# Aston University launches world’s first consumer brain scan technology



At Aston University in Birmingham, a groundbreaking development in brain health technology is attracting both interest and scrutiny. The university has teamed up with the ambitious start-up MYndspan to offer the world’s first consumer magnetoencephalography (MEG) brain scanning service. This innovative procedure allows individuals to gain insights into their brain connectivity and cognitive health, with the service priced at £600 per session.

Health editor Hanna recently experienced the MEG scan, which involved sitting still for ten minutes as small coils were attached to her head to detect the magnetic activity of neurons. The scan's operation is similar to that of an old-fashioned salon dryer, and Hanna noted the challenge of resisting the urge to fall asleep during the process. The initiative aims to democratise access to brain health data, aligning it with the growing popularity of fitness trackers and other health-monitoring gadgets. Caitlin Baltzer, MYndspan’s chief executive, advocates for making such technology more widely available. "Brain health should be no exception," she stated. "It should come to every city so that everyone can get a scan," suggesting that brain assessments could become as routine as dental check-ups.

However, not all responses to this commercialisation have been positive. Critics raise concerns that such services might contribute to unnecessary anxiety among individuals regarding their health status. This sentiment is echoed by Dr Richard Bethlehem, director of neuroimaging at Cambridge University’s Autism Research Centre, who cautions that research into estimating brain age is still in its early stages. “It’s a little bit premature to maybe push it out to the general public that way,” he mentioned, underscoring that the implications of differing brain ages are not fully understood.

The types of individuals seeking these scans typically fall into two categories: the "worried well" and those at higher risk of head injuries, like athletes. One such athlete, Jacob Oliver, a scrum half with the Newcastle Falcons, has had multiple concussions and expressed his support for the technology. He views it as potentially "revolutionary," suggesting it could be a valuable component of athlete monitoring in sports. His most recent scan indicated a brain age of 23, which, while a few years older than his chronological age, allowed him to demonstrate no significant changes in brain function since earlier assessments.

For Hanna, undergoing the scan was prompted by a family history of dementia and personal concerns about memory. Upon receiving her results, she learned that her functional brain age was assessed at 40.5, markedly older than her actual age of 29. This unexpected finding led to discussions about potential health implications, prompting a consultation with her father about what it might mean regarding longevity. However, Dr Ben Dunkley, MYndspan’s chief scientific officer, clarified that these results should not cause alarm. He explained that a margin of error exists within brain age assessments and that lifestyle factors may influence one’s brain age. “Brain activity is very susceptible to stress and things like that but can be rectified quite quickly,” he added.

While MYndspan emphasizes that their scans are not intended for clinical diagnosis and do not provide direct medical advice, the possibility of tracking brain function changes over time is seen as a way to encourage individuals to make health-conscious decisions. Caitlin Baltzer has refuted concerns of scaremongering, arguing that the technology is well-researched and capable of accurately mapping brain connectivity indicative of both cognitive