Third International Digital Mental Health & Wellbeing Conference 2025

Granada, Spain Aula Magna, Escuela de Arquitectura de Granada

Chairs

- Prof. Zoraida Callejas, University of Granada
- Dr. Patrick McAllister, Ulster University

Programme Chairs

- Prof. David Griol, University of Granada
- Dr. Colin Gorman, Pneuma Healthcare

Industry and Non-profit Chairs

- Leona Doran, Pneuma Healthcare
- James Gorman, Pneuma Healthcare

Local Organisation Chairs

- Prof. Francisco Abarca, University of Granada
- Daniel Calderón, University of Granada
- Juan Barrionuevo, University of Granada

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Final programme

DAY 1 - Wed. 21st May		DAY 2 - Thu. 22nd May		DAY 3 - Fri. 23rd May		
08:30	Registration opens			-		
09:00 - 09:15	Opening			-		
09:15 - 10:00	Keynote 1: Alessandro	09:00 - 9:45	Keynote 2: Frances Gardner	09:00 - 09:45	Keynote 4: Ann-Marie Küchler	
10:00 - 11:00	Vinciarelli Session 1: Workplace Wellbeing	09:45 - 11:00	Session 6: Families & Specialized Populations	09:45 - 11:00	Session 10: Youth Engagement & Perspectives	
11:00 - 11:30	Coffee break					
11:30 - 12:15	Session 2: Bullying, Coercion & Negative Incidents	11:30 - 12:55	Session 7: Personalisation & Al Applications	11:30 - 12:45	Session 11: Student Support	
12:15 - 13:00	Session 3: Posters			12:45 - 13:50	Session 12: Co-production & User-led Design	
13:00 - 14:30	Lunch			13:50 - 14:00	Closing	
14:30 - 15:45	Session 4: Engagement, Chatbots & Simulated Patients	14:30 - 15:15	Keynote 3: Juan Ignacio Godino			
		15:15 - 16:00	Session 8: Digital Phenotyping & Activity Monitoring II			
15:45-16:15	Coffee break	16:00 - 16:30	Coffee break			
16:15 -17:30	Session 5: Digital Phenotyping & Activity Monitoring I	16:30 - 17:35	Session 9: Virtual, Immersive & Contextual Interventions			
19:00	Flamenco show	20:30	Conference Dinner at Restaurante Carmen de las Tomasas			

[WED21] Conference Day 1

08:30 Registration opens Will remain open during the conference

- 09:00 09:15 Opening
- 09:15 09:45 Keynote 1:

Alessandro Vinciarelli (University of Glasgow) Is there a role for Al in psychiatric practice?

The goal of this talk is to show that Artificial Intelligence can help psychiatrists to avoid the most tedious and repetitive aspects of their work, thus saving time and energy for the most rewarding aspects of clinical practice. The underlying assumption of the talk is that mental health issues leave physical, machine detectable traces in the behaviour of people, especially when it comes to language (what people say) and paralanguage (how they say it). Therefore, machines can automatically detect such traces and infer from them possible pathologies with the help of AI. Two use cases – detection of depression in adults and identification of insecure attachment in children – will serve as a basis to highlight risks and opportunities in the relationship between AI and psychiatry, from the lack of explainability in state-of-the-art AI methodologies to the possibility of performing large-scale screenings of the population. A discussion on how to bridge the gap between AI and its users (especially in settings relevant to mental health) will conclude the talk.

Chair: Anna Esposito (Università degli Studi della Campania Luigi Vanvitelli)

09:45–10:00 **Q&A**

[WED21 - Session 1]: Workplace Wellbeing

Chair: Anna Esposito (Università degli Studi della Campania Luigi Vanvitelli)

10:00–10:10 **Predicting and explaining improvement in work & social adjustment in clients attending police service psychological therapies** *Byron Graham* (Queen's University Belfast), <u>Maurice Mulvenna</u> (Ulster University), <u>Raymond</u> <u>Bond</u> (Ulster University), <u>Anne Moorhead</u> (Ulster University), <u>Norry McBride</u> (Police Rehabilitation and Retraining Trust)

10:10-10:20Enhancing workplace wellbeing: The development of a digital mental
health & wellbeing hub for employees

<u>Muhammad Saad</u> (Ulster University & Action Mental Health), <u>Patrick McAllister</u> (Ulster University), <u>Maurice Mulvenna</u> (Ulster University), <u>Colin Gorman</u> (Ulster University), <u>Raymond</u> <u>Bond</u> (Ulster University), <u>Orla McDevitt-Petrovic</u> (Ulster University), <u>David Babington</u> (Action Mental Health), and <u>Jonny Cirnaru</u> (Action Mental Health)

10:20–10:30 Mental health in the workplace: Evaluating the impact of counselling services in an Employee Assistance Programme <u>Gillian Cameron</u> (Ulster University), <u>Maurice Mulvenna</u> (Ulster University), <u>Raymond Bond</u> (Ulster University), <u>Edel Ennis</u> (Ulster University), <u>Siobhan O'Neill</u> (Ulster University), <u>David</u> <u>Cameron</u> (Lena, by Inspire), and <u>Alex Bunting</u> (Lena, by Inspire)

