorders Mini-Conference were divided into the following 5 thematic sessions:

Session 1: Metabolism in health and diseases

Session 2: Molecular and functional studies of metabolic disorders

Session 3: Cancer metabolism and signalling

Session 4: Cancer genomics in diagnostics and therapy

Session 5: Cancer response to xenobiotics and natural products

3.2 MINI-CONFERENCE SATISFACTION SURVEY

After the event, the Mini-Conference participants were asked to fill in the satisfaction survey.

Out of 28 survey visitors, 18 completed the task, which amounts to 64.3% of overall completion rate.

The question whether the Mini-Conference contents met the expectations of the participants was answered positively by 94.4% of respondents, with one negative answer (5.56%).

The overall rating of the research program of the Mini-Conference was evaluated as 4 out of 5 by 50% and as 5 out of 5 by the remaining 50% of respondents.

The matchmaking part was evaluated as 5 out of 5 by 27.8% (5 answers), 4 out of 5 by 38.9% (7 answers), 3 out of 5 by 22.2% (4 answers), 2 out of 5 by 5.6% (1) and 1 out of 5 by 5.6% (1 answer).

The organization of the conference (including venue and catering assessment) obtained 5 out of 5 mark by 94.4% (17 responses) and 4 out of 5 by 5.6% (1 response).

The question whether respondents would recommend this event to their colleagues met with 100% of positive answers.

The answers to the question regarding what was the most interesting or most valuable information/learning acquired during the Mini-conference concerned the excellent work presented by several researchers, variety of perspectives (West vs East, differences between oncological diseases and therapeutic approaches, industry vs academia), and opportunity to collaborate via the Seed Fund.

The question about areas for improvement, found a number of insightful comments, concerning:

1. Matchmaking format (“more personalized, round table, discussions rather than lectures”, “start with matchmaking part so that there are more time to establish connections”
2. “Participation of young researchers, maybe also a poster session”
3. Industry representatives: “(...) giving more time to the industry speakers and maybe having a few more of them and spreading them throughout the program”; “I would recommend to somehow mix the researcher part and industrial presentation part – to have more possibilities to discuss the cooperation possibilities”
4. Time (+1 day) and more informal time for match making and broader scope of topics (“more extensive/not so specific scientific topics”) vs focusing on only one specific topic and invite only researchers working on this one topic (e.g. cancer only, without other fields)

3.3 ANNEX 1: PROGRAM OF THE MINI-CONFERENCE



**A4L_ACTIONS Thematic Mini-conference
with Matchmaking Event**

CANCER AND METABOLIC DISORDERS

**Congress Centre of the Slovak Academy of Sciences,
Smolenice castle**

<https://kcsmolence.sav.sk/en/>

October 3-5, 2022

The Alliance4Life thematic mini-conference is aimed at sharing the research ideas with intellectual origin in the Central and Eastern European countries and at creating the opportunity for matchmaking with pharma and med-tech industry. The speaker faculty and participants consist of research and development leaders in the areas of cancer and metabolic disorders. The topics of the event will include investigations of genetic, epigenetic and physiological mechanisms of diseases through preclinical and clinical approaches, as well as translation of newly acquired knowledge into advances in diagnostics and therapy. The programme of this mini-conference reflects the current programming priorities of Horizon Europe within Cancer Mission and covers both scientific lectures, information on project opportunities, matchmaking and discussion about future collaborations.

The main event purpose is to explore the opportunities for collaboration of research and industry (initial small projects can be supported by the Alliance4Life's Seed fund).

PROGRAM:

OCTOBER 3 (Monday):

Arrival to Smolenice castle

17:00 Opening

17:10 Keynote lecture:

Prof. Pawel Swietach, University of Oxford, Department of Physiology, Anatomy and Genetics:
Sourness, Survival, and Selection



Prof. Pawel Swietach is a prominent world-renowned personality in physiology of acid-base control. His research is driven by an interest in how biological processes are affected by chemical acidity. All tissues are exquisitely sensitive to changes in acidity (often expressed on a pH scale). However, two main pillars of his research relate to the heart and to cancer. Acidity has a powerful effect on cardiac biology and is particularly important in cardiac diseases. In tumours, acidity is a chemical signature that influences disease progression. By discovering the mechanisms of these pH-responses, he and his group hope to deliver new insights that may lead to better diagnosis, management and treatment of cardiovascular diseases and cancer. Most of his work is supported by the European Research Council (ERC) and the British Heart Foundation (BHF).

<https://www.dpag.ox.ac.uk/team/pawel-swietach>

19:00 – 22:00 Reception

OCTOBER 4 (Tuesday):**08:40 – 10:00****Session 1: Metabolism in health and diseases***Chair: Daniela Gašperíková, PhD, DSc.*

08:40 – 09:00	Edgars Liepins, PhD. (LV): Fatty acid metabolism in health and diseases
09:00 – 09:20	Marcela Hortová Kohoutková, PhD. (CZ): Immunometabolism in control of inflammation and disease
09:20 – 09:40	Bruno Velescu, MD., PhD. (RO): Metal complexes with antidiabetic and anti-inflammatory effects
09:40 – 10:00	Dr. Teja Klancic (SI): Early life antibiotics and prebiotics: impact on gut microbiota, metabolism and obesity risk

10:00 – 11:00**Session 2: Molecular and functional studies of metabolic disorders***Chair: Edgars Liepins, PhD.*

10:00 – 10:20	Miroslav Baláž, PhD. (SK): Identification of new therapeutic targets with potential to increase brown adipose tissue metabolic activity
10:20 – 10:40	Izabela Burzynska-Pedziwiatr, PhD. (PL): Lipidomic approach to GDM molecular diagnosis
10:40 – 11:00	Daniela Gašperíková, PhD., DSc. (SK): Functional studies in monogenic diabetes and their clinical consequences

11:00 – 11:30**Coffee break****11:30 – 12:30****Session 3: Cancer metabolism and signalling***Chair: prof. Ondřej Slabý, PhD.*

11:30 – 11:50	Eliška Švastová, PhD. (SK): Mechanisms of cancer cells' adaptation to stresses in tumour microenvironment
11:50 – 12:10	Jan Škoda, PhD.(CZ): Targeting mitochondria in therapy-resistant neuroblastoma
12:10 – 12:30	Filip Sedlic, MD., PhD. (HR): The role of mitochondria in cancer and cardiovascular diseases

12:30 – 13:45**Lunch break****13:45 – 14:00****Group photo****14:00 – 15:40****Session 4: Cancer genomics in diagnostics and therapy***Chair: prof. Silvia Pastoreková, DSc.*

