

A Collective Intelligent Platform to Support Cancer Champions



Welcome to the third issue of the LifeChamps Newsletter!

We are pleased to announce the publication of the third issue of the LifeChamps newsletter.

LifeChamps is a 3-year Research and Innovation Action (RIA), running from 2019 to 2022, funded under Horizon 2020. Its main focus is on delivering a smart, personalised and secure platform that will monitor health outcomes and address cancers' comorbidities of older cancer survivors by preventing long-term side effects and improving Quality of Life (QoL).

Vision statement:

We believe in a society where ageist stereotypes and discrimination against older adults will be eliminated from the clinical practice.

The LifeChamps project aims to support and deliver the highest care and QoL to older cancer patients, their caregivers and clinicians, using emerging developments in the fields of Big Data, Data Analytics, and Artificial Intelligence. Furthermore, LifeChamps' objective is to disrupt Big Data modelling, analysis, and aggregation under a novel context-aware data-intensive and large-scale analytics framework towards delivering person-centred care solutions for three different types of cancer (breast cancer, prostate cancer and melanoma), most prevalent in the older age.



The Role Of Dell Technologies In LifeChamps Project



LifeChamps HPC cloud engine

The LifeChamps' partner Dell Technologies is working on the data analytics and processing for modelling and insights' extraction regarding cancer survivors' treatment, monitoring and follow-up, focusing on frailty analysis and QoL improvement. Moreover, Dell Technologies develops and deploys management tools for monitoring, migration and on-demand scale-up of Big Data applications based on the HPC infrastructure.

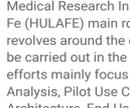
[Read more](#)

LifeChamps Cloud To Edge Control Plane

Dell Technologies is leading the development of the Cloud to Edge Control Plane. This task aims to reduce operational costs by focusing on the control plane to provide a solution for LifeChamps's Edge premises sensing platform components. The Cloud to Edge Control Plane defines the control plane of the Lifechamps platform to the Edge devices deployed at the Edge of the network (e.g., patients' homes).

[Read more](#)

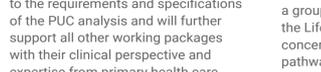
HULAFE's contribution to LifeChamps project



Medical Research Institute of Hospital La Fe (HULAFE) main role at LifeChamps revolves around the clinical pilots that will be carried out in the project. HULAFE's efforts mainly focus on Requirements Analysis, Pilot Use Cases and Functional Architecture, End-User Applications and Clinical Decision Support and Pilots Specification, Demonstration and Evaluation. Furthermore, HULAFE acts as an advisor by transferring the clinical point of view for the development of the LifeChamps platform.

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APCs role in LifeChamps project



APC contributes to LifeChamps as a Pilot Use Case provider for PUC2 and as task leader of the LifeChamps Health Economic Analysis and Economic Impact task. In addition, APC has contributed to the requirements and specifications of the PUC analysis and will further support all other working packages with their clinical perspective and expertise from primary health care.

APC has the opportunity to consult clinical experts relevant to the project from all Region in Stockholm. Moreover, at APC, the multidisciplinary team CaPrim (Cancer in Primary care) can

support different tasks and assist the APC LifeChamps team in planning a real-life pilot with relevant metrics.

Recently the APC team conducted a virtual workshop on melanoma care with a group of clinical experts affiliated with the LifeChamps project. Discussions concerned the melanoma care process pathway, alongside necessary clinical training and education for physicians in primary care – this in relation to the activities and planning of the future APC pilot use case in the LifeChamps project and other related projects.

[Read more](#)



M5 Teams workshop with the clinical expert/teledermoscopy group at APC/RS Stockholm. From upper left: Marie Sedvall, specialist in Family Medicine, teledermoscopy expert; Elinor Nemlander, specialist in Family Medicine, PhD candidate at KI - Cancer in Primary Care; Manos Kokorokos, licensed physician, research associate APC; Eliya Abedi, specialist in Family Medicine, PhD candidate at KI - Cancer in Primary Care; Jan Lapins, specialist in dermatology, associate professor at KI; Fedra Amorim, specialist in Family Medicine, teledermoscopy expert; Panos Papachristou, specialist in Family Medicine, researcher at APC and KI. Missing: Lina Ivert, specialist in dermatology, PhD candidate at KI

LifeChamps Multimodal Sensing Platform

As part of the LifeChamps platform, a multimodal sensing platform is being developed to support cancer champions and enhance their well-being. The development of the sensing platform is a challenging endeavour requiring transversal collaboration among partners contributing with very different but complementary competencies.