10:30–10:40 Enhancing well being within the nursing workforce through online interventions: literature review

<u>Soukaina Bouabid</u> (Mohammed VI University of Sciences and Health & Mohammed VI Center for Research and Innovation), <u>Saadia Bouftane</u> (Hassan II University of Casablanca), <u>Adam Chati</u> (Hassan II University of Casablanca), <u>Kenza Hassouni</u> (Mohammed VI University of Sciences and Health & Mohammed VI Center for Research and Innovation), <u>Sanaa Belabbes</u> (Mohammed VI University of Sciences and Health & Mohammed VI Center for Research and Innovation), and <u>Mohamed Khalis</u>(Mohammed VI University of Sciences and Health & Mohammed VI Center for Research and Innovation & Higher Institute of Nursing Professions and Health Techniques of the Ministry of Health and Social Protection of Morocco)

- 10:40-11:00 **Q&A**
- 11:00–11:30 Coffee Break 🍧

[WED21 - Session 2]: Bullying, Coercion & Negative Incidents

Chair: Edel Ennis (Ulster University)

11:30–11:40 Mental health, cyberbullying, and digital help-seeking among neurodivergent young people: Secondary analysis of the Youth Wellbeing NI survey

<u>Jamie McNulty</u> (Ulster University), <u>Siobhan O'Neill</u> (Ulster University), <u>Edel Ennis</u> (Ulster University), <u>Maurice Mulvenna</u> (Ulster University), <u>Emma Nolan</u> (Queen's University Belfast), and <u>Lisa Bunting</u> (Queen's University Belfast)

11:40–11:50 Enhancing understanding of coercive control: Co-creation of digital stories as an educational method <u>Kyle Boyd</u> (Ulster University), <u>Raymond Bond</u> (Ulster University), <u>Susan Langdon</u> (Ulster

University), and Julie-Anne Jordan (Northern HSC Trust)

- 11:50–12:00 **Two digital mental health interventions for youth in Norway: Insights from the development and trials of Opp and NettOpp** <u>Henriette Kyrrestad</u> (UiT The Arctic University of Norway), <u>Helene Høgsdal</u> (UiT The Arctic University of Norway), and <u>Sabine Kaiser</u> (UiT The Arctic University of Norway)
- 12:00–12:15 **Q&A**

[WED21 - Session 3]: Poster session

Chairs: Daniel Calderón and Juan Barrionuevo (University of Granada)

 [P01] Soma Design for Health and Wellbeing Digital Interventions: A

 12:15–13:00
 Scoping Review

 Sachiyo Ito-Jaeger (NIHR Nottingham Biomedical Research Centre), Aysegul Kafadar (University of Nottingham), Steve Benford (University of Nottingham), and Elvira Perez Vallejos (NIHR Nottingham Biomedical Research Centre & University of Nottingham)

 Nottingham Biomedical Research Centre & University of Nottingham)

[P02] Assessing the effectiveness of VR therapy for mental health difficulties in older populations; A mixed methods systematic review

<u>Oisin Harkin</u> (Ulster University), <u>Orla McDevitt-Petrovic</u> (Ulster University), <u>Colin Gorman</u> (Ulster University), <u>Donal McAteer</u> (Ulster University), <u>Karen Kirby</u> (Ulster University)

[P03] An introduction to Responsible Research and Innovation (RRI) for Digital Mental Health Interventions: A pilot study

<u>Lucy Hitcham</u> (University of Nottingham), <u>Emma Gentry</u> (University of Nottingham), <u>Sachiyo</u> <u>Ito-Jaeger</u> (National Institute for Health and Care Research & University of Nottingham), <u>Aislinn</u> <u>Gomez Bergin</u> (University of Nottingham), and <u>Elvira Perez Vallejos</u> (University of Nottingham, & National Institute for Health and Care Research)

[P04] The Impact of Digital Interventions on the Health and Wellbeing of people living with Long-Covid

<u>Eleanor Hotopf</u> (Brighton and Sussex Medical School), <u>Luke Yaxley</u> (Brighton and Sussex Medical School), <u>Neil Singh</u> (Brighton and Sussex Medical School), <u>Patrick Nyikavaranda</u> (Brighton and Sussex Medical School), and <u>Marija Pantelic</u> (Brighton and Sussex Medical School)

[P05] Online Help and Information Seeking for Mental Health: a Scoping Review

<u>Cristina Perea del Olmo</u> (University College Dublin), <u>Anna-Lisa Mann</u> (Trinity College Dublin), <u>and</u> <u>David Coyle</u> (University College Dublin)

