



Wellcome's programme on mental health – active ingredients, data and measures

Professor Miranda Wolpert MBE

M.Wolpert@wellcome.org

@mirandarwolpert



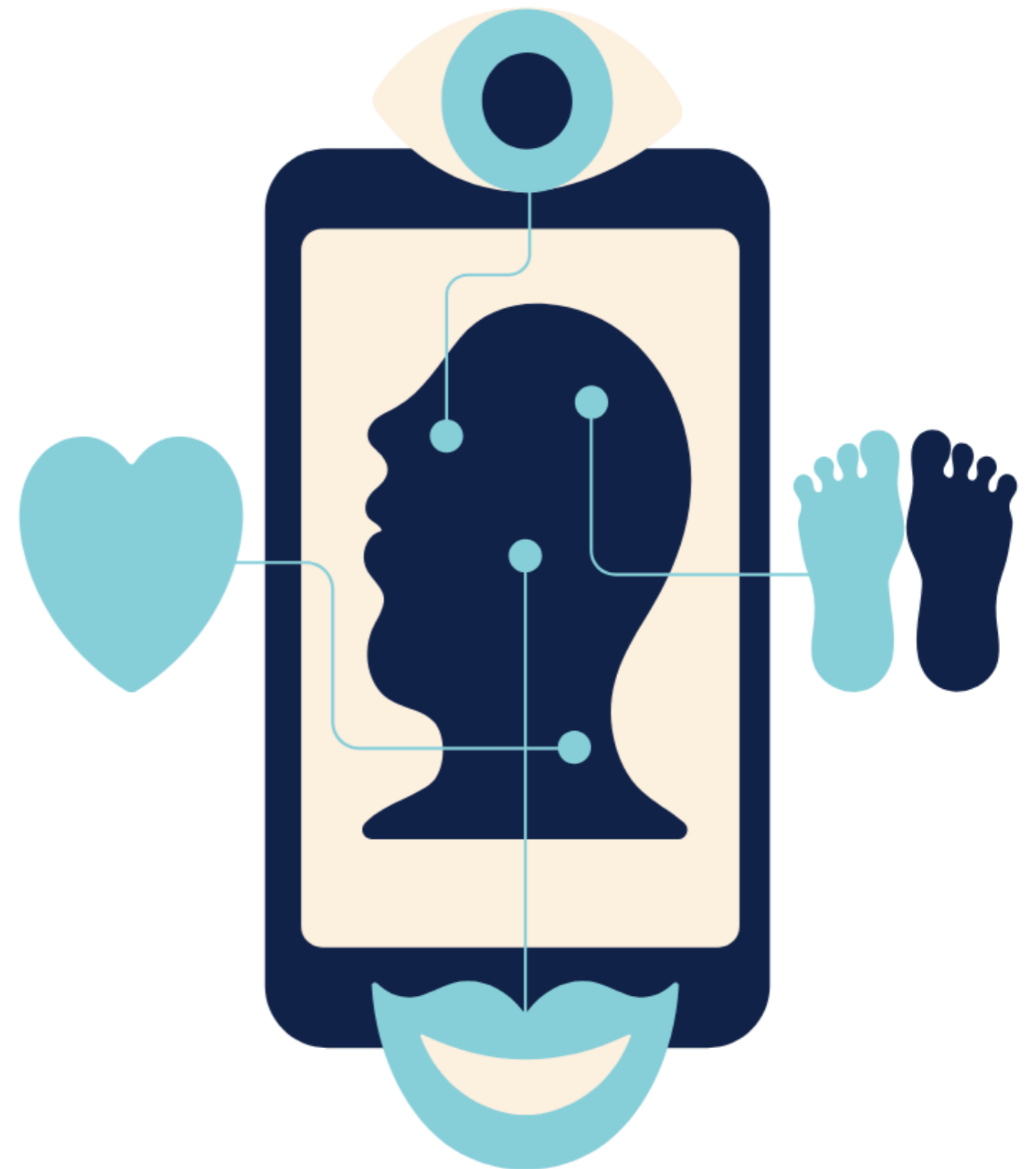
“ “A world where no one is held back by mental health problems , ,

What we're doing

Collecting and using data to identify the interplay between biological, psychological, or social factors holds huge potential in identifying new personalised mental health interventions. To support this we are:

1. Exploring what makes for effective treatments **(Active Ingredients)**
2. Making better use of existing data **(The Wellcome Data Prize)**
3. Exploring how to collect new forms of data in new ways **(The MindKind Study)**
4. Supporting common measures **(Common Measures Board and Advisors)**

We are aiming to run these projects in a way that foregrounds equity, not just openness
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FLYING
OBJECT



Active Ingredients to prevent or treat youth anxiety and depression reviewed by Wellcome-funded teams (2020-21)