In the LifeChamps project, The Medical Technology and Digital Health group at CLINTEC, KI, has led the efforts related to sensing aspects of the LifeChamps platforms in general and wearable sensing in particular. Now that the sensors have been selected for the different use cases, they will continue working further, coordinating the effort

of Lifechamps partners to finalise the development of the Lifechamps platform and supporting clinical partners with the implementation of their use cases.

How is being with innovation projects in digital health during COVID19?

The LifeChamps project aims to improve follow-up care for older people with cancer. We refer to them as Champions to honour how they continue to thrive despite the cumulated burden in their lives.

As developers of a digital solution, it is not surprising that LifeChamps partners from Greece, Spain, Sweden, Portugal, Netherlands, Scotland have managed to move all the communication to digital platforms like Teams and Zoom. Nevertheless, access to

clinicians, patients, and their families has been a big challenge. Following the vaccination campaigns, we hope for an uncomplicated and safe interaction with our main stakeholders' clinicians, patients, and their families for the rest of the project's timeframe.

5P – “Cancer Survivorship – AI for well-being” Cluster

Vision

‘To boost the adoption of best practices of participatory research in Artificial Intelligence for healthcare and well-being for the benefit of EU citizens.’

In April 2021, five EU-funded projects, the OCTO Research Office at Dell Technologies, QUALITOP and LifeChamps, focusing on healthcare and well-being, joined forces to a cooperative cluster for sharing their experience regarding end-users and their acceptance of the various developing solutions.

a participatory research vision sharing a common approach. With motto “We don't work in silos”, the “Cancer Survivorship – AI for Well-being” cluster is collaborating to ensure that all the projects involved adopt a highly user-centric approach to their solutions.

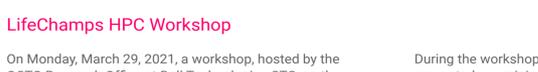
‘It will boost the adoption of best practices of participatory research in Artificial Intelligence for healthcare and well-being for the benefit of EU citizens.’

Joint initiatives

The cluster engages internal and external stakeholders and end-users to obtain their views and verify and validate the ongoing work of the engaging projects. To this end, it has been organising a series of “Meetings of Minds”, two of which will take place later in 2021.

In addition, an industry-focused event is planned for 2021 to showcase ongoing projects' work and obtain early feedback on it. The cluster intends to strengthen the wider take-up and interest in the outcomes of the participating projects and explore the possibilities for an industrial uptake of their outcomes.

Cluster members



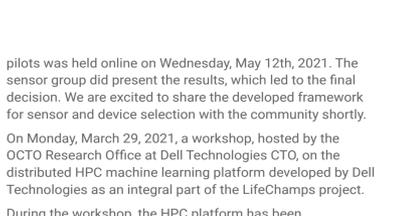
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LifeChamps Events – The Highlights

LifeChamps HPC Workshop

On Monday, March 29, 2021, a workshop, hosted by the OCTO Research Office at Dell Technologies CTO, on the distributed HPC machine learning platform developed by Dell Technologies as an integral part of the LifeChamps project.

During the workshop, the HPC platform has been presented, examining how it is helping the LifeChamps project to overcome the escalating challenges that arise as models and datasets continue to evolve.



Watch the HPC Workshop's video: [LifeChamps HPC Workshop](#)

LifeChamps sensor Workshop

The selection of sensing devices has been a challenging goal for the project's partners who, after several meetings, developed criteria based on requirements, drawn the use cases and the implementation constraints.

pilots was held online on Wednesday, May 12th, 2021. The sensor group did present the results, which led to the final decision. We are excited to share the developed framework for sensor and device selection with the community shortly.