[P06] Evaluation of Well-being Among Young People in Morocco

<u>Youssra El Bouzeidi</u> (Hassan II University of Casablanca), <u>Soukaina Bouabid</u> (Hassan II University of Casablanca), <u>Adam Chati</u> (Hassan II University of Casablanca), <u>Sanaa Belabbes (</u>Mohammed VI University of Health Sciences), and <u>Kenza Hassouni (</u>Mohammed VI University of Health Sciences)

[P07] Serious Fun: Leveraging Gamification to Enhance Engagement and Outcomes in Digital Mental Health

<u>Harold Ngabo-Woods</u> (Universitat Politècnica de València & BGDV Research. Rwanda - Ireland), <u>Larisa Dunai</u> (Universitat Politècnica de València), and <u>Isabel Seguí Verdú</u> (Universitat Politècnica de València)

[P08] Dialogue for Wellbeing: Designing and Implementing Chatbots to Personalize Mental Health Support

<u>Harold Ngabo-Woods</u> (Universitat Politècnica de València & BGDV Research. Rwanda - Ireland), and <u>Larisa Dunai</u> (Universitat Politècnica de València), and <u>Isabel Seguí Verdú</u> (Universitat Politècnica de València)

[P09] Implementing Digital Mental Health in Universities: A Collective Intelligence Approach with Stakeholders

<u>Leona Ryan</u> (University of Galway), <u>Maeve Dwan O'Reilly</u> (University of Galway), <u>Sophie Mahon</u> (University of Galway), <u>Anna Sinnott O'Mahony</u> (University of Galway), <u>Alba Madrid Cagigal</u> (University of Galway), <u>Connor Gavin</u> (University of Galway), <u>James McCormick</u> (University of Galway), <u>Treasa Fox</u> (Technological University of the Shannon), <u>Gary Donohue</u> (University of Galway) and the *VISTA Programme Team (Royal College of Surgeons Dublin; Trinity College Dublin; Dublin City College)

[P10] Protocol for a Systematic Review on the Effectiveness and Acceptance of Digital Mental Health Interventions for Neurodivergent Young People

<u>Jamie McNulty</u> (Ulster University), <u>Siobhan O'Neil'</u> (Ulster University), <u>Edel Ennis (</u>Ulster University), <u>Maurice Mulvenna</u> (Ulster University)

13:00–14:30 Lunch Break

[WED21 - Session 4]: Engagement, Chatbots & Simulated Patients

Chair: Zoraida Callejas (University of Granada)

14:30-14:40 Lámha – Leveraging Al for mental healthcare applications: Democratising machine learning for all?

<u>Maurice Mulvenna</u> (Ulster University), <u>Colin Gorman</u> (Ulster University), <u>Raymond Bond</u> (Ulster University), <u>Edel Ennis</u> (Ulster University)

14:40-14:50 Monitoring patient engagement through eye tracking in therapeutic dialogue systems

<u>Karolina Gabor-Siatkowska</u> (Warsaw University of Technology), <u>Izabela Stefaniak</u> (Lazarski University), and <u>Artur Janicki</u> (Warsaw University of Technology)

14:50-15:00 Using Large Language Models in Simulated Mental Health Assessment and Treatment: Opportunities and Ethical Considerations

> <u>Michael F. McTear</u> (Ulster University), <u>Sophy McFarlane</u> (Pneuma Healthcare), <u>Colin Gorman</u> (Pneuma Healthcare), <u>Maurice D. Mulvenna</u> (Ulster University), <u>Raymond Bond</u> (Ulster University), <u>Edel Ennis</u> (Ulster University)

15:00-15:10 The Mood App: an instrument to assist emotional wellbeing

<u>Emanuel Rojas</u> (Universidad del País Vasco), <u>Gavin McConvey</u> (Action Mental Health), <u>Alain</u> <u>Vázquez</u> (Universidad del País Vasco), <u>Javier Mikel Olaso</u> (Universidad del País Vasco), <u>Daniel</u> <u>Calderón-González</u> (Universidad de Granada), <u>David Griol</u> (Universidad de Granada), <u>Maria Inés</u> <u>Torres</u> (Universidad del País Vasco),

15:10-15:20 Evaluating a Suicide Information Chatbot with 5 diverse controlled-groups

<u>Pablo Ascorbe</u> (Universidad de La Rioja), <u>María S. Campos</u> (Unidad de Salud Mental Espartero), <u>César Domínguez</u> (Universidad de La Rioja), <u>Jónathan Heras</u> (Universidad de La Rioja), <u>Magdalena Pérez</u> (Teléfono de la Esperanza), <u>Ana Rosa Terroba-Reinares</u> (Universidad de La Rioja & Fundación Rioja Salud)

- 15:20–15:40 **Q&A**
- 15:45–16:15 Coffee Break 🍧

[WED21 - Session 5]: Digital Phenotyping & Activity Monitoring I

Chair: Maurice Mulvenna (Ulster University)

16:15-16:25 **The use of digital phenotyping to predict mental health** <u>Donncha Hanna</u> (Queen's University Belfast), and <u>Ciaran Shannon</u> (Northern Health and Social Care Trust)

