

## **COST Action CA19136 - NET4Age-Friendly**

International interdisciplinary network on health and wellbeing in an age-friendly digital world

# **The Sustainability of Health Promotion and Disease Prevention, with a special focus on Big Data and Business Modelling**

## **Training School**

**12-15 September 2022**

Ana Aslan International Foundation (AAIF) and Carol Davila University of Medicine and Pharmacy – CieH

Venue: University of Medicine and Pharmacy "Carol Davila", 8 Bulevardul Eroii Sanitari, Bucharest, Romania

## **Goal**

The overall objective of the training school is to stimulate an international and interdisciplinary community of researchers and other stakeholders, to pave the roadmap for innovation in health thus opening new markets for sustainable development.

There are three main specific objectives of NET4Age-Friendly COST Action and the Training School:

- Improving the individual level of awareness about the paradigmatic shift from disease treatment to disease prevention and health promotion
- Big Data in Health Care and
- Business Modelling Innovation

## **Call for Trainees**

The NET4Age-Friendly Training School is a multidisciplinary event open to professionals, researchers, and Ph.D. students with a professional interest into the topic. Any interested applicant must complete the [APPLICATION FORM](#).

### **Criteria for selected trainees**

Applicants shall be engaged in an official research program as a PhD Student or postdoctoral fellow or can be employed by, or affiliated to, an institution, organisation, or legal entity which has within its remit a clear association with health promotion or disease prevention.

Trainees eligible for reimbursement are from COST Full Member Countries (Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Republic of Moldova, Montenegro, The Netherlands, The Republic of North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, and United Kingdom), COST Near Neighbour Countries (NNC) or from Approved European RTD Organisations.

**The selected international applicants (trainees) will benefit from a Trainee Grant** to participate in the activities of the Training School from the 12<sup>th</sup> to 15<sup>th</sup> of September, 2022. This grant is expected to cover the long-distance travel expenses (by train, ferry, bus, plane, or car). Furthermore, the international trainees will receive a fixed daily allowance amount of 110 EUR, which is expected to cover the accommodation in Bucharest, meals and local transportation. Each application will be individually evaluated along with the total grant to be awarded for the 4 days.

The selected applicants (trainees) from Romania will benefit from a Trainee Grant to participate in the activities of the Training School based on the distance to and from Bucharest and the accommodation needs. This grant will be individually discussed and agreed.

Selected trainees shall create an e-COST profile at <https://e-services.cost.eu> including bank details prior to accepting their e-COST invitation. They shall submit via e-COST a completed online travel reimbursement request within 30 calendar days after the end date of the approved activity.

## Trainers

- ✓ Prof Maddalena ILLARIO, Federico II Department of Public Health, Italy
- ✓ Prof Luiza SPIRU, University of Medicine and Pharmacy "Carol Davila", Bucharest, Romania
- ✓ Dr Stefan BUSNATU, University of Medicine and Pharmacy "Carol Davila", Bucharest, Romania
- ✓ Dr Ivan CHORBEV, Faculty of Computer Science and Engineering, University Ss Cyril and Methodius, Skopje, North Macedonia
- ✓ Prof Aleksandar Jevremovic, Ph.D., Singidunum University, Serbia
- ✓ Flaviana Rotaru, President of Rohealth - Health and Bioeconomy Cluster, Romania
- ✓ Prof. Nick Guldemond, The Netherlands
- ✓ Mircea Mărzan, MD, EMBA, PhDS, Ana Aslan International Foundation, Romania
- ✓ Others to be confirmed

## Training topics

We are excited that you are part of this program and at the opportunities it will provide to you!

The training will revolve around the following topics:

### PREVENTION

- Prevention Overview: the understanding of the total care process
- Predictive, Preventive and Personalised Medicine in the new paradigm of Longevity Medicine;
- Sustainability and privacy aspects of ICT solutions in health promotion and disease prevention: challenges with balancing between solutions, stability and innovation, as well as privacy/security related problems with solutions in this domain;
- Reinventing the patient doctor communication in the eHealth era;
- Digital interventions in mental health for older adults – present and perspective

### BIG DATA IN HEALTH

- Big Data in Health Care - Scalable and Distributed Analysis and Learning from Big Data and current limitations to access of large-scale data in medicine (patient data, meta data, ethics, statistical approaches);
- Introduction to data processing. Ethics in data processing. Introduction to Big Data. Cloud Computing and its use in Big Data processing;
- Data analysis used in Precision medicine.

## **BUSINESS MODELLING**

- Defining the business models for new health and care services: learning about the impact of organizational change on work behavior and identity;
- Value-based business modelling and procurement strategies from a provider and payer perspective.

