

United European Gastroenterology (UEG) Brussels Office Rue Archimède, 17 1000 Brussels, Belgium

Transparency Number 665390317626-77

Austrian Register of Associations N° 570340662

Twitter twitter.com/my_ueg Facebook facebook.com/myUEG

publicaffairs@ueg.eu www.ueg.eu

UEG Key priorities for Horizon Europe Strategic Plan on Cluster 1 and its health-related challenges

UEG priorities for challenge 1: Staying healthy in a rapidly changing society

UEG welcomes the focus on "risk factors such as smoking, drinking, physical inactivity, and obesity" and fully agrees on the importance of fostering "healthier lifestyles and behaviours, make healthier choices (such as healthier food choices)". High level of alcohol consumption, obesity and unhealthy nutrition are risk factors for many gastrointestinal and liver diseases. Due to the projected rise in "unhealthy behaviour" and the ageing population the health related and economical burden of these diseases will rise simultaneously. Fostering means and measures for prevention is essential to decrease this burden. Furthermore, the absence of globally agreed scientific targets for healthy diets and sustainable food production has further hindered large-scale and coordinated efforts to transform the global food system. Cooperation with Horizon Europe's Cluster 6 on this is needed.

UEG also receives very positively the targeted impact of improvement of "physical and mental health and well-being of children". Obesity in childhood represents a particularly worrying health hazard to the European citizens and has been linked to numerous health complications that endure into adulthood. Today in Europe, one in three children aged 6 to 9 are overweight or obese. Paediatric liver disease is emerging as one of the most worrisome complications of childhood obesity. With growing evidence of the link between nutrition in early life and obesity, we must prioritise research into the underlying mechanisms and focus our resources and training on novel, targeted prevention strategies, including those initiated during pregnancy and early childhood.

UEG priorities for challenge 3: Tackling diseases and reducing disease burden

UEG calls for an increased focus on funding for chronic diseases with life long- impact & research into environmental health determinants resulting in chronicity. Chronic digestive diseases cause lifelong suffering, reduce quality of life, and significantly lower productivity. The chronicity is associated with a significant economic burden – for example, direct medical costs for the treatment of non-alcoholic fatty liver disease is €35 billion per year and up to €5.6 billion for inflammatory bowel disease (IBD) in Europe. The pathogenesis of IBD, coeliac disease, chronic pancreatitis, functional gastrointestinal disorders and preventive opportunities are not fully known and need further research. It is, however, proven that genetic and environmental factors play a key role. All of these diseases pose a considerable socioeconomic burden across Europe.

Research into gut-brain axis. Functional gastrointestinal disorders represent a great burden in terms of quality of life and healthcare costs. A third of people suffering from irritable bowel syndrome report that they visited their medical



professional more than five times before receiving a diagnosis. To improve the lives of people with functional gastrointestinal disorders and to optimize patients' outcomes, there needs to be greater recognition of the disorders, and advancement of their scientific understanding.

Europe is currently facing a poor quality of paediatric digestive health across Europe and paediatric digestive diseases need important research efforts. For instance, incidence of paediatric Inflammatory Bowel Disease's continues to increase rapidly. To halt the impact and severity of the disease, further research is needed to understand the complex physical, psychological and social needs of children with IBD, propose tailored care and services, enable the development of effective treatments and prevention strategies, and understand the causes through research into early life programming. Also, coeliac disease prevalence is increasing in an alarming rate and strategies for prevention, diagnosis and treatment are urgently needed. Paediatric liver disease is increasingly common in young children and involves a need for lifetime care. Research is required to reduce incidence and improve diagnosis.

Further concerted research on the microbiome: The gut microbiome plays a key role in several aspects of disease, including pathogenesis, phenotype, prognosis, and response to therapies. It is also an important diagnostic and therapeutic biomarker. New insights about the importance of the gut microbiome in disease onset and progression would open new possible strategies for prevention and treatment that may contribute to the sustainability of healthcare systems by keeping the increasing healthcare costs under control.

Antimicrobial resistant infections remain a major threat to health in the EU. Studies are now showing that antibiotic overuse results in a loss of treatment efficacy and may negatively affect human gut microbiota. Therefore, strategies to overcome treatment resistance such as faecal microbiota transplantation need to be put in focus.

The liver diseases, due to hepatitis B and C, affect millions of Europeans. Effective hepatitis virus surveillance systems are now in place, but hepatitis B and C continue to exert a heavy personal burden on affected individuals, with frequent physician visits, poor work performance and discrimination in the workplace.