16:25-16:35 Did you miss me? Making the most of digital phenotyping data by imputing missingness with point process models

<u>Imogen E. Leaning</u> (Radboud University Nijmegen), <u>Andrea Costanzo</u> (University of Groningen), <u>Raj Jagesar</u> (University of Groningen), <u>Sarah Tjeerdsma</u> (Radboud University Nijmegen), <u>Anna Tyborowska</u> (Radboud University Nijmegen), <u>Nessa Ikani</u> (Tilburg University), <u>Martien J.H. Kas</u> (University of Groningen), <u>Christian F. Beckmann</u> (Radboud University Nijmegen), <u>Henricus G. Ruhé</u> (Radboud University), and <u>Andre F. Marquand</u> (King's College London)

16:35-16:45 **Mobile monitoring of mood (MoMo-Mood): A multimodal digital** phenotyping study with major depressive patients and healthy controls

<u>Talayeh Aledavood</u> (Aalto University), <u>Nguyen Luong</u> (Aalto University), <u>Ilya Baryshnikov</u> (University of Helsinki & Helsinki and Uusimaa Hospital District), <u>Richard Darst</u> (Aalto University), <u>Roope Heikkilä</u> (City of Helsinki Mental Health Services), <u>Joel Holmén</u> (University of Turku), <u>Arsi Ikäheimonen</u> (Aalto University), <u>Annasofia Martikkala</u> (University of Helsinki), <u>Kirsi</u> <u>Riihimäki</u> (Helsinki and Uusimaa Hospital District & Finnish Institute for Health and Welfare), Outi Saleva</u> (Helsinki and Uusimaa Hospital District), <u>Ana Maria Triana</u> (Aalto University), and <u>Erkki Isometsä</u> (University of Helsinki)

16:45-16:55 Variability in self-reported depression symptomology and associated mobile-sensed behavioral patterns in digital phenotyping

<u>Arsi Ikäheimonen</u> (Aalto University), <u>Nguyen Luong</u> (Aalto University), <u>Ilya Baryshnikov</u> (University of Helsinki & Helsinki and Uusimaa Hospital District), <u>Ti John</u> (Aalto University), <u>Annasofia Martikkala</u> (University of Helsinki & Helsinki and Uusimaa Hospital District), <u>Erkki</u> <u>Isometsä</u> (University of Helsinki & Helsinki and Uusimaa Hospital District), and <u>Talayeh</u> <u>Aledavood</u> (Aalto University)

16:55-17:05 Acceptability, Feasibility, and Efficacy of a Digital Phenotyping-Enhanced Internet Intervention to Improve Psychosocial Outcomes in Breast Cancer Survivors: preliminary findings of a pilot randomized controlled trial

<u>Cristina Mendes Santos</u> (Fraunhofer Portugal AICOS)<u>, Beatriz Matos</u> (Instituto Portugués de Oncologia do Porto Francisco Gentil), <u>Ana Filipa Oliveira</u> (Universidade de Aveiro), <u>Maria Lua</u> <u>Nunes</u> (Fraunhofer Portugal AICOS), <u>Ana Vasconcelos</u> (Fraunhofer Portugal AICOS), <u>Diana</u> <u>Ferreira</u> (Universidade do Porto), <u>√csis Silva</u> (Universidade do Porto), <u>Gerhard Andersson</u> (Politécnico do Porto), and <u>Mayank Goel</u> (Linköping University)

17:05-17:15 Insights on an evaluation framework for the implementation of new digital technology within mental healthcare

<u>Anna Blix</u> (Jigsaw - The National Centre for Youth Mental Health), <u>Elizabeth Doyle</u> (Jigsaw -The National Centre for Youth Mental Health), <u>Barry O'Dwyer</u> (Jigsaw - The National Centre for Youth Mental Health), <u>Jeff Moore</u> (Jigsaw - The National Centre for Youth Mental Health)

17:15-17:30 **Q&A**

19:00 Social activity: Flamenco show

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[THU22] Conference Day 2

09:00-09:30 Keynote 2:

Frances Gardner (University of Oxford) Digital parenting interventions – can they be effective and sustainable in real-world service systems and in low-resource settings?

Parenting interventions are effective for reducing child mental health and behavioural problems, and for preventing harsh and abusive parenting - problems that are highly prevalent around the world. The evidence is substantial, based on over 500 randomised trials in every region of the world, including many countries in the Global South, and forms the core of guidelines for policymakers and practitioners, such as WHO and NICE guidelines on parenting interventions. We also know a good deal about mechanisms and moderators of action, and about their transportability across cultures and countries. Parenting interventions have been taken to scale in health and social services in many countries, but the challenges are huge in finding ways to embed these interventions into real world systems, in ways that are sustainable, effective and affordable – and reach the families that most need them. Naturally researchers have turned to digital and digital-hybrid interventions to try and address these problems of scalability.

