I offer my expertise to participate

X I am planning to coordinate a proposal and I am looking for partners

Short summary of my partner search (3 lines max.):

We aim to link with two top-class leading research groups from EU in order to raise the excellence and reputation of our institution in scientific, research management and administrative aspects

**Topic**

Topic we are interested in:

Twinning Bottom-Up (HORIZON-WIDERA 2023-ACCESS 02-01)

**Project information**

Tentative title:

Sarcopenia and sarcopenic obesity in survivors of pediatric onco-hematological diseases

Project idea:

Survival rates in onco-hematological disorders diagnosed in childhood and adolescence have improved significantly in the last decades, leading to an increase in long-term survivors. However, more than half of survivors will exhibit chronic treatment-related morbidities much earlier in life. The late effects of cancer treatment include disturbances in body composition, such as lean mass (LM) deficits and fat mass (FM) excess that may result in both frailty and an increased metabolic risk. Sarcopenia (a syndrome of decreased muscle mass and impaired muscle function) and sarcopenic obesity (skeletal muscle wasting in the setting of excess fat) have been increasingly recognized as important prognostic indicators in adult oncology, but the reports are scarce for pediatric population. Unfavorable changes in LM and FM manifest early in therapy and are associated with altered chemotherapy metabolism as well as increased treatment-related morbidity and mortality. Studies have shown that BMI is a poor predictor of body fatness in childhood cancer survivors (CCS) population where diminished LM has been documented. In this study we aim to determine adiposity and LM by dual-energy x-ray absorptiometry (DXA) and compare it with conventional anthropometry in order to identify the association with new markers of cardio-metabolic risk (uric acid, adiponectin, hsCRP, leptin, and apolipoprotein B) in survivors of pediatric onco-hematological diseases. In addition, the muscle function will be evaluated by handgrip test and 6-min walk test and quality of life (Qol) will be assessed using two survey instruments, one used for children with various chronic paediatric disorders (PedQL) and one that was validated for cancer survivors (SF-36). The results will be compared to QoL scores from age and sex matched healthy children (control group).
We hypothesized that excess adiposity will be associated with an increased metabolic risk and low muscle mass would be associated with impaired physical function and QoL for survivors of pediatric onco-hematological diseases. Early identification and adequate treatment of sarcopenia and sarcopenic obesity will lead to decreased morbidity/mortality in survivors of onco-hematological disorders and interventions to address components of frailty (low muscle mass, weakness) may improve function and QoL among CCS.

This study will provide a DXA surveillance strategy for CSS that could facilitate the early identification and treatment of sarcopenia and sarcopenic obesity among survivors of pediatric onco-hematological diseases with the goal to prevent the long-term morbidity that has a negative impact on QoL.

We are looking for EU partners with expertise in the long-term management of CCS in order to enhance our scientific competence, raise our international visibility and reputation, and thus strengthen the participation and success rate in research funding proposals submitted by our multidisciplinary team.

By increasing networking capabilities we aim to exchange best practice between our research group and EU partners. In addition, by joining a consortium we will be able to increase the number of patients enrolled in the study and this could help us identify the added value of body composition evaluation into a multiparametric prediction model for cardio-metabolic risk (medical history, demographic, lifestyle factors) in CCS.

Potential contribution of my organisation to the project:

- Scientific mediation. Capacity to build citizen participative scientific programs
- Coordination of scientific projects and capacity to write down a scientific and cultural program.
- Communication skills
- Research approaches and patients database
- Capacity to organize large scale events
- Capacity to mobilize the research community, the business communities, and public authorities in its own country.

Role in the project:

- [X] Research
- [X] Training
- [X] Dissemination
- [ ] Technology Development
- [ ] Other (artistic residencies)

Experience as a coordinator:

- [X] Yes but National projects
- [ ] No

Experience as a partner in a collaborative project:

- [X] Yes
- [ ] No
Consortium:
University of Medicine and Pharmacy ‘Carol Davila’, Romania

Target Coordinator/Partner sought

Organisation type:

- Higher Education/University
- Public Research Organisation
- Large Scale Enterprise
- Small and Medium Scale Enterprise
- Public Body/Authority
- International NGO
- National NGO
- Other, please specify:

We are looking for the following expertise/competencies:

EU partners of established scientific excellence in the field of long-term follow-up of childhood cancer survivors

Contact details

<table>
<thead>
<tr>
<th>Contact person</th>
<th>Luminita Cima</th>
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<tbody>
<tr>
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</tbody>
</table>

Additional information on the organisation (previous projects, publications, etc.):

References