14:00 – 14:20	Prof. Ondřej Slabý, PhD. (Brno, CZ): Application of modern genomics in paediatric cancer research and therapeutic planning
14:20 – 14:40	Michal Šmída, PhD. (Brno, CZ): The use of functional genomics for advancing monoclonal antibody therapy of chronic lymphocytic leukaemia
14:40 – 15:00	Péter István Turai, MD. (HU): Novel tissue microRNA panels for the differentiation of adrenocortical tumours established by artificial intelligence
15:00 – 15:20	Diana Loreta Păun, MD., PhD. (RO): Up to date on genetic aspects in adrenal neoplasia
15:20 – 15:40	Asst. prof. Monika Ulamec, MD., PhD. (HR): Cell-free DNA methylation in cancer

15:40 – 16:10**Coffee break**

16:10 – 17:30**Session 5: Cancer response to xenobiotics and natural products***Chair: Diana Loreta Păun, MD., PhD.*

16:10 – 16:30	Pauliine Konsa (EE): The role of AHR in pancreatic ductal adenocarcinoma cells
16:30 – 16:50	Dr. Pavel Arsenyan (Riga, LV): Selenium in a fight with cancer: a blessing and a curse
16:50 – 17:10	Katarzyna Sobierajska, PhD. (PL): Evening primrose extract as an example of a natural bioproduct in anti-cancer therapy
17:10 – 17:30	Małgorzata Chmielewska-Kassassir, MSc. (PL): Molecular model of TYMS expression regulation: the role of Evening primrose extract in malignant pleural mesothelioma treatment

17:30 – 17:50**Zsolt Kohus, PhD. and Dóra Barczikai (HU): Information on A4L_Actions Seed fund for small collaborative academia-industry projects****19:00 – 22:00 Dinner and match-making discussions****OCTOBER 5 (Wednesday):****09:00 – 10:30****Session 6: Presentation of companies***Chair: Zsolt Kohus, PhD.*

09:00 – 09:15	Pavol Čekan, PhD., CEO, Evan Paul, PhD., CSO, MultiplexDX, (SK), https://www.multiplexdx.com/
09:15 – 09:30	Róbert Dóczy, PhD., Lead Scientist, Oncompass Medicine, (HU), www.oncompassmedicine.com : Computer-assisted treatment decisions in precision oncology
09:30 – 09:45	Dr. Benjamin Pelcman, COO, Atrogi AB, (LV), https://atrogi.com
09:45 – 10:00	Radan Spaventi, Partner, Triadelta Partners Ltd., (HR), http://www.triadeltapartners.com/en/expertiseservices/
10:00 – 10:15	Łukasz Markiewicz, PhD. (PL): BRaIn in your cancer research
10:15 – 10:30	Stefan Busnatu, MD., PhD., Coordinator of the Center for Innovation and e-Health (RO), https://cieh.umfcd.ro/

10:30 – 11:00**Coffee break**

11:00 – 11:15	Dr. Klára Horváth, NCP, Cluster I, Health, (HU): Future calls in cancer research, artificial intelligence in research and metabolic diseases
11:15 – 12:00	Matchmaking workshop
12:00 – 12:05	Formal closing of the event

12:10 – 13:10**Lunch break****Departure**

Biomedical Research Center of the Slovak Academy of Sciences
Local organizer



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3.4 ANNEX 2: PRESS RELEASE



NEWS > A4L_ACTIONS OFFERS SPACE FOR CONNECTING SCIENCE AND INDUSTRY

A4L_ACTIONS offers space for connecting science and industry

A4L_ACTIONS Thematic Mini-conference with Matchmaking Event organised recently in Slovakia and hosted by the Biomedical Research Center of the Slovak Academy of Sciences (BMC SAS) was aimed at sharing research ideas with intellectual origin in the Central and Eastern European countries and at creating opportunities for matchmaking with pharma and med-tech industry. The event was held between the 3-5th October 2022 in the Congress Center of the Slovak Academy of Sciences on the Smolenice Castle.

The speakers and participants comprised research and development leaders in cancer and metabolic disorders. The event's topics included investigations of genetic, epigenetic and physiological mechanisms of diseases through preclinical and clinical approaches and translation of newly acquired knowledge into advances in diagnostics and therapy. The program of this mini-conference reflected the current programming priorities of Horizon Europe within Cancer Mission. It covered scientific lectures, project opportunities information, matchmaking, and discussion about future collaborations.

The main event's purpose was to explore the opportunities for collaboration of research and industry that could lead to the creation of initial small projects, which the Alliance4Life's Seed fund will support.

The meeting fulfilled its two primary goals. Firstly, it brought together researchers of the A4L_ACTIONS partner institutions and enabled them to get insight into their scientific topics and to stimulate the exchange of ideas and interests for collaboration. **Secondly**, it facilitated the matchmaking of scientists with industry representatives from biomedical, artificial intelligence and medicinal chemistry areas. The event opened opportunities for closer mutual communication and future joint activities that could lead to innovations. **The meeting offered a high level of expertise, starting with an excellent keynote lecture by prof. Pawel Swietach from the University of Oxford continued with talks from A4L_ACTIONS partner researchers** in an open and friendly atmosphere.

"I am happy that we could host such excellent and honest participants. Through this meeting, we broadened the scope of the A4L_ACTIONS project from sharing best practices in research governance to sharing knowledge and skills in research excellence," said prof. Silvia Pastoreková, Director General of BMC SAS, Local Organizer of the Mini-conference and Member of the A4L_ACTIONS Strategy Board.

FIG.1 Mini-Conference on Cancer and Metabolic Disorders– Information disseminated on the project website

A4L_ACTIONS offers space for connecting science and industry

A4L_ACTIONS Thematic Mini-conference with Matchmaking Event organised recently in Slovakia and hosted by the Biomedical Research Center of the Slovak Academy of Sciences (BMC SAS) was aimed at sharing research ideas with intellectual origin in the Central and Eastern European countries and at creating opportunities for matchmaking with pharma and med-tech industry. The event was held between the 3-5th October 2022 in the Congress Center of the Slovak Academy of Sciences on the Smolenice Castle.

The speakers and participants comprised research and development leaders in cancer and metabolic disorders. The event's topics included investigations of **genetic, epigenetic and physiological mechanisms of diseases through preclinical and clinical approaches and translation of newly acquired knowledge into advances in diagnostics and therapy**. The program of this mini-conference reflected the current programming priorities of **Horizon**

Europe within **Cancer Mission**. It covered scientific lectures, project opportunities information, matchmaking, and discussion about future collaborations.

The main event's purpose was to explore the opportunities for collaboration of research and industry that could lead to the creation of initial small projects, which the Alliance4Life's Seed fund will support.

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The Matchmaking

The last day was dedicated to introducing industrial partners in cancer and metabolic disease research. The major driving force beyond this event was to get to know the services and innovative research/developmental activities of companies and to create informal and formal tights between the member institutions of the A4L_ACTIONS consortium and potential industrial partners. These possibilities were discussed during the matchmaking, where researchers, representatives of companies and service-providing research facilities had the chance to map future cooperation possibilities.