This talk introduces recent developments in digital parenting interventions, drawing on research from our Global Parenting Initiative (www.globalparenting.org), examining how digital parenting interventions can be embedded in real-world systems to address the needs of vulnerable families and children, including those in resource-poor settings in the global south. Examples include using efficient experimental designs to test different options for chatbot delivery; embedding a parent chatbot in the preschool system in Malaysia; co-creating a film-based intervention for Burmese refugees on the Thai border; and developing programmes for parents in Africa with low-spec phones. These examples illustrate how, if we want to scale-up and reach families with high levels of need, it's vital to collaborate with stakeholders from the outset, including governments and practitioners; to learn from parents what kinds of delivery are accessible and acceptable for their context; and to help parents with low digital or print literacy.

Chair: Colin Gorman (Pneuma Healthcare and Ulster University)

09:30–09:45 **Q&A**

[THU22 - Session 6]: Families & Specialised Populations

Chair: Colin Gorman (Pneuma Healthcare and Ulster University)

- 09:45–09:55 **The implementation of an adolescent virtual mental health ward: An innovative solution to meet service needs** <u>Debbie van Tonder</u> (Trinity College Dublin)
- 09:55–10:05 Exploring the provision of In-Person and Digital Low Intensity Psychological Interventions: An Evaluation of Satisfaction Levels of Families - A collaboration between Pneuma Healthcare and CAMHS Ireland

Jennifer Carolan (University of Galway)

10:05–10:15	Supporting the supporters: Developing a brief, online parent-directed		
	intervention for adolescent depression		
	Natalia Kika (University of Bath), Jeffrey Lambert (University of Bath), Nina Higson-Sweeney		
	(University of Bath), Shirley Reynolds (University of Reading), Maria Loades (University of Bath)		
10:15–10:25	What type of lighting promotes positive mental health for ageing &		
	dementia populations?		
	Kate Turley (Chroma Lighting & Ulster University), Joseph Rafferty (Ulster University), Raymond		
	<u>Bond</u> (Ulster University), <u>Assumpta Ryan</u> (Ulster University), <u>Maurice Mulvenna</u> (Ulster		
	University), and <u>Lloyd Crawford</u> (Chroma Lighting)		
10:25-10:35	Clinician's Perspectives on the Acceptability of a combined online and		
10.25-10.55			
	in-person intervention targeting Social Recovery in Early Intervention for		
	Psychosis Services: The CREST-R Study		
	<u>Sophie Mahon</u> (University of Galway), <u>Maeve Dwan O'Reilly</u> (University of Galway), <u>Emma</u>		
	<u>Frawley</u> (Trinity College Dublin), <u>Caroline Heary</u> (University of Galway), <u>David Fowler</u> (Trinity		
	College Dublin), <u>Max Birchwood</u> (University of Warwick), <u>Gary Donohoe</u> (University of Galway)		
10:35–10:45	The effect of complexity thinking and emotional self-regulation on		
10100 10110	persuasiveness in online communication		
	Philipp Ruppert (KU Leuven), <u>Martin Euwema</u> (KU Leuven), <u>Peter Coleman</u> (Columbia		
	University)		
10:45-11:00	Q&A		

11:00–11:30 Coffee Break 🝧

[THU22 - Session 7]: Personalisation & AI Applications

Chair: David Griol (University of Granada)

- 11:30–11:40
 The impact of personalisation in a digital mental health app: Findings from a randomised controlled trial

 Clemence Rhodes-Maquaire (University of the West England)
- 11:40–11:50 **EEG-Based User Experience Evaluation to Improve Personalization in** Digital Mental Health

<u>Rosa Milo</u> (Università degli Studi della Campania Luigi Vanvitelli), <u>Marialucia Cuciniello</u> (Università degli Studi della Campania Luigi Vanvitelli), <u>Terry Amorese</u> (Università degli Studi della Campania Luigi Vanvitelli), <u>Gennaro Cordasco</u> (Università degli Studi della Campania Luigi Vanvitelli & University of Salerno), and <u>Anna Esposito</u> (Università degli Studi della Campania Luigi Vanvitelli)

11:50–12:00 Enhancing mental health content relevance with recommender systems – Is individual personalisation better than community-based approaches? Paul Matthews (University of the West England), and <u>Clemence Rhodes-Maquaire</u> (University of the West England) 12:00-12:10 **Defining and Measuring Engagement and Adherence in Digital Mental** Health Interventions: Umbrella Review Protocol Lyen Krenz Yap (Ulster University), Edel Ennis (Ulster University), Maurice Mulvenna (Ulster University), and <u>Jorge Martinez-Carracedo</u> (Ulster University) 12:10-12:20 Stella's Data-Driven Approach to Wellbeing: Building Personalized AI through Psychological Assessment and Humanistic Human-Computer Interaction Yang Ni (Perfects.AI & Columbia University) 12:20-12:30 Humanizing robots: Proactivity and Natural Interaction to improve quality of life for the elderly Esperanza Johnson (Universitetet i Innlandet), Laura Villa (Universidad de Castilla-La Mancha), Luis Cabañero (Universidad de Castilla-La Mancha), and Ramón Hervás (Universidad de Castilla-La Mancha) 12:30-12:45 Q&A 12:45-13:00 Update from 2024 Conference: School Digital Mental Health Co-construction with St. Mary's Derry. Supported by mdeducational Foundation, Pneuma Healthcare Ltd and St.Mary's College, Derry. N.Ireland. 13:00-14:30 Lunch Break

14:30–15:00 Keynote 3:

Juan Ignacio Godino (Technical University of Madrid) Speech technologies for the screening of Parkinson's disease. What can we expect from them?

