

# MENHIR: Mental health monitoring through interactive conversations

Zoraida Callejas, MENHIR coordinator  
University of Granada (Spain)

“Cancer Survivorship – AI for Well-being” cluster



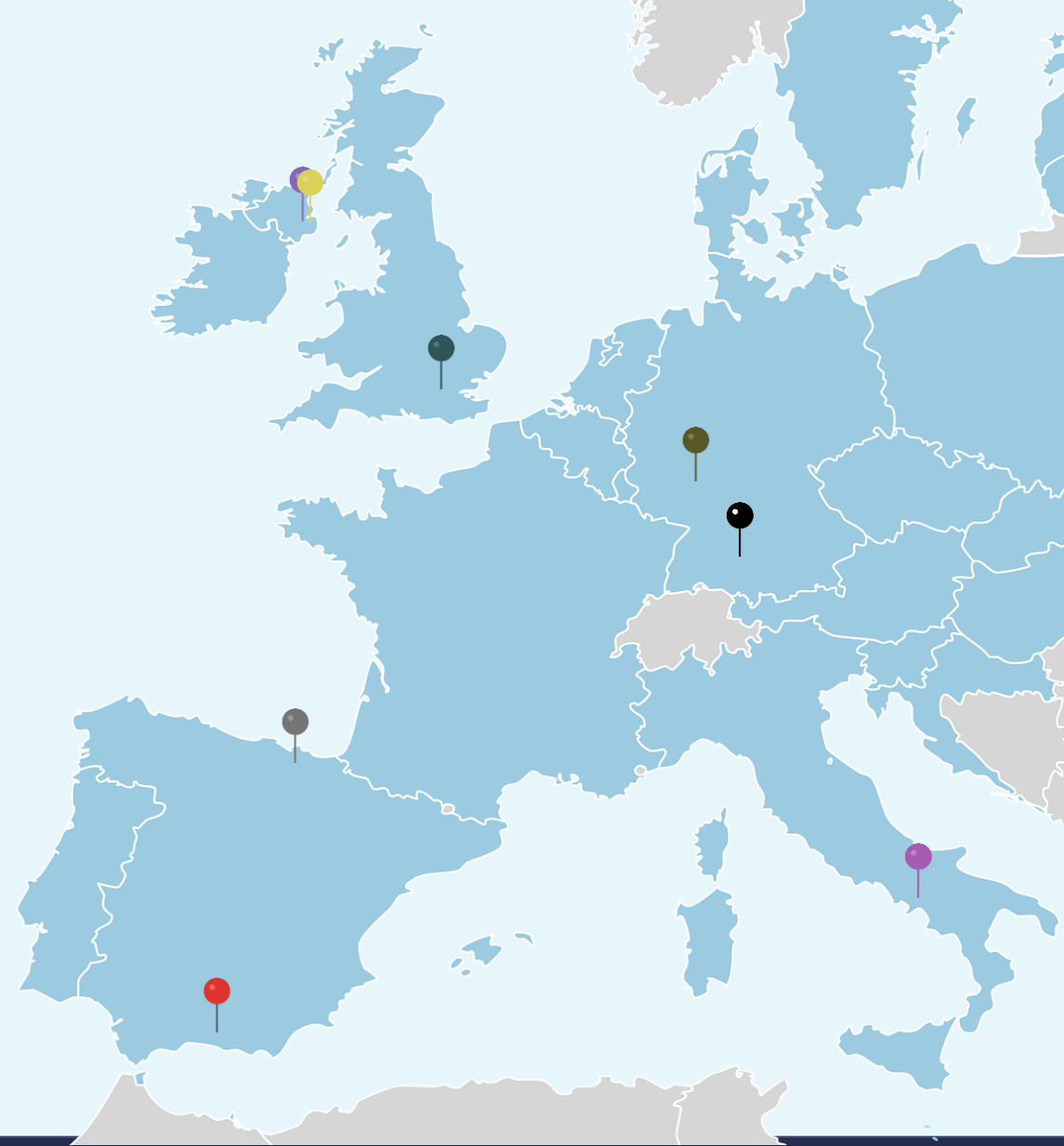
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 823907

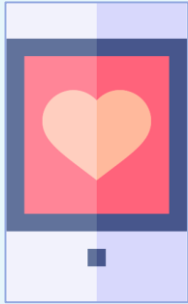




**Multidisciplinary cross-sectorial consortium**  
(ICT, psychology, mental health)

- Universidad de Granada (coordinator) - Academic
- Action Mental Health – Non-profit
- Ulster University - Academic
- Universidad del País Vasco - Academic
- Intelligent Voice Ltd. - Industrial
- Ulm University - Academic
- Università degli Studi della Campania Luigi Vanvitelli - Academic
- GLOBIT - Industrial





**Mental e-health** applications have the potential to **improve access** to mental healthcare, providing **opportunities to engage and empower** users in the self-management of mental ill health.



