HOW PHOTONICS CAN **SUPPORT YOU**

Photonics empowers the healthcare industry in countless ways. From faster, more accurate disease diagnosis and better medical treatment to improved medicine effectiveness and precise cancer detection through optical methods of medical imaging and in-vitro diagnostics.

Innovation with the advantages of light reduces the burden on healthcare and ensures a healthier, happier life.

Start your photonics innovation journey with our support.

DEMO & EXPERIENCE CENTRES

In addition to providing innovation support, PhotonHub partners accross Europe provide both onsite and online training for industry. This extensive training offering is presented as a single online catalogue of the European Photonics Innovation Academy.

ONSITE TRAINING OPPORTUNITIES AT DEMO AND EXPERIENCE CENTERS

Discover and become fully immersed in photonics through in-person training delivered at the Demo & Experience centers listed below. The schedule of upcoming training can be found at photonhub.eu or by scanning the QR code.

- IMEC
- Joanneum Research
- VTT
- Fraunhofer
- Leibniz IPHT
- FORTH
- UCC
- Politecnico di Milano
- Łukasiewicz IMiF
- WUT
- VLC
- EPFL

FREE **ONLINE** INTRODUCTORY TRAINING OPPORTUNITIES

Half-day online sessions are delivered throughout the year.

View our complete training schedule and register your interest at photonhub.eu or by scanning the QR code.

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PhotonHub™

PHOTONICS21
PHOTONICS PUBLIC PRIVATE PARTNERSHIP

DISCOVER HOW YOU CAN

- ✓ **Boost prevention**
- ✓ **Diagnose diseases**
- ✓ **Manage chronic conditions**
- ✓ **Advance therapy options**

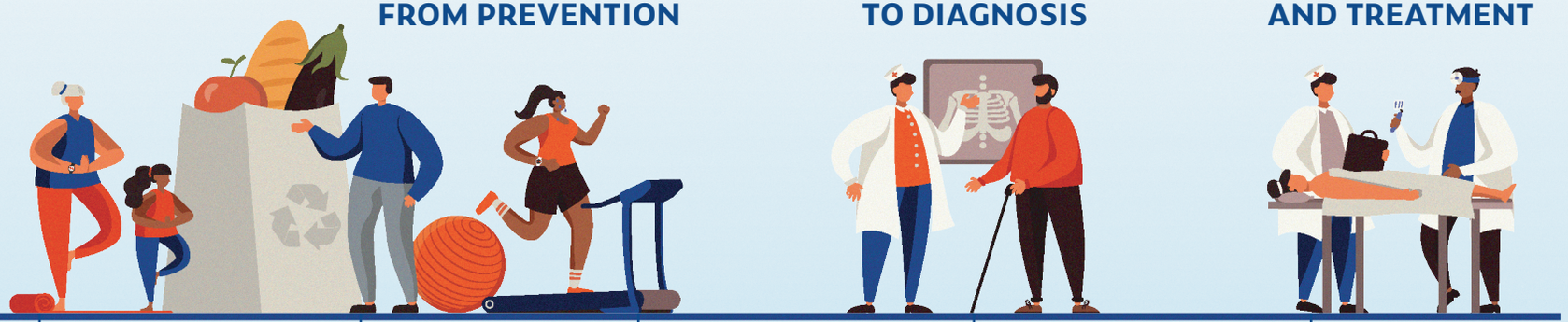
Explore all possibilities on photonhub.eu

Avail of a **free initial assessment by top experts** for European SMEs

Delve into how your business could minimise the risk and expense of deep technology innovation through "test-before-invest" support from PhotonHub.

PHOTONICS IS EMPOWERING THE COMPLETE CARE SPECTRUM

FROM PREVENTION TO DIAGNOSIS AND TREATMENT



Monitoring vital signs

Helping with informed choices about food intake

Assessing muscle strength, endurance and fatigue

Creating high-resolution images of internal organs and structures

Delivering precise and minimally invasive treatments

EXAMPLES OF COMPANIES **SUPPORTED WITH PHOTONICS INNOVATION PROJECTS**

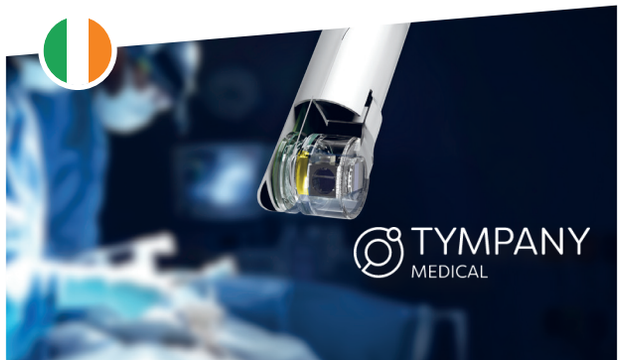
FIND MORE ON PHOTONHUB.EU

REDUCING DIAGNOSTIC TIMES THROUGH OPTICAL SENSORS

In-vitro diagnostic (IVD) products, especially those for body fluids such as whole blood, serum, plasma or urine, require a high level of precision in temperature measurement. EXIAS Medical partnered with Joanneum Research on introducing photonics to their analysis systems, enabling them to achieve shorter measurement times and a higher standard of accuracy and precision, especially for blood gas and glucose readings. This novel solution is applicable to the analysis systems used in hospitals, laboratories or large medical practices.
Scan the QR code overleaf to watch a short video on this project.

IMPROVING PROCEDURE ACCURACY THROUGH HIGH-QUALITY ILLUMINATION AND HIGH-RESOLUTION IMAGERY

Shorter and less invasive procedures improve patient outcomes and ensure faster recovery. Photonics has been a key enabling technology for Tympany Medical in the development of their next-generation endoscope for minimally invasive ear, nose and throat (ENT) procedures. Vrije Universiteit Brussel (VUB) worked with the company on developing a prototype, involving the Tyndall Institute for their packaging expertise. The resulting endoscope enhances the capabilities of the surgeon by providing panoramic vision and self-cleaning functionalities. *Scan the QR code overleaf to watch a short video on this project.*



ASSESSING POST-OPERATIVE RECOVERY USING REMOTE OPTICAL MONITORING

Reducing the need for multiple hospital attendances following surgery can greatly improve patient outcomes. Real Implants Ltd. worked in collaboration with Optoelectronics Research Centre (ORC) on a feasibility study to explore the use of optical monitoring to assess the repair of fractures fitted with a 'smart' implant and enable real time, remote monitoring of healing. The aim of this solution would be to measure the healing response, without patient journeys to hospital and numerous x-rays, thereby reducing the cost of treatment while increasing convenience for the patient and improving their recovery and rehabilitation.