The industrial participants convinced researchers that the knowledge of researchers and research facilities is crucial in cooperation, and business partners always welcome new research and innovative ideas. Especially in Central and Eastern Europe, the publication force of researchers and the market-driven activity of business partners do not exclude each other. However, this is not necessarily the same in Western Europe, but before each collaboration, the requirements and expectations of future cooperation partners should be discussed in advance.

„It has also been highlighted that having a good idea or service is not enough. The number of competitors in higher education and business environment is permanently increasing; thus, each entity must consider factors that can distinguish their performance and service from the others“, stated Zsolt Kohus, Technology Transfer Group Leader at Semmelweis University in Budapest and the chair of session six during the event.

Finally, during the Mini-Conference, the first round of the A4L_ACTIONS Seed Fund call for small collaborative academia-industry projects was announced. Both researchers and industrial partners expressed their interest in this activity and would welcome any suggestions to cooperate.

3.5 ANNEX 3: PHOTOS

PHOTOS FROM THE MINI-CONFERENCE ON CANCER AND METABOLIC DISORDERS IN SMOLENICE, SLOVAKIA



4 THE SECOND MINI-CONFERENCE ON HEALTH AND THE ENVIRONMENT ORGANIZED BY THE MEDICAL UNIVERSITY OF LODZ IN LODZ, POLAND

4.1 THEMATIC SCOPE

The speakers and participants are intended to consist of research and development leaders in the areas of HEALTH AND THE ENVIRONMENT issues. The event's topic included challenges the EU is facing in post-pandemic healthcare and opportunities coming from digital transformation in Healthcare, MedTech, and Pharma. The programme of this Mini-Conference reflects the current programming priorities of Horizon Europe and cover both scientific lectures, matchmaking workshops and discussion about future collaborations. The funding opportunities presented during the Matchmaking part included the opened A4L Seed Fund Call, the topics of Horizon Europe Cluster 1, 6, Mission Cancer and Mission Climate. **As a result, 2 projects of 7 Partner Research Groups received the Seed Funds.**

The scientific lectures in the Health and the Environment Mini-Conference were divided into **five sessions**:

1. Natural Compounds and drug discovery
2. Environmental factors and asthma
3. Environmental risks in health
4. Environmental health and well-being
5. Environment and health in industry

4.2 MINI-CONFERENCE SATISFACTION SURVEY

Out of 45 survey visitors, 31 completed the task, which amounts to 68.9% of overall completion rate.

The question whether the Mini-Conference contents met the expectations of the participants was answered positively by 96.7% of respondents, with one negative comment (“I thought it would [be] more medical, MedTech”).

The overall rating of the research program of the Mini-Conference veered towards the evaluation of 4 out of 5 (46.7%) and 5 out of 5 (43.3%) with 3 answers of 3 out of 5 (10%).

The matchmaking part was evaluated as 5 out of 5 by 53.3% (16 answers), 4 out of 5 by 33.3% (10 answers) and 3 out of 5 by 13.3% (4 answers).

The organization of the conference (including venue and catering assessment) obtained 5 out of 5 mark by 83.3% (25 responses) and 4 out of 5 by 16.7% (5 responses).

The question whether respondents would recommend this event to their colleagues met with 100% of positive answers.

The answers to the question regarding what was the most interesting or most valuable information/learning acquired during the Mini-conference fell into three categories:

1. The respondents appreciated the wide range of topics and interdisciplinary approaches, showcasing the connections between medicine and environmental

issues. As one respondent commented: "valuable evidence-based associations between environmental factors and poor health were discussed in great detail".

2. Opportunity to meet great start-ups from Eastern Europe and learn about the usage of plants in medicine and cosmetology
3. New ways to get funding and opportunity to network

Last, but not least, the question about areas for improvement, found a number of insightful remarks, that will be taken into consideration while preparing for the final Mini-Conference in Bucharest. Below we present selected comments:

1. Everything was great! If I must comment something, I would say it would be maybe better to spread the program over 4 days and thus having fewer presentations in one day.
2. Involving the Authorities in these projects
3. It could be expanded to include a panel of poster presentations (the recurring comment)
4. Most of the sessions of the conference had at least two speakers (out of three or four) coming from the same institution, which is not ideal if the goal is to provide a match-making platform to the participants. I think that the speakers in each session should have all come from different countries in order to foster cross-fertilization and international collaborations. Broadening participation of scientists with a diverse origin would help the effectiveness of the match-making process.
5. Strictly fixed and shorter time for presentations - a little bit more narrow field of topics being presented - more time for explaining about funding, how to correctly write a project etc.
6. The only thing that would make conference better is if the content was more uniform in the terms of the research, more similar themes, than we would be able to connect more ... in this case we had practically everything. it was interesting but there was no possibility to connect or mutual interest or research
7. To be delivered with online sessions for remote listeners at our own institutions.

4.3 ANNEX 4: PROGRAMME OF THE MINI-CONFERENCE



A4L_ACTIONS: Thematic Mini-conference with Matchmaking Event: HEALTH AND THE ENVIRONMENT

PROGRAMME

24-26 April 2023, Lodz, Poland

Venue: Medical University of Lodz

24.04.2023 (Monday)	
16:30 - 17:00	Registration
17:00 – 18:00	Opening session <ol style="list-style-type: none"> 1. Transnational strategy for development of ionizing radiation exposure biomarkers - Prof. Wojciech Fendler M.D., Ph.D. (MUL) 2. Infection and Immunity. From the laboratory towards control of chronic infections - Prof. Magdalena Mikołajczyk-Chmiela, PhD (UL) 3. Climate change (and biodiversity loss) as biggest threat to public health of XXI century - Weronika Michalak (HEAL Poland)
18:00 – 20:00	Walking dinner
25.04.2023 (Tuesday)	
10:00 - 10:30	Registration
10:30 – 12:00	<u>Natural compounds and drug discovery</u> <ol style="list-style-type: none"> 1. Nature as a source of inspiration for pharmacists: from extracts to drugs. (Prof. Maija Dambrova; LIOS) 2. Engineering of a fructosyl peptide oxidase enzyme for biomedical applications (Prof. Emilio Parisini; LIOS) 3. Cholinesterase inhibitors as an example of multifunctional drugs design. (Prof. Paweł Szymański; MUL)
12:00 – 12:15	Coffee break
12:15 – 13:45	<u>Environmental factors and asthma development</u> <ol style="list-style-type: none"> 1. Viral infections in asthma and allergy development (Assoc. Prof. Maciej Chałubiński; MUL) 2. Air pollution and health: the methodological issues and challenges (Dr Andreja Kuček; UL) 3. Asthma in children and environmental health determinants (Assist. Tanja Rejc; UL) 4. New data on indoor air quality and child health (Prof. Arunas Valiulis; VU)