Parkinson's disease (PD) is a progressive neurological disorder that severely affects motor functions, including speech. This often results in dysarthric patterns, such as reduced loudness, monotony, imprecise articulation, and a breathy or hoarse vocal quality. Over the past decade, this fact has driven the development of innovative methods for early diagnosis and objective monitoring of PD, utilizing advanced machine learning and signal processing techniques to analyze the voice and the speech. Early research initially focused on fundamental speech characteristics like pitch, loudness, and articulation precision as early indicators of PD, with traditional methods relying on statistical analysis of these features. However, early systems faced challenges with accuracy and reliability, often hindered by limited datasets and less advanced feature extraction methods.

In recent years, the field has progressed significantly with the application of deep learning and neural network models, enabling more sophisticated feature extraction and enhancing classification performance. Modern approaches now use complex algorithms and cross-linguistic studies to detect subtle speech production anomalies linked to PD. These advancements show great promise in identifying early-stage PD and tracking disease progression, even in cross-lingual contexts, providing valuable assistance to clinical assessments. Despite these advancements, however, current techniques remain limited and still require considerable work to be effectively implemented in clinical settings. This talk will review key contributions to the field over the past decade, developed by Universidad Politécnica de Madrid, Spain, and will also offer insights into future directions for research and development.

Chair: María Inés Torres (University of the Basque Country)

15:00–15:15 **Q&A**

[THU22 - Session 8]: Digital Phenotyping & Activity Monitoring II

Chair: Raymond Bond (Ulster University)

15:15-15:25	Rest-activity rhythms and depression symptoms: Identifying risk groups using wearable-derived metrics in NHANES 2011–2014 <u>Bartosz Dobies</u> (Jagiellonian University Medical College), and <u>Agnieszka Pac</u> (Jagiellonian University Medical College)
15:25-14:35	Multi-modal sleep measurement and alignment analysis in outpatients with major depressive episode <u>Afrooz Mahir</u> (Aalto University), <u>Nguyen Luong</u> (Aalto University), <u>Ilva Baryshnikov</u> (University of Helsinki & Helsinki and Uusimaa Hospital District), <u>Annasofia Martikkala</u> (University of Helsinki & Helsinki and Uusimaa Hospital District), <u>Erkki Isometsä</u> (University of Helsinki & Helsinki and Uusimaa Hospital District), and <u>Talayeh Aledavood</u> (Aalto University)
15:35-15:45	Using Computer Vision to Apply Activity Recognition Techniques to the Monitoring of Emotional Wellbeing <u>Ciara Sempey</u> (Ulster University), <u>Bryan Scotney</u> (Ulster University), <u>Shuai Zhang</u> (Ulster University), <u>Matthew Burns</u> (Ulster University), and <u>Jorge Martinez Carracedo</u> (Ulster University)
15:45-16:00	Q&A

[THU22 - Session 9]: Virtual, Immersive & Contextual Interventions

Chair: James Sweeney (Ulster University)

16:00–16:30 Coffee Break 🍧

- Exploring the integration of low-cost virtual reality in trauma-focused 16:30-16:40 cognitive behavioural therapy Paul Best (Queen's University Belfast), Jessica Cushnan (Queen's University Belfast), Rosellen Roche (Virginia Commonwealth University), Tom Van Daele (Thomas More University of Applied Sciences), and <u>Adam Elliot</u> (Northern Health and Social Care Trust) 16:40-16:50 A protocol of a randomised control trial (RCT) assessing the effectiveness of VR exposure therapy for presentation anxiety within a university student population Oisin Harkin (Ulster University), Orla McDevitt-Petrovic (Ulster University), Colin Gorman (Ulster University), Donal McAteer (Ulster University), Karen Kirby (Ulster University), and Karl <u>McCreadie</u> (Ulster University) 16:50-17:00 Virtual reality training for classroom assistants: Proof of concept for enhancing mental health awareness in educational settings Nichola Booth (Queen's University Belfast), Paul Best (Queen's University Belfast), and Janine Stockdale (Queen's University Belfast)
- 17:00-17:10 SOCIAbLE: A VR-based social cognitive intervention following adverse early life experiences

<u>Sophie Harrington</u> (University of Galway), <u>Emily Barrett</u> (University of Galway), <u>Cathal</u> <u>O'Curraoin</u> (University of Galway), <u>David Roberts</u> (University of Texas), <u>David Penn</u> (University of North Carolina-Chapel Hill), and <u>Gary Donohoe</u> (University of Galway)