Research on public awareness and better treatments for affected persons is needed

<u>UEG priorities for challenges 4, 5, 6: Ensuring access to innovative, sustainable and high-quality health care in the EU; Unlocking the full potential of new tools, technologies and digital solutions for a healthy society; Maintaining an innovative, sustainable and globally competitive health industry</u>

UEG underlines the importance of screening programmes to improve sustainable health care systems. Although colorectal screening programmes have been implemented across Europe, participation rates vary widely, affecting treatment efficiency, survival rates, and impacting the high annual cost of colorectal cancer care (13 billion €) across Europe. Furthermore, appropriate



screening programmes for the detection of other digestive cancers, like gastric and oesophageal cancers, should be considered, and further research into robust biomarkers should be prioritised.

UEG further calls for increased funding in the field of disruptive technologies in gastroenterology. Despite the progress made in endoscopic techniques, there is still a need for improvement, for e.g., better *in vivo* diagnosis of early neoplastic lesions of the digestive tract, but also for the development of less invasive techniques. Furthermore, there are concerns over the precision and provision of endoscopic ultrasound for pancreatic cancer detection. We need to urgently refine these techniques for more accurate results.

Further research should focus on the exploitation of artificial intelligence, big data and machine learning, and next generation screening markers in gastroenterology (including microbiome and metabolome biomarkers) with the aim of increasing early disease detection and directing to a personalized treatment.

UEG recognises the value of "Health data accessibility and interoperability, with the creation of a European health cloud for research purposes". Europewide pseudonymized patients' registries and biobanking would facilitate improvement of diagnostics and treatment of almost all GI disorders.

UEG priorities for European Mission on Cancer:

The European Commission is called upon to enhance initiatives in the Mission area on Cancer. UEG calls for more research on digestive cancers, from detection to treatment.

Digestive cancers are the leading cause of cancer-related death (28%) in the EU. They are the most common type of cancer in Europe among men and the second most common in women. Importantly, some recent studies show that the age of the onset of some digestive cancers is decreasing, indicating the involvement of some environmental and thus potentially modifiable factors. It is now estimated that approximately half of all cancers are preventable, and thus through appropriate action, their burden could be reduced.

Colorectal Cancer (CRC) also faces worrying trends, with incidence rates in adults aged 20-39 increasing by 6% every year between 2008 and 2016, while overall CRC incidence rates increased 1.4% every year between 2005-2016. Research to understand the causes of this increase should be a key priority. Young-onset CRC is more aggressive, more likely to be diagnosed at an advanced stage, and more likely to be fatal than CRC diagnosed later in life.

The number of deaths related to pancreatic cancer has almost doubled in the past three decades and the number of cases and deaths are both estimated to increase by 40% in 2035. Pancreatic cancer is the deadliest cancer, with a 5 years survival of less than 10% and no progress for almost 50 years. With increased research, we can enhance our understanding of this deleterious disease, identify the correct tools to achieve earlier diagnosis, implement highly innovative



evidence-based methods of treatment including standardized surgery and perioperative neo- and adjuvant therapy and, ultimately, save more lives. Despite appalling patient outcomes, pancreatic cancer receives less than 2% of all cancer research funding in Europe.

Other digestive cancers, like gastric and oesophageal cancers, although less frequent, also require our attention since they are characterized by a particularly bad prognosis (overall survival not exceeding 25 and 10%, respectively), and are potentially preventable (adapted screening, early detection).

United European Gastroenterology (UEG) is a professional non-profit organisation combining all the leading European medical specialist (17) and 47 national societies focusing on digestive health. It acts as the united and trusted voice of European gastroenterology.

All information is taken from UEG materials unless otherwise stated:

- UEG Survey of Digestive Health Across Europe
- UEG Articles & reports: "Alcohol & Digestive Cancers: Time for Change"
 "Digestive Health Across Europe Issues, Challenges and Inequalities"
 "Pancreatic Cancer across Europe", "Paediatric Digestive Health Across Europe",
- UEG Position papers on <u>Digestive Cancers</u>, on <u>Horizon Europe</u> on "Reducing the Burden of Chronic Digestive Diseases"
- <u>Future research demands of the United European Gastroenterology</u>
 (UEG), Volume 7, Issue 6 of United European Gastroenterology Journal
- Pancreatic Cancer Europe: 10 things you need to know about pancreatic cancer https://www.pancreaticcancereurope.eu/about-us/mission-and-history/about-pancreatic-cancer/