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Dear subscriber,

ALADDIN is an Erasmus+ project, pursuing the integration of additive manufacturing (3D printing) in the health sector. Additive manufacturing (AM) is the production of 3D objects using a digital file. AM has vast potential in the health care sector, however, it has not been fully adopted in the sector. ALADDIN will help its adoption by developing a specific training programme on AM in hospitals. The training programme will target health professional working in hospitals and engineering students with a future in the health sector. The project will therefore develop customised learning content, teaching guide and eLearning platform.

During the last months of the project, the partners will finish uploading the modules into an eLearning platform supported by Moodle, while running the pilot courses in English, Spanish and French.

In addition to project updates, this newsletter edition gathers articles and news related to additive manufacturing in healthcare.

Happy reading!

News from the EU & Global Agencies

- [Regulation on EMA's extended mandate becomes applicable](#)
- [Proposal for a Regulation of the European Parliament and of the Council on the European Health Data Space](#)

News from AIMPLAS

Tailor-made medicine is now a reality. AIMPLAS, together with the General Hospital of Valencia, has developed this flexible 3D printing project for the planning of less invasive surgeries, with less costs and errors.

AIMPLAS is working on a comprehensive flexible 3D printing service for the planning of surgeries and for obtaining complex geometry orthoses with realistic anatomical models that faithfully recreate the different properties and characteristics of organs, tissues and pathologies and allow surgical planning in multiple hospital services that are totally personalised and adapted to each patient to reduce the side effects of treatments.



Inauguration of the LINUX laboratory of IDIVAL

On Friday 22 April, the new LINUX space was inaugurated in the presence of the Regional Minister of Health, Raúl Pesquera, and the Vice-President of the Regional Government, Pablo Zuloaga in a ceremony that was also attended by the Director General of Digital Transformation and User Relations, Santiago García; the Managing Director of the Cantabrian Health Service, Rafael Sotoca, the Director General of Organization, Inspection and Pharmacy, Raquel Olalla, accompanied by the Scientific Director of IDIVAL, Marcos López Hoyos and the Director of Management, Galo Peralta.

LINUX is aimed at promoting projects to improve the health system linked to the incorporation of new technologies and the conceptualization of care and management processes with a multidisciplinary and multi-institutional approach.

A new space designed to foster creativity, innovation and the co-creation of multidisciplinary projects, it has a prototyping laboratory, an experience and usability room, a team work room, four individual offices and an open room for meetings or teamwork in a more informal and relaxed atmosphere that invites creativity.

This new IDIVAL space has been refurbished thanks to an investment of 60,000 euros from the Directorate General for Digital Transformation and User Relations.

At the inauguration, Raúl Pesquera framed "this new laboratory within the objectives of the Regional Ministry of Health to internationalize and internalize, in order to attract talent and generate the entire process of creating and executing projects with its own resources. An

objective that has been extended to the Marqués de Valdecilla University Hospital and its professionals, together with all the IDIVAL research staff". "With this initiative we are making a tangible commitment to innovation in health and the co-creation with professionals and patients of new digital health solutions", explained the Minister.

A multifunctional workspace to develop innovation projects at the service of healthcare professionals and with the aim of improving patient care. In these spaces, the usability of the technology will be evaluated, and research and innovation in strategies that contribute to improving the healthcare system will be promoted.

As an experience laboratory, Linnux will focus on evaluating the usability of technology, software, processes and spaces through observation and testing using specific methodologies including observation, heuristics, usability testing and testing technology such as eye tracking systems. The focus will be on e-Health systems in general and telemedicine in particular, including patients as recipients and end users of all tools.

As a creativity laboratory, it will also have the function of raising awareness, research, experimentation, creation and launching of new ideas that are generated from the creative capacities of people through the use of 'design thinking' as a basic tool.

In addition, as a prototyping and design laboratory, Linnux will serve to generate basic designs and prototypes for the conceptualization and testing of equipment as part of the development of new devices that can serve as conceptual tools within the innovation projects of the healthcare system.

These spaces, as well as being available to all staff of the public health system in Cantabria, are also expected to be used under specific agreements by external institutions.

HOPE Agora



On 3 and 4 June 2022, the HOPE Agora took place in Brussels. The HOPE Agora is closing the HOPE Exchange Programme, a training period of four weeks intended for professionals with managerial responsibilities working in hospitals and healthcare facilities.

This year's programme of the Agora was "Using Evidence in Healthcare Management". This event was the occasion for the team to present the ALADDIN project to all the participants! Our participants in Denmark also mentioned the role of a 3D Print Center in creating and using evidence.

3D Printing Expo in Ireland

The 3D Printing Show is the largest professional 3D printing show and additive manufacturing conference and expo in Ireland. As an attendee, you'll explore the business applications of 3D printing through conference sessions led by industry experts, demonstrations of the latest 3D printers and services, and programming for designers, professionals, and makers. Meet with over 30 exhibitors and understand how 3D printing is revolutionizing industries including manufacturing, medicine, architecture, aerospace, and more.

It was held in the RDS Simmonscourt, Dublin on 25th-26th May 2022.

Interview with Carlos Pando, Centre Manager from 3D WIT

3DWIT is an initiative of the SEAM Research Centre in Waterford, now part of the South East Technology University (SETU). 3DWIT offers Additive Manufacturing training programs suitable for all industry audiences, from absolute beginners all the way to experienced engineers, designers, production technicians and business professionals. Besides the training activity, 3DWIT also offers prototyping and manufacturing services in metal

3dprinting, in varied materials like steel or stainless-steel alloys, reactive materials such as Titanium, Aluminium or Magnesium, or other high-grade alloys (Inconel).

www.3dwit.ie

The seamless collaboration with the SEAM Research Centre, with its top-level equipment and highly skilled team, allows us to offer the added value of a full-cycle Quality Control of 3d printed parts. SEAM's capacity in this space ranges from powder characterisation (powder shape, powder size and distribution, apparent density, flowability), raw materials chemical analysis, metallography and crystallography, all types of mechanical and surface testing (roughness, SEM, TEM), up to metrology of the final parts with internal analysis through X-ray CT scanners, or reverse engineering.

www.seam.ie

We recently received a delegation of LEO (Local Enterprise Office) managers from Waterford, Wexford, Kilkenny, and Carlow. During the meeting, they expressed their interest in understanding how 3D printing can bring value and competitiveness to the industry in the Region and how to translate the message to their client companies. We discussed the potential benefits derived from manufacturing flexibility, tool-less applications, fully digital process and the extra layer of complexity. 3DWIT supplies training personalised to their level of knowledge and needs.

Besides serving the industry needs today, we care about their future needs too. We participate in programmes to disseminate knowledge in 3d printing, like the I-Form with the Junior Cycle for Teachers - Technologies (JCT4), an SFI Discover-funded project aimed at upskilling teachers in the use of 3D printing technology in the classroom. A series of training workshops contribute to building teachers' confidence and ability to link 3D printing projects to the curriculum and discuss manufacturing careers with their students. The first cohort of 120 teachers attended online classes and hands-on sessions where they discussed their progress, difficulties, and needs.

<https://www.i-form.ie/communityengagement/secondaryschools/>

Interesting Articles

- [Occupational safety in additive manufacturing](#)
 - [Additive manufacturing in respiratory sciences - current applications and future prospects](#)
 - [AIMPLAS crea una 'garra' robot para facilitar la rehabilitación de lesiones musculoesqueléticas](#)
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Upcoming

- ALADDIN e-learning platform

In September, ALADDIN project will be finalised and all modules will be released on the e-learning platform.



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