Behaviours and activities	Beliefs and knowledge	Brain/Body functions
<ul style="list-style-type: none"> • Behavioural activation: increasing engagement with positive activities • Collaborative goal setting and tracking • Engagement with the arts • Exposure: facing one's fears in a planned manner • Physical activity: more bodily movement • Problem solving • Relaxation techniques: better stress response via relaxation • Remote measurement technologies: use of remote technologies to monitor changes in biology, behaviour, and environment relevant to the problems • Self-disclosure: sharing information with others about personal experiences and characteristics 	<ul style="list-style-type: none"> • Agency: developing a sense of agency through social action • Cultural connection: connection with one's own culture • Mental health literacy • Sense of mattering • Sense of purpose • Self-evaluation: improved view of self • Spiritual and religious beliefs 	<ul style="list-style-type: none"> • Circadian rhythms: better sleep-wake cycles • Gut microbiome: improving gut microbiome function • Hippocampal neurogenesis: growth of new neurons in the hippocampal region of the brain • Omega-3 supplements • Reduced levels of inflammation in the body • Selective serotonin reuptake inhibitors: use of antidepressants
Cognitive and attentional skills	Human connections	Socioeconomic factors
<ul style="list-style-type: none"> • Affective awareness: knowing how one feels • Decentering: better able to shift perspective • Emotional controllability: beliefs about the extent to which emotions are controllable • Emotional granularity: improved ability to characterise emotional experiences • Emotion regulation: improved management of emotions • Grief reduction: use of strategies to target feelings of grief • Helpful attentional and interpretational thinking patterns • Hopefulness: learning to be more hopeful • Mental imagery: helpful use of emotional mental imagery • Perfectionism reduction • Repetitive negative thinking reduction • Self-compassion 	<ul style="list-style-type: none"> • Communication in families • Digital quality social connection • Family support • Loneliness reduction • Neighbourhood cohesion: increased neighbourhood social connection • Peer support: support from a peer who has experienced anxiety and/or depression • School connectedness: sense of connection to school life • Social inclusion: improved inclusion for those who are minoritized on the basis of their identity (e.g., sexual and gender) • Social relationships: facilitating improvements in social relationships • Working alliance: a functional and collaborative relationship with a helper 	<ul style="list-style-type: none"> • Economic transfers: increased financial resources via cash transfers • Urban access to green space

Note: This is not a comprehensive list of all possible active ingredients. Wellcome selected these based on the quality of the submitted proposals, the teams' expertise, and to ensure a diverse range of ingredients were considered. Categories used are imperfect and merely for ease of navigation.



<https://wellcome.org/what-we-do/mental-health/projects/anxiety-depression-young-people-finding-next-generation-treatments>



The Wellcome Prize

Making better use of existing data

In 2022 we will launch the first Wellcome Data Prize in Mental Health to improve access to data collected via cohort studies, private and third sector organisations in the UK and South Africa. The prize is being led by Social Finance & DataKind.

The £2M prize will incentivise and support mental health researchers and data scientists to access and analyse such data to further our understanding.



1. **Making use of existing data** drawing on longitudinal, NGO and private data sources.
2. **Addressing impactful research questions**
3. **Involving young people** with lived experience in the design of the prize
4. **Multi-disciplinary teams** with academics, data scientists and young people with lived experience
5. **Raising awareness** of the opportunities for computational innovation in mental health
6. **Providing seed funding** to enable the broadest possible participation.
7. Ensuring team leads are based in the same country as the data sources to **address risks of data colonialism.**



The MindKind Study

Collecting new data in new ways

The MindKind Study is a 2-year feasibility study led by Sage Bionetworks and a consortia of researchers and young people with lived experience in UK, South Africa and India.

They are testing different approaches of collecting data related to psychological, behavioural and environmental factors in ways that give various levels of agency to data providers from multiple geographic regions.



What we are doing

1. **Building a prototype databank** that collects data related to sleep, bodily movement, social connections and positive activities, and using it to test different forms of data stewardship with 4500 participants in UK, India and South Africa.
2. **International deliberative democracy** exercises with people with lived experience.
3. **Co-designing** the entire feasibility study with professional youth advisors and panels of lived experience advisors.

What we are learning

- How to bring together different types of passive and active data in a form that is useful to researchers.
- What technical, regulatory, ethical and cultural factors need to be accounted for to ensure data can be collected and accessed globally.
- The relative preference and acceptability of different data stewardship approaches.
- How to embed lived experience into global research.

Common Measures

PHQ, GAD, RCADS, WHODAS

<https://www.linkedin.com/pulse/funders-agree-first-common-metrics-mental-health-science-wolpert>

Board

- NIMH (co-chair), Wellcome Trust (co-chair), Grand Challenges, Canada, Movember, MQ, UKRI, One Mind, JAMA Psychiatry, Lancet Psychiatry

Under auspices of IAMHRF (International Alliance of Mental Health Research Funders)

Common Measures Advisors and Community of Practice



Thank you