- 17:10-17:20 Meeting people where they are at: Digital inclusion, digital inequality and first steps in digital mental health interventions <u>Eunice Anteh</u> (Mhor Collective Scotland & Heriot-Watt University), <u>Anya Martus</u> (Mhor Collective Scotland), <u>Shona Munro</u> (Mhor Collective Scotland), and <u>Irene Mackintosh</u> (Mhor Collective Scotland)
- 17:20-17:35 **Q&A**

20:30 Conference Dinner at Restaurante Carmen de las Tomasas

[FRI23] Conference Day 3

09:00-09:30 Keynote 4:

Ann-Marie Küchler (Ulm University)

Harnessing Digital Interventions to Support College Students: Evidence, Challenges, and Future Directions

College students face a unique set of mental health and well-being challenges, making them a key target group for digital interventions. Internet- and mobile-based interventions (IMIs) offer accessible, scalable, and cost-effective solutions, yet their efficacy and implementation require careful examination. This keynote will present meta-analytic evidence on the effectiveness and cost-efficiency of IMIs for college students, highlighting their potential to bridge gaps in mental health support. Despite these advantages, digital interventions face challenges, including engagement barriers, adherence issues, and varying levels of acceptance. Drawing insights from the StudiCare project, this talk will explore common obstacles and propose strategies to enhance adherence and user acceptance. Findings from a study on college students' preferred intervention targets and delivery formats will further inform best practices for digital intervention design.Looking ahead, this keynote will outline key innovations in the field, including the development of single-session interventions, the expansion of blended approaches like StudiCare Procrastination, and the integration of AI-driven personalization to optimize intervention efficacy. By addressing current challenges and leveraging technological advancements, we can create more effective and widely accepted digital interventions tailored to the needs of college students.

Chair: Patrick McAllister (Ulster University)

9:30–09:45 **Q&A**

[FRI23 - Session 10]: Youth Engagement & Perspectives

Chair: Patrick McAllister (Ulster University)

09:45–09:55 **Preferences for Al-driven resource signposting among young people** using an online mental health peer support app

<u>Bethany Cliffe</u> (University of Westminster), <u>Lucy Biddle</u> (University of Bristol), <u>Myles-Jay Linton</u> (University of Bristol)

09:55–10:05 Exploring the digital landscape: Mental health tools for young people (16–25)

<u>Courtney Potts</u> (Ulster University), <u>Carmen Kealy</u> (University of Galway), <u>Jamie McNulty</u> (Ulster University), <u>Alba Madrid-Cagigal</u> (University of Galway), <u>Maurice Mulvenna</u> (Ulster University), <u>Siobhan O'Neill</u> (Ulster University), <u>Gary Donohoe</u> (University of Galway), and <u>Margaret Barry</u> (University of Galway)

10:05–10:15 Adolescents' attitudes towards mental health apps <u>Helene Høgsdal</u> (UiT The Arctic University of Norway), <u>Henriette Kyrrestad</u> (UiT The Arctic University of Norway), and <u>Sabine Kaiser</u> (UiT The Arctic University of Norway)

10:15–10:25 Understanding early smartphone ownership: State-of-the-art and evidence from Barcelona

<u>Juan Albacete-Maza (</u>Universitat Ramon Llull), <u>Xavier Casanovas Combalia</u> (Universitat Ramon Llull), and <u>Cristina Montañola</u> (Universitat Ramon Llull)

10:25-10:35	Cultural adaptation of third-wave psychotherapies for Saudi youth. Insights and implications for digital mental health interventions Yousef Aljohani (University of Glasgow), Seonaid Cleare (University of Glasgow), Craig Melville (University of Glasgow), Hamish J. McLeod (University of Glasgow)
10:35-10:45	GreenTouch: Towards a nature-based web application <u>Aija Ozola</u> (Riga Stradins University), and <u>Kristīne Mārtiņsone</u> (Riga Stradins University)
10:45-11:00	Q&A

11:00–11:30 Coffee Break 🍧

[FRI23 - Session 11]: Student Support

Chair: Oisin Harkin(Ulster University)

- 11:30–11:40 Exploring enhanced digital innovations & psychological solutions in school-based adolescent mental health & wellbeing <u>René Droomer</u> (mdeducational foundation), <u>Colin Gorman</u> (Pneuma Healthcare & Ulster University), and <u>Deirdre Doherty</u> (mdeducational foundation)
- 11:40–11:50 Supporting university students with ADHD: Evidence, experiences, & best practices in online groupwork

<u>Sophy McFarlane</u> (Pneuma Healthcare), <u>Caroline Millar</u> (Pneuma Healthcare), <u>James Sweeney</u> (Atlantic Technology University), <u>Margaret McLafferty</u> (Atlantic Technology University), <u>Elaine</u> <u>Murray</u> (Ulster University), <u>Louise McBride</u> (Atlantic Technology University), and <u>Colin Gorman</u> (Pneuma Healthcare & Ulster University)