13:45 – 14:30	Lunch
14:30 – 16:00	<p><u>Environmental risks in health</u></p> <ol style="list-style-type: none"> 1. Health risks of infections caused by viruses transmitted by ticks (Martina Lickova, PhD; SAS) 2. Health risks of infections caused by viruses transmitted by mosquitos (RNDr. Viktória Čabanová, PhD; SAS) 3. Is Gestational Diabetes an Urban Pathology? (Prof. Iuliana Ceausu; UMPCD) 4. The Role of Scientific Expertise assesing the Health and Environmental Risks of Endocrine Disrupters (Sorin Paun, MD, PhD; UMPCD)
16:15 – 16:30	Coffee break
16:30 – 18:00	<p><u>Environmental health and well-being</u></p> <ol style="list-style-type: none"> 1. The impact of traffic noise on health (Triin Veber; UT) 2. How much BPA is around us (Prof. Ksenia Vitale; UZ) 3. Teaching Institute of Public Health Andrija Štampar - Pharmacological substances and environment (Adela Krivohlavek, PhD) 4. Planetary health – a catchy academic discussion or an urgent necessity for a global action in public health? (Dr Joanna Ruszkowska; MUL)
20:00 – 22:00	Networking dinner
26.04.2023 (Wednesday)	
8:45 - 9:00	Registration
9:00 – 9:45	<p><u>Towards ecological sustainability</u></p> <ol style="list-style-type: none"> 1. Eco UMED – environmental program in sustainable university development (Assoc. Prof. Anna Lipert; MUL) 2. Digitalization for a sustainable development" at the Medical University Sofia (Magdalena Kasnakova, PhD; MUS)
9:45 – 10:00	Coffee break
10:00 – 11:30	<p><u>Environment and health in industry</u></p> <ol style="list-style-type: none"> 1. mHealth app NephroGo: easier control of chronic kidney disease (Giedrė Žulpaitė; VU) 2. Ecological manikin for teaching basic life support - ECO CPR (Filip Jaškiewicz, PhD; MUL) 3. The “silent” life of medicinal plants - Field and Forest SIA (Gundars Skudriņš) 4. Plant cell cultures for efficient production of cosmetic ingredients - Alternative Plants Ltd (Anna Ramata-Stunda) 5. Data&AI in medicine and public health – Microsoft (Tomasz Jaworski) 6. Between an idea & a clinic. The MedTech product development process– Consonance (Mariusz Masior)

12:30 – 12:45	Info on Seed Fund
11:30 – 12:30	Matchmaking session for future projects
12:45 – 14:00	Networking Lunch

ANNEX 5: PRESS RELEASE



**A4L_ACTIONS Thematic Mini-conference
with Matchmaking Event**

HEALTH AND THE ENVIRONMENT

**April 24th – 26th, 2023
Medical University of Lodz**

Health and Environment were the main subject matters of the international mini-conference held at the Medical University of Lodz on April 24-26, 2023 within the project: *Alliance for Life Sciences: From Strategies to Actions in Central and Eastern Europe* (funded by the European Commission within Horizon 2020 programme).

Researchers from universities and research institutes from Central and Eastern Europe discussed the impact of the environment on human health and the programmes of sustainable development deployed in their institutions. The accompanying matchmaking workshops, in turn, provided an opportunity to strengthen the cooperation and business relations as well as discuss ideas for joint initiatives and research projects.

The list of speakers in the opening session included:

- Prof. Wojciech Fendler (Medical University of Lodz)

Translational Strategy for Development of Ionizing Radiation Exposure Biomarkers

- prof. Magdalena Mikołajczyk-Chmiela (University of Lodz)

Infection and Immunity - From the laboratory towards control of chronic infections

- Weronika Michalak (Heal Poland: international non-profit organisation which analyses the impact of the environment on public health.)

Climate change (and biodiversity loss) as biggest threat to public health of XXI century

The other sessions of the conference were focused on:

- natural products and drug discovery
- environmental triggers of asthma
- environmental risks in health
- environmental health and well-being
- directions for sustainable development in research institutes
- the environment and health in industry



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 964997. This document reflects the view of Alliance4Life's consortium and the European Commission is not responsible for any use that may be made of the information it contains.

Current priorities of Horizon Europe programme were also debated at the conference. The event was not only intended for experienced researchers but also for the beginners in the implementation of international projects: leaders in the field of health and environment.

Medical University of Lodz hosted the conference whose subject was closely connected with one of our research priorities i.e. public health. I am convinced that this international scientific meeting will result in new collaboration and also jointly implemented projects in the longer run, says Prof. Lucyna Woźniak, Vice Rektor for Research Strategy and International Relations.

Alliance4Life is a bottom-up initiative of twelve leading life science institutions from eleven EU-13 countries that aims at closing the divide in European health research and innovation. Members of the Alliance are progressive research institutions that have the necessary strength to stimulate institutional change.

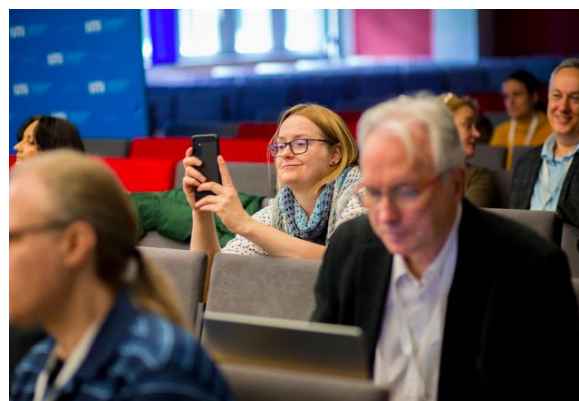
<https://alliance4life.ceitec.cz/>



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4.5 ANNEX 6: PHOTOS

PHOTOS FROM THE MINI-CONFERENCE ON HEALTH AND THE ENVIRONMENT IN LODZ, POLAND



5 THE THIRD MINI-CONFERENCE ON PERSONALIZED MEDICINE ORGANIZED BY THE UNIVERSITY OF MEDICINE AND PHARMACY "CAROL DAVILA" OF BUCHAREST, ROMANIA

5.1 THEMATIC SCOPE

The mini-conference organized on October 26-27 in Romania and hosted by the **University of Medicine and Pharmacy Carol Davila UMFC**D in Bucharest was already the third event organized by **Alliance4Life**, which aimed to share research ideas of intellectual origin in Central and Eastern European countries and to create the opportunity for matchmaking with the pharma and meditech industry.

The conference and trigger event has been organized together with the yearly University Congress, celebrating together the great values of cooperation within a higher education network and increasing research and administrative capacity in an Eastern and Central European academic environment. Both events were opened by the project's coordinating representative from UMFC

D, Professor Iuliana Ceausu, together with the rector of the university, Professor Viorel Jinga, the vice-rector for scientific research, Professor Simona Ruță, the vice-deans for scientific research of the four faculties of UMFCD and the health advisor to the President of Romania, Professor Diana Loreta Păun.

