## **Horizon Europe Partner Search Form**

Link: <a href="https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic">https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic</a>
details/horizon-widera-2023-access-02-01
<ul> <li>I offer my expertise to participate</li> <li>I am planning to coordinate a proposal and I am looking for partners</li> </ul>
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 (QoI) 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 oncohematological diseases with the goal to prevent the long-term morbidity that has a negative impact on Ool.

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, lifestylev 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			

Consortiun	n·			
University of Medicine and Pharmacy 'Carol Davila', Romania				
Target Co	ordinator/Partr	ner sought		
Organisatio	on type:			
X	Higher Education/University			
X	Public Resear	ublic 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 de	etails			
Contact person :		Luminita Cima		
Organisation:		UNIVERSITATEA DE MEDICINA SI FARMACIE "CAROL DAVILA", BUCURESTI		
Country:		Romania		
E-mail:		luminita.cima@umfcd.ro,		

## References

Phone:

Organisation Website:

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

Lee K. Sarcopenic obesity and 10-year cardiovascular disease risk scores in cancer survivors and non-cancer participants using a nationwide survey. Eur J Cancer Care (Engl). 2021;30(2):e13365. doi:10.1111/ecc.13365

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Guolla L, Morrison KM, Barr RD. Adiposity in Survivors of Cancer in Childhood: How is it Measured and Why Does it Matter?. J Pediatr Hematol Oncol. 2021;43(1):1-11. doi:10.1097/MPH.0000000000001988

Pluimakers VG, van Santen SS, Fiocco M, et al. Can biomarkers be used to improve diagnosis and prediction of metabolic syndrome in childhood cancer survivors? A systematic review. *Obes Rev.* 2021;22(11):e13312. doi:10.1111/obr.13312

Zembura M, Matusik P. Sarcopenic Obesity in Children and Adolescents: A Systematic Review. Front Endocrinol (Lausanne). 2022;13:914740. Published 2022 Jun 1. doi:10.3389/fendo.2022.914740

Sack C, Ferrari N, Friesen D, et al. Health Risks of Sarcopenic Obesity in Overweight Children and Adolescents: Data from the CHILT III Programme (Cologne). J Clin Med. 2022;11(1):277. Published 2022 Jan 5. doi:10.3390/jcm11010277