11:50–12:00 Factors influencing engagement with digital mental health interventions from the perspective of university students with mental health difficulties: A qualitative study

<u>Alba Madrid-Cagigal</u> (University of Galway), <u>Carmen Kealy</u> (University of Galway), <u>Courtney</u> <u>Potts</u> (Ulster University), <u>Margaret M Barry</u> (University of Galway), <u>Maurice D Mulvenna</u> (Ulster University), <u>Molly Byrne</u> (University of Galway), <u>Gary Donohoe</u> (University of Galway)

12:00-12:10 An acceptability study of Moderated Online Social Therapy (MOST) for help-seeking university students

<u>Anna O'Mahony Sinnott</u> (University of Galway), <u>Maeve Dwan-O'Reilly</u> (University of Galway), <u>Sophie Harrington</u> (University of Galway), <u>Caroline Heary</u> (University of Galway), <u>Mario</u> <u>Alvarez-Jimenez</u> (University of Melbourne), and <u>Gary Donohoe</u> (University of Galway)

12:10-12:20 A pilot randomised controlled trial of Moderated Online Social Therapy (MOST) for help-seeking university students

<u>Maeve Dwan-O'Reilly</u> (University of Galway). <u>Sophie Harrington</u> (University of Galway). <u>Anna</u> <u>O'Mahony Sinnott</u> (University of Galway). <u>James McCormack</u> (University of Galway). <u>Caroline</u> <u>Heary</u> (University of Galway), <u>Mario Alvarez-Jimenez</u> (University of Melbourne), and <u>Gary</u> <u>Donohoe</u> (University of Galway)

12:20-12:30 Journaling through E-coaching to Promote Mental Health in High Schools (JEPMEN-HS)

<u>Batuhan Sayis</u> (Universitat Pompeu Fabra), <u>Oresti Baños</u> (Universidad de Granada), <u>José</u> <u>Manuel Soto-Hidalgo</u> (Universidad de Granada), and <u>Claudia Villalonga</u> (Universidad de Granada)

12:30-12:45 **Q&A**

[FRI22 - Session 12]: Co-production & User-led Design

Chair: Sophy McFarlane (Pneuma Healthcare)

- 12:45-12:55 Transformation of children's digital mental health services through user-led design <u>Becca Randell</u> (University of Sussex)
- 12:55-13:05 Co-producing digital mental health resources with marginalized youth in Ireland

<u>Carmen Kealy</u> (University of Galway), <u>Courtney Potts</u> (Ulster University), <u>Alba Madrid-Cagigal</u> (University of Galway), <u>Maurice Mulvenna</u> (Ulster University), <u>Gary Donohoe</u> (University of Galway), <u>Siobhan O'Neill</u> (Ulster University), and <u>Margaret M. Barry</u> (University of Galway)

13:05-13:15 Using digital platforms for inclusive citizen science, co-production and sustainability in the Peace of Mind Youth Wellbeing Intervention <u>Natalie Divin</u> (Open University), <u>Jessica Carr</u> (Open University), <u>Caoimhe Millar</u> (Verbal), <u>Geraint</u> <u>Griffiths</u> (Cedar Foundation), and <u>Christothea Herodotou</u> (Open University)

13:15-13:25 The design and development of the CaTS-App for understanding self-harm: learnings from Phase 2 co-production Lucy Hitcham (University of Nottingham), Camilla Babbage (University of Nottingham), Joanna

<u>Lucy Hitcham</u> (University of Nottingham), <u>Camilla Babbage</u> (University of Nottingham), <u>Joanna</u> <u>Lockwood</u> (University of Nottingham), <u>Lily Roberts</u> (University of Nottingham), <u>Rebecca Gibson</u> (University of Nottingham), and <u>Ellen Townsend</u> (University of Nottingham)

13:25-13:35 Exploring Cognitive-Behavioural Therapists' Perspectives on Providing Asynchronous, Text-Based Digital Therapies: A Qualitative Study in NHS Talking Therapies

> <u>Daniel Ying-Heng Hua</u> (University of Oxford), <u>Sarah Sollesse</u> (Berkshire NHS Foundation Trust), <u>Lucy Hart</u> (Berkshire NHS Foundation Trust), <u>Grace Jell</u> (Berkshire NHS Foundation Trust), <u>Emily</u> <u>Reeves</u> (University of Oxford)

- 13:35-13:50 **Q&A**
- **13:50–14:00** Best presentation & poster awards Closing remarks & farewell

Presentation instructions:

Oral presentations. Each presenter will have a <u>maximum of 10 minutes</u> to deliver their presentation. A joint 15 minutes Q&A will follow at the end of each session. Presenters will be required to submit their presentation files in PowerPoint or PDF format to <u>dmhw2025@ugr.es</u> before the start of the session. Presentations will be delivered in English.

Poster presentations. Can be prepared up to A0 format maximum in portrait mode. Presenters will be required to hang their posters prior to the start of the poster session.