As demand increases for mental health care, to the point where it exceeds available resources of national health care services, there is potential for mental e-health solutions to **reduce waiting times and reach isolated areas**, offering flexible and immediate means of accessing help.



**Chatbots** can establish a new natural, **intuitive** and **user-friendly** interface to promote user participation in their own care, and help and support professionals.



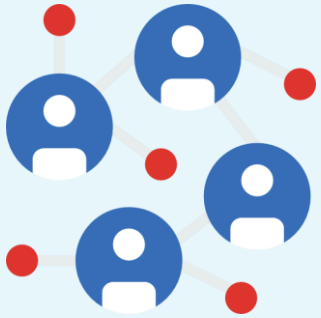
**Chatbots** can provide additional **support at various times of the day and night**, as well as rapid and appropriate interventions e.g. **signposting** to resources, appropriate **feedback** such as prompts, supportive messages, **copng strategies** and **intelligent reminders**.



Chatbots are also **intuitive** since they utilise **natural language**, which is the most natural form of human communication.



# MENHIR Challenges



Mental health,  
psychology,  
user modelling



Cross-modal  
analysis, user  
state recognition



Adapted dialogue  
management,  
communication styles  
and trust



Knowledge  
representation,  
storage,  
alignment,  
annotation and  
fusion



Multidisciplinary  
cross-sectorial  
work and  
co-creation



# MENHIR current advances



Analysis of mental health monitoring systems



Recording of human-to-human interaction



Transcription and annotation of interactional exchanges



Active listening repository



Perceptual studies (e.g. TTS)

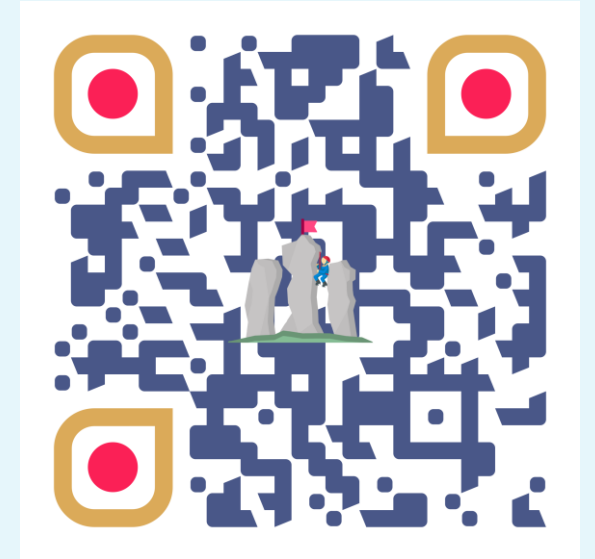
## For more information:



Visit our **website**: <http://menhir-project.eu>



Follow us on **twitter**: [@MenhirH2020](https://twitter.com/MenhirH2020)



# Thank you!

**MENHIR**

 #MENHIR\_H2020



These slides are shared under **CC 4.0 BY licence**. Attribution should be made to the H2020 MSCA-RISE **MENHIR Project** (ref. 823907)

<http://menhir-project.eu>

We would like to thank all users who have shared with licence *CC 3.0 BY* the icons we have used for this presentation, which have been retrieved from FlatIcon ([www.flaticon.com](http://www.flaticon.com)):

Freepik (<https://www.freepik.com>)

Ddara (<https://www.flaticon.com/authors/ddara>)

Twitter (<https://www.flaticon.com/authors/twitter>)

Prettycons (<https://www.flaticon.com/authors/twitter>)

Nikita Golubev (<https://www.flaticon.com/authors/nikita-golubev>)

Smashicons (<https://www.flaticon.com/authors/smashicons>)

SlidesGo (<http://slidesgo.com/>)

Icongeek26 ([https://www.flaticon.es/icono-gratis/bloc\\_1250280](https://www.flaticon.es/icono-gratis/bloc_1250280))