The speakers and participants were scientific leaders in the field of personalized medicine, which represents an effective way to improve individual health based on family history, personal medical data, and genetic information. The aim of the participants was to create and strengthen a community of specialists, bringing together health professionals from different fields.

Focusing on whole-person patient-centered health, uniting the Alliance4Life community, and bringing together healthcare professionals not only from Europe but also from the US and New Zealand, this Conference has attracted **more than 50 participants** from the most prestigious universities and institutes which are either partners in this project or essential guests of this conference and hopefully future partners in beautiful collaborative projects, **more than 30 oral presentations** of health professionals from all disciplines, who are committed to advancing personalized and integrative medicine and healthcare. The healthcare field continues to move from the inefficient, one-size-fits-all-patient medicine of today, toward the data-driven and personalized medicine of tomorrow.

The scientific lectures in the PERSONALIZED MEDICINE Mini-Conference were divided into **seven sessions**:

1. Genetic diagnostics and personalized medicine
2. Engineering for personalized therapies
3. Personalized medicine: the industry's future
4. Excellence and interdisciplinarity in the care of pregnancies in patients with autoimmune diseases
5. Personalized response – from laboratory to clinics and back

6. Personalized research, diagnostics and treatment
7. New approaches on personalized medicine

5.2 MINI-CONFERENCE SATISFACTION SURVEY

The dissemination of impressions, knowledge and best practices obtained at the conference was analysed following the monkey survey as follows:

- 100% of respondents agreed that the conference successfully met the expectations of the participants
- for 69.2% of the respondents Research Programme received a maximum rating of 5, the rest of the respondents opting for 4 points out of 5 points
- Regarding the Match-making programme of the Mini-conference, 69.2% of respondents agreed that it met all the requirements, the rest of the respondents opting for 4 points out of 5.
- The organisation of the conference was also highly rated, with 69.2% agreeing that it could be rated with maximum stars, the rest opting for 4 out of 5 points.

The most interesting or most valuable information/lessons learned by our colleagues during the Mini-Conference were: AI in medicine, Discussions with colleagues about the future of e-health, possible collaborations, learning a new perspective for personalized treatments for our patients, how personal health data can be studied in other countries.

Nominal appreciation for: 1. molecular architectures of viral entities studied by microscopic techniques, presented by Prof. Mihnea Boștină who gave an interesting insight into this area of research and 2. Prof. Srecko Gajovic, with his presentation on person-centered care which was really enlightening

Suggestions for improvement included: more topics on dentistry and dental technology, more time for discussions/materials, number of speakers, better representation of the local biopharmaceutical industry.

Attendance at the Mini-Conference is 100% recommended.

5.3 ANNEX 7: PROGRAMME OF THE MINI-CONFERENCE IN BUCHAREST



**Mini-conference
with Matchmaking Event A4L_ACTIONS Thematic
PERSONALISED MEDICINE**

The Palace of Parliament
2-4, Izvor Street; <http://cic.cdep.ro/en>

Council Chamber of Faculty of Medicine - UMFC
8, Eroii Sanitari Bvd.; <https://umfcd.ro/en/education/faculty-of-medicine/>

October 26-27, 2023

The thematic mini-conference aims to share research ideas of intellectual origin in Central and Eastern European countries and to create the opportunity for matchmaking with the pharma and Meditech industry. The speakers and participants are intended to consist of research and development leaders in the areas of PERSONALISED MEDICINE. As Personalised Medicine represents an effective way to improve individual health based on family history, personal medical data, and genetic information, this event aims to create and strengthen a community of specialists, bringing together health professionals from different fields. The programme of this mini-conference reflects the current programming priorities of Horizon Europe and cover both scientific lectures, matchmaking workshops, and discussion about future collaborations.

PROGRAM

26.10.2023	CONFERENCE The Palace of Parliament Human Rights Conference Room
8.30 – 9.00	Registration
9.00 – 9.15	Opening of the conference Prof. Dr. Viorel Jinga, Rector of UMFC Prof. Dr. Iuliana Ceaușu, UMFC, coordinator A4L Project - UMFC Prof. Dr. Dana Craiu Vice Dean of Research, Faculty of Medicine, UMFC Prof. Dr. Sabina Zurac, Vice Dean of Research, Faculty of Dental Medicine, UMFC
9.15 – 10.15	Session 1) GENETIC DIAGNOSTICS AND PERSONALIZED MEDICINE (3 speakers – 20 mins/pers + Q&A) Chairperson: Aneta Andrzejczyk , Deputy Director of the Office for Research, Strategies and Development Lodz University, A4L team member
9.15 – 9.35	Daniela Gasperikova , PhD, DSc Research director, Biomedical Research Center, Slovak Academy of Sciences Genetic risk score for T1D in children with newly diagnosed diabetes mellitus Q&A
9.35 – 9.55	Dana Craiu, Vice Dean of Research, Faculty of Medicine, UMFC

	Role of genetics in the personalized treatment of epilepsy in children Q&A
9.55 – 10.15	Martina Škopková , RNDr., PhD researcher, Biomedical Research Center, Slovak Academy of Sciences Epimutation in the Mmachc Promoter as a Cause of Vitamin B12 Metabolism Disorder Q&A
10.15 – 10.30	Coffee Break
10.30 – 11.45	Session 2) ENGINEERING FOR PERSONALIZED THERAPIES (3 speakers – 20 mins/pers + Q&A) Chairperson: Silvia Pastorekova , prof. RNDr., DrSc. Director General, Biomedical Research Center, Slovak Academy of Sciences, A4L Board member
10.30– 10.50	Nikola Štoković rhBMP6 delivered within autologous blood coagulum and synthetic ceramics as a novel strategy for bone regeneration Q&A
10.50– 11.10	Aleš Hampel Bioartificial autologous graft for intervertebral bony fusion. Q&A
11.10– 11.30	Nikita Umov Personalised prediction of cardiovascular disease: Building a risk prediction algorithm from Estonian electronic health and social records Q&A
11.30– 11.45	Discussions
11.45– 12.00	Coffee Break
12.00– 13.15	Session 3) PERSONALIZED MEDICINE: THE INDUSTRY'S FUTURE (2 speakers – 20 mins/pers + Q&A) Chairperson: Maija Dambrova , Head of Laboratory of Pharmaceutical Pharmacology Latvian Institute of Organic Synthesis
12.00– 12.20	Veronika Chladova fastGEN NGS technology - fast and reliable tool for personalised medicine Q&A
12.20– 12.40	Zoran Topolnjak National e-health infrastructure as a foundation for personalized medicine Q&A
12.40– 13.15	Matchmaking
13.15– 13.45	Lunch break with group photo in front of Parliament Palace Building
13.45– 15.00	Session 4) EXCELLENCE AND INTERDISCIPLINARITY IN THE CARE OF PREGNANCIES IN PATIENTS WITH AUTOIMMUNE DISEASES (4 speakers – 15 mins/pers + Q&A) Chairperson: Iuliana Ceaușu , Professor and Mihai Bojincă , Associated Professor; UMFC