\*As we kick off this new International Training School, over the course of each day we will invite the trainers to discuss and debate for one hour on the topics proposed by other trainers and by the trainees themselves.

## **Discussion**

Health promotion and disease prevention actions aim at keeping people healthy by raising awareness and supporting individuals and communities to engage in healthy behaviors, while also diminishing risks of chronic diseases.

World Health Organization discuss health promotion as following: “[health promotion] enables people to increase control over their own health. It covers a wide range of social and environmental interventions that are designed to benefit and protect individual people’s health and quality of life by addressing and preventing the root causes of ill health, not just focusing on treatment and cure.”

This point of focus would increase wellness and also lead to some significant changes into overall framework, such as addressing social determinant of health and making systemic changes at the level of societal ecosystems in order to enable healthy choices.

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Despite its relevance, studies addressing business model innovation for ensuring more effective and efficient health care delivery are rare. Also, the existing conceptualizations of business models do not adequately guide in designing business models specifically applied to the integration of innovations in health services.

A rapidly aging population, combined with fast turnover of health technologies have been driving strong demands for high-cost health services. The need to ensure equity and sustainability in service provision has been stimulating the adoption of digital solutions, especially as a consequence of the Covid-19 pandemic. eHealth innovations offer promising new avenues that will allow health and social care systems to cope with these challenges and improve the quality of life for older people. However, the user uptake of eHealth is surprisingly low, and successful deployment is not guaranteed unless the interests of key stakeholders are better addressed. While many previous studies have addressed technological aspects of eHealth innovations, the business models underpinning these innovations are often overlooked.

These eHealth innovations are expected to create and facilitate new avenues for cost effective and safe methods of care and enabling active and healthy ageing along the entire life course. In particular, digital solutions can enable older adults to live independently in their own homes, thus opening a new “silver market” for smart health and age-friendly environments.

One of the key barriers to any increased uptake and integration of eHealth innovations in the European context is the uncertainty related to the sustainability of the business models.

The creation of sustainable business models has been recommended as one of the most significant factors for improving health information technology and its implementation, including support of telemedicine functionality for home care (Abraham et al., 2011).

In the healthcare sector, the lack of innovative business models has been noted as one of the main factors behind the current problems of both accessibility and affordability (Hwang and Christensen, 2008).

## Key dates

- ✚ Applications opened: 21 July 2022
- ✚ Applications submission deadline: 15 August 2022
- ✚ Confirmation to the selected trainees: 22 August 2022
- ✚ Deadline for e-Cost registration and confirmation: 31 August 2022
- ✚ Training School days: 12-15 September 2022

## AGENDA

### DAY 1 (12.09)

#### 14.00 Welcoming remarks

##### Slot 1 **Luiza Spiru, Nick Gouldemond and Aleksandar Jevremovic**

Panel discussions: Introductory remarks and Prevention Overview: the understanding of the total care process and Challenges.

##### Slot 2 **Aleksandar Jevremovic**

Sustainability and privacy aspects of ICT solutions in health promotion and disease prevention: challenges with balancing between solutions, stability and innovation, as well as privacy/security related problems with solutions in this domain.

### DAY 2 (13.09)

#### Big Data in Health Care & Business Modelling

##### Slot 1 **Ivan Chorbev**

Big Data in Health Care - Scalable and Distributed Analysis and Learning from Big Data and current limitations to access of large-scale data in medicine (patient data, meta data, ethics, statistical approaches). Introduction to data processing. Ethics in data processing. Introduction to Big Data. Cloud Computing and its use in Big Data processing; Data analysis used in Precision medicine.

##### Slot 2 **Flaviana Rotaru**

Health entrepreneurship.

#### Lunch

##### Slot 3 **Nick Gouldemond**

Value-based business modelling and procurement strategies from a provider and payer perspective.

##### Slot 4 **Panel Discussion**

Ivan Chorbev, Flaviana Rotaru, Nick Guldemond

**DAY 3 (14.09)**

Slot 1 **Luiza Spiru and Mircea Marzan**

Predictive, Preventive and Personalised Medicine in the new paradigm of Longevity Medicine.  
Digital interventions in mental health for older adults – present and perspective.

Slot 2 **Maddalena Illario**

Overview to innovative approaches to disease prevention and health promotion. Building synergies & collaborative approaches: mHealth Hub experience.

**Lunch**

Slot 3 **Stefan Busnatu**

Reinventing the patient doctor communication in the eHealth era.

Slot 4 **Panel discussions**

Luiza Spiru, Mircea Mărzan, Maddalena Illario, Ștefan Busnatu.

**DAY 4 (15.09)**

Practical Views

Slot 1 **Flaviana Rotaru**

Workshop Practical Views.

14:00 **Concluding remarks**