The clinical needs have been identified through workshops and interviews with clinicians as well as literature studies. The criteria including evaluating Sensors from different categories across four dimensions: clinical, technical, economic, and user acceptance. Each dimension includes several criteria customised for selecting the best sensors for the different use cases within the LifeChamps project.

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Presentation Of LifeChamps H2020 Project In The “Catch Up Meeting” Of ENoLL

On Tuesday, the 27th of April 2021, held online the “Catch-Up Meeting” of the European Network of Living Labs (ENoLL), aiming at the mutual know-how exchange, the fostering & exploration of synergies and collaboration among ENoLL's members and the network's Living Labs. In this framework, the Aristotle University of Thessaloniki, the lead partner of LifeChamps H2020, represented by the Project Coordinator Prof. Panos Bamidis and Project's Managers, was invited to present the LifeChamps project's aims and objectives. AUTH is considered one of the influential members of ENoLL, through its Living Labs, the Thessaloniki Active & Healthy Ageing Living Lab (Thess-AHALL) (part of the AUTH Medical Physics & Digital Innovation Lab, School of Medicine).

[Read more](#)



LifeChamps and Engagement with Safe Haven at NHS GG&C

On the 19th May 2021, the UoFG coordinated an initial meeting between a representative of Safe Haven, a department within Glasgow & Clyde Health board in the National Health Service (NHS), Scotland [https://www.nhsggc.org.uk/about-us/professional-support-sites/glasgow-safe-haven/], and representatives of LifeChamps (AUTH, UPV, Altran, Salumedia, Cyberlens). This initial meeting was to ascertain if LifeChamps could access specific information via data extraction from Electronic Health Records. The meeting had positive outcomes and established direct communication with Safe Haven.

[Read more](#)

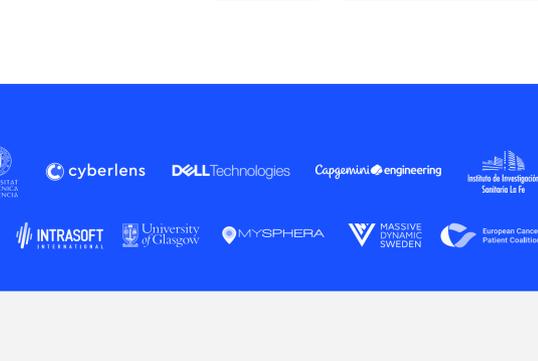
European Week Against Cancer

During the European Week Against Cancer, and in the light of the EU Beating Cancer Plan, the European Cancer Patient Coalition (ECPC), the Cancer Complications and Comorbidities Initiative Members and European Parliamentary Inter-group “Challenge Cancer” co-organised five webinars, taking place from Tuesday 25th to Monday 31st of May 2021. These webinars presented various issues surrounding Cancer Complications and Comorbidities, to the extent that Cancer complications and comorbidities are addressed in the implementation of the Europe's Beating Cancer Plan, and to further pursue recognition of these comorbidities, increasing awareness on relevant stakeholders and the public.

The events reached a broad and varied audience, equally composed of medical and research professionals, non-governmental organisations, general public, as well as patients, patient advocates, and policy makers.

On the 25th May, during the first webinar, Antonella Cardone, Director of ECPC, presented the White Paper entitled “The impact of cancer-related comorbidities on patient treatment, treatment efficacy, survivorship, and quality of life, which treated about subject surrounding the impact on cancer-related complications and comorbidities on patient treatment, treatment efficacy, survivorship, and quality of life. A special emphasis was given on cancer and ageing, in the context of which, the main aims of the LifeChamps project were briefly presented by the ECPC Director.

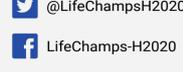
Click on the link to find more on the ECPC White Paper or watch the webinars videos: <https://ecpc.org/policy/cancer-comorbidities/>



Consortium Partners

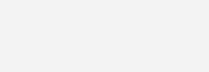


Get in Touch



LifeChamps Project

LinkedIn Group:
LifeChamps: A collective intelligent platform to support cancer champions



www.lifechamps.eu



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