13.45– 14.00	Diana Loreta Păun Autoimmune thyroid disorders during pregnancy and postpartum
14.00– 14.15	Anca Bobîrcă "State of art" in planning and management of pregnancies in patients with rheumatic diseases
14.15– 14.30	Ana Gheorghiu Challenges in SLE, APS and sistemic sclerosis patients during pregnancy
14.30– 14.45	Cristian Poalelungi Surveillance and specific outcomes in pregnant patients with autoimmune disease
14.45– 15.00	Discussions
26.10.2023	TRIGGER EVENT - FROM A4L to A4L_BRIDGE: SEED FUNDS, SEEDS FOR EXCELLENCE IN RESEARCH, HIGH EDUCATION AND CLINICAL PRACTICE The Palace of Parliament Human Rights Conference Room
15.00 - 15.15	Welcoming Guests
15.15 - 15.45	Official opening Official Guest Welcome Addresses
15.45 – 16.30	SEED FUNDS – UMFCD 1. Alexandru Scafa - Intelligent Monitoring of Heart Failure Improving Disease Management 2. Poliana Leru - Evaluation of respiratory allergies burden in particular urban areas and identification of best practices to improve their management and prevention
16.30 – 17.00	Sorin Paun Another meaning of Personalized Medicine – what about the professional independence of the doctor? Stefan Busnatu Fostering Interuniversity Collaboration for Accelerating Health Research and Innovation in Central and Eastern Europe and not only
17.00 – 17.45	Round table discussion with representatives of Romanian stakeholders in research, innovation and higher education, and members of the Alliance4Life's
17.45-18.00	End of Event - light dinner
27.10.2023	CONFERENCE FACULTY OF MEDICINE BOARDROOM
8.30 – 9.00	Registration
9.00 – 10.15	Session 5) PERSONALIZED RESPONSE - FROM LABORATORY TO CLINICS AND BACK (3 speakers – 20 mins/pers + Q&A) Chairperson: Lăcrămioara Popa, Professor, Faculty of Pharmacy, UMFCD
9.00 – 9.20	Talianu Marina-Theodora, PhD Student, Faculty of Pharmacy, UMFCD Rational Design of Innovative Drug Delivery Systems: An Open Gate Toward Targeted Therapy Q&A

9.20 – 9.40	Andreea Arsene, Professor, Faculty of Pharmacy, UMFC Dysbiosis and the brain-gut axis Q&A
9.40 – 10.00	Maija Dambrova, Professor, Head of Laboratory of Pharmaceutical Pharmacology Latvian Institute of Organic Synthesis Different faces of a cardiometabolic risk marker TMAO: from laboratory to clinics and back
10.00 – 10.20	Mihnea Boștină, Associate Professor and Academic Director of the Otago Centre for Electron Microscopy, Department of Microbiology and immunology, University of Otago, New Zealand Building viruses for fighting diseases
10.20 – 10.30	Coffee Break with group photo
10.30 – 12.30	Session 6) PERSONALISED RESEARCH, DIAGNOSTIC AND TREATMENT (4 speakers – 20 mins/pers + Q&A) <i>Chairperson: Daniela Gasperikova, PhD, DSc Research director, Biomedical Research Center, Slovak Academy of Sciences</i>
10.30 – 10.50	Šárka Pospíšilová, Vice-rector for Research, Head of CEITEC Research Center for Molecular Medicine Research and diagnostics of lymphoid malignancies Q&A
10.50 – 11.10	Srečko Gajovic, Professor, Medical Univ. Zagreb, Croatia The tehnological entities between person-centered care and personalized medicine Q&A
11.10 – 11.30	Mihai David – Associate professor, UMFC Personalized technology - full zirconia single tooth fixed prosthetic restorations obtained through CAD/CAM technology, technological and practical aspects Q&A
11.30 – 11.50	Viorel Perieanu – Associate professor, UMFC Preliminary study on the communication between dentist - patient - dental technician in the process of personalised designing and creating implant-prosthetic restorations Q&A
11.50-12.10	Robert Szewczyk – PhD Student, Lodz University Divergent response of human lung vascular endothelium to human coronaviruses – a key to the resilience against viral respiratory infections?
12.10-12.30	Break
	Session 7) New approaches on personalized medicine <i>Chairperson: Elena Poenaru, Associated Professor, UMFC</i>
12.30 – 12.50	Osvalds Pugovičs, Director, Dr.chem, Latvian Institute of Organic Synthesis Bioanalytics as an efficient support tool for personalized medicine Q&A
12.50 – 13.10	Sabina Zurac, Professor, Vice Dean for Research, UMFC AI in histopathology- RO experience Q&A
13.10 – 13.30	Bruno Velescu, Associate Professor, Faculty of Pharmacy, UMFC Drugs-nutrients interactions. Antidiabetics case.

	Q&A
13.30- 13.50	Stefania Tudorache – Professor, Faculty of Medicine, University of Medicine and Pharmacy, Craiova First trimester ultrasound - yes we can! Q&A
13.50 – 14.30	Lunch with group photo in front of Faculty of Medicine Visit the Faculty of Medicine - Palade Museum, Library
14.30 – 16.00	Session 8 - EXTERNAL SPEAKERS (3 speakers – 30 mins/pers + Q&A) Chairperson: Iuliana Ceaușu, Professor, Gynaecology, Obstetrics; UMFCD
14.30 – 15.00	Fabio Martelli Director of the Molecular Cardiology Laboratory at Policlinico San Donato, Italy NoncodingRNAs in cardiovascular diseases Q&A
15.00 – 15.30	Professor Dr Mircea Ivan, Indiana University School of Medicine MIR193BHG (LincNors): A noncoding RNA locus with human development implications
15.30 – 16.00	Break and Conference closure

EXTERNAL SPEAKERS

BIOS



Dr Fabio Martelli is a biologist and Director of the Molecular Cardiology Laboratory at Policlinico San Donato. Dr. Martelli graduated in Biological Sciences from the University of Rome La Sapienza in 1991 and specialised in Biotechnological Applications at the same university in 1994.

After a five-year post-specialisation training in the USA, at Harvard Medical School in Boston, he worked as a senior researcher at the Vascular Pathology Laboratory of the IRCCS-IDI in Rome.

Since 2007, he has been director of the Laboratory of Molecular Cardiology at IRCCS Policlinico San Donato.

Since 2014 he is also coordinator of Biomolecular Research for Cardiovascular Diseases at the San Donato Group Foundation and since 2022 he is part of the Scientific Committee of the IRCCS Italian Cardiology Network and of the Ethics Committee of the San Raffaele Hospital.

In 2017, he received national qualification as full professor of molecular biology and as full professor of applied biology.

Dr Martelli's current research interests revolve around the identification of molecular mechanisms underlying cardiovascular diseases, such as: cardiac and peripheral ischaemia, heart failure.

Specifically, he is dedicated to the study of the deregulation of gene expression (transcriptome) in the molecular mechanisms that characterise tissue response to hypoxia and ischemia.

Special attention is paid to noncoding RNAs such as microRNAs, long noncoding RNAs and circular RNAs. Research lines on rare diseases such as Marfan syndrome and myotonic dystrophy are also active.

Over the years, Dr. Martelli's research has been supported by the Ministry of Health as well as by national and international research funding agencies, including the European Commission, Telethon Italia and AFM-Telethon and AIRC.

Dr Martelli is a member of the editorial board of international journals such as International Journal of Molecular Sciences, Frontiers in Cardiovascular Medicine-Cardiovascular Biologics and Regenerative Medicine, PLoS ONE. In addition, he has been an ad-hoc reviewer for more than 230 manuscripts submitted to peer reviewed journals and 150 applications to research funding societies.

He is the author of more than 130 scientific articles in international journals (scopus H index 52).



Mihnea Bostina Associate Professor and Academic Director of the Otago Centre for Electron Microscopy, Department of Microbiology and immunology, University of Otago, New Zealand

Research interests: Structural biology, viral pathogenesis and molecular virology

Current research: understanding molecular architectures and relating those structures to their functional mechanisms using cryo-electron microscopy and electron tomography combined with image analysis techniques.



Associate Professor Dr Mircea Ivan Indiana University School of Medicine

We are interested in specific molecular responses to hypoxia and their relevance for cancer biology. My postdoctoral work in Dr. William Kaelin's laboratory elucidated the key signaling event that allows metazoan cells to monitor ambient O₂ tension. In 2016 my first-author Science and PNAS papers were highlighted in connection to the annual Lasker Foundation awards. Furthermore, the Nobel Assembly chose my 2001 Science paper as essential for their decision to award the 2019 Nobel Prize in Medicine or Physiology to my former mentor Dr. William Kaelin.

In 2007 my group was the first to identify microRNAs induced by decreased oxygen tension, including miR-210, now widely recognized as universal “hypoxia-miR.” Hypoxia-regulated noncoding RNAs are integrated into our broader interest in metabolic responses to oxygen deprivation.

We are developing new combinatorial therapeutic approaches based on rational interference with tumor metabolism, focusing on glioma and glioblastoma. In 2013 we generated proof of concept showing that blockade of pyruvate dehydrogenase kinase using dichloroacetate (DCA) significantly increases antiangiogenic agents' efficacy in xenografts. With the support of the IU Brain Tumor Working group, we continue to refine this strategy, aiming to open the road for clinical trials.

In 2019, we characterized a novel long noncoding RNA generated by the mir193bhg locus on chr16. We termed this lincRNA lincNORS and demonstrated that it modulated the sterol and steroid homeostatic programs in the cells. Interestingly, lincNORS is "tagged" by more than 20 genome-wide association studies, and we provide early evidence for its roles in human growth phenotypes, in particular puberty onset timing in males and females.

5.4 ANNEX 8: PRESS RELEASE



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Searching



PERSONALISED MEDICINE - thematic mini-conference

The speakers and participants were scientific leaders in the field of personalized medicine, which represents an effective way to improve individual health based on family history, personal medical data, and genetic information. The aim of the participants was to create and strengthen a community of specialists, bringing together health professionals from different fields.

The seven sessions of topics subjects ranged from descriptions of revolutionary techniques, new approaches, and unique pathways in what is called personalized medicine, providing many opportunities for an extraordinary dynamic of discussions and shared information.

Human genetic variation may lead to different responses from patients subjected to the same treatments. This is why bioanalytics represents an efficient support tool for personalized medicine tools for enabling precision medicine (**Osvalds Pugovičs**).

Session 1 (Genetic Diagnostics and Personalized Medicine) was focused on children with presentations by **Daniela Gasperikova**, PhD, DSc Research Director, Biomedical Research Centre, Slovak Academy of Sciences, entitled "Genetic risk score for T1D in children with newly diagnosed diabetes" and **Dana Craiu**, Deputy Vice-Dean of Research, Professor at the Faculty of Medicine, UMFCD with the presentation "The role of genetics in the personalized treatment of epilepsy in children". The finding regarding Epimutation in the Mmachc Promoter as a Cause of Vitamin B12 Metabolism Disorder presented by **Martina Škopková**, RNDr., Ph.D. researcher, Biomedical Research Center, Slovak Academy of Sciences will have an impact on diagnosis, and genetic counseling in families with genetic diseases, as well as in the development of new therapeutic approaches.

From an engineering point of view, precision medicine involves the use of technologies to acquire and validate population-wise data (**Srecko Gajovic, Professor, Medical Univ. Zagreb, Croatia: The technological entities between person-centered care and personalized medicine**).

Session 2 (Engineering for Personalized Therapies) has provided important data on novel biocompatible therapeutic solution for bone regeneration (**Nikola Štokovič**) and offered interesting information concerning the significant advancements in bone grafts and bone graft substitutes to augment spinal fusion (**Aleš Hampl**).

The technological entities between person-centered care and personalized medicine (**Srecko Gajovic, Professor, Medical Univ. Zagreb**). Technology is very active in shaping knowledge landscapes, and it is the base of tremendous advancements in the health digital environment. Technology provides the means by which the user and system can handle the contents of knowledge landscapes.

Cardiovascular disease, the leading cause of death worldwide, was assessed in Estonia in relation to a

FIG.2 Mini-Conference on Personalized Medicine– Information disseminated on the project website



Mini-conference
with Matchmaking Event A4L_ACTIONS Thematic
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The Palace of Parliament
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Council Chamber of Faculty of Medicine - UMFC
8, Eroii Sanitari Bvd.; <https://umfcd.ro/en/education/faculty-of-medicine/>

PRESS RELEASE MINI-CONFERENCE

PERSONALISED MEDICINE - thematic mini-conference with matchmaking

With the mini-conference organized on October 26-27 in Romania and hosted by the University of Medicine and Pharmacy Carol Davila UMFC from Bucharest, **Alliance4Life Project** has ended its thematic mini-conferences which aimed to share research ideas of intellectual origin in Central and Eastern European countries and to create the opportunity for matchmaking with the pharma and Meditech industry.

The conference and trigger event have been organized together with yearly University Congress, celebrating together the great values of cooperation within a higher education network and increase research and administrative capacity in an Eastern and Central European University environment.

Both events were opened by the project's coordinating representative from UMFC, Professor Iuliana Ceausu, together with the rector of the university, Professor Viorel Jinga, the vice-rector for scientific research, Professor Simona Ruță, the vice-deans for scientific research of the 4 faculties of UMFC and the health advisor to the President of Romania, Professor Diana Loreta Păun.

The speakers and participants consisted of research and development leaders in the areas of PERSONALISED MEDICINE. As Personalised Medicine represents an effective way to improve individual health based on family history, personal medical data, and genetic information, this event aimed to create and strengthen a community of specialists, bringing together health professionals from different fields.

Focusing on whole - person patient centered health, uniting the Alliance for Life community and bringing together healthcare professionals not only from Europe, but also from US and New Zealand, this Conference has attracted more than 50 participants from the most prestigious universities and institutes which are either partners in this project or important guests of this conference and hopefully future partners in beautiful collaborative projects, more than 30 oral presentations of health professionals from all disciplines, who are committed to advancing personalized and integrative medicine and healthcare.

The field of healthcare continues to move from the inefficient, one-size-fits-all-patients medicine of today, toward the data-driven and personalised medicine of tomorrow.

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Cardiovascular disease, the leading cause of death worldwide, was assessed in Estonia in relation to a risk prediction algorithm based on data obtained from electronic health and social records (**Nikita Umov**). Along with the known risk factors of cardiovascular diseases (CVDs) constituting metabolic syndrome (MS), the gut microbiome and some of its metabolites, in particular trimethylamine-N-oxide (TMAO), are actively discussed. Many studies have established a link between the metabolism of certain microbes and the development of cardiovascular disease (**Maija Dambrova, Professor, Head of Laboratory of Pharmaceutical Pharmacology, Latvian Institute of Organic Synthesis**). Non-coding RNAs have been identified as critical novel regulators of cardiovascular risk factors and cell functions and are thus important candidates to improve diagnostics and prognosis assessment (**Fabio Martelli Director of the Molecular Cardiology Laboratory at Policlinico San Donato, Italy**).

In the era of personalized medicine, researchers and physicians rely on their understanding of clinical utility to assess the value of rapidly evolving genetic and genomic tests. With a constantly growing number of genetic markers with evidenced or potential clinical impact in lymphoid neoplasms, a more comprehensive genomic test is highly desirable. Thus, a new integrative, capture-based, next-generation sequencing (NGS) panel, LYmphoid NeXt-Generation Sequencing (LYNX), can detect and analyze standard and novel biomarkers in the most common lymphoid neoplasms simultaneously (**Šárka Pospíšilová, Vice-rector for**

Research, Head of CEITEC Research Center for Molecular Medicine: Research and diagnostics of lymphoid malignancies).

Professor Dr Mircea Ivan, Indiana University School of Medicine had discovered the ancient enzymatic machinery that allows all metazoan cells to monitor O₂ abundance in their environment, the resulting paper being recognized as essential for the 2019 Nobel Prize in Medicine. This work paved the way for the development of a new class of pharmaceutical agents that mimic the hypoxic response by inhibiting HIF prolyl hydroxylases, conducting to one of the first few examples of noncoding RNAs being involved in adaptive responses.

University of Otago (New Zealand) researchers have used high-resolution electron microscopy images to reveal how an anti-cancer virus interacts with tumor cells, increasing its potential to save lives. Seneca Valley Virus (SVV), a newly discovered virus which infects cancer cells but not normal tissue, has become a main research project in the laboratory of **Dr Mihnea Boștină, Academic Director of Otago's OMNI Electron Microscopy unit and senior lecturer in the Department of Microbiology and Immunology:** Building viruses for fighting diseases.

How to save hours of intensive works of researchers and physicians using AI was deeply explained by **Sabina Zurac, Professor, Vice Dean for Research, UMFCD.** Search in Ziehl Nielsen (ZN) colored slides with a 40X microscopic objective (0.5 mm diameter) takes hours but Artificial Intelligence can provide viable solutions in this area. Artificial intelligence-based software for the automatic analysis of ZN colored slides has reliable results, providing extraordinary savings in the pathologist's time and effort (AI in histopathology- RO experience).

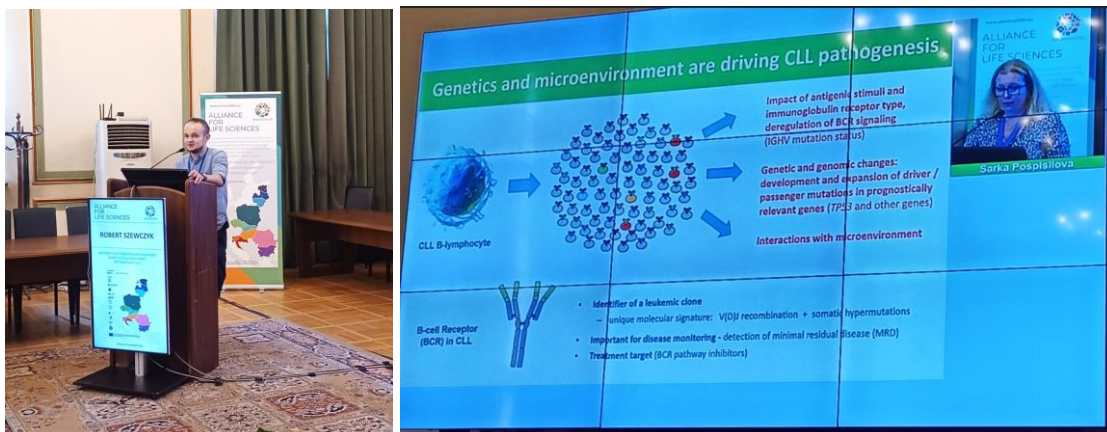
A4L universities' industry partners were represented by BioVendor (**Veronika Chladova**) and Ericsson (**Zoran Topolnjak**). BioVendor brings new technology fastGEN for examination of the mutation status of oncomarkers in samples. Technology is base on ultra-deep sequencing of short amplicons obtained by a single polymerase chain reaction with special tagged hybrid primers. Ericsson Nikola Tesla's health care portfolio in Croatia consists of a plethora of services and products that range from standalone systems targeting specific health care services like patient management, electronic health care records, e-referral, e-prescription up to comprehensive and integrated health care information systems like health information exchange, hospital information system or remote patient monitoring.

The conference opened doors for like-minds from all parts of the health space to step out of silos and to come together for two days of stimulating, evidence-based and informed sharing and learning.









5.5 ANNEX 9: PHOTOS

PHOTOS FROM THE MINI-CONFERENCE ON PERSONALIZED MEDICINE ORGANIZED BY THE UNIVERSITY OF MEDICINE AND PHARMACY "CAROL DAVILA" OF BUCHAREST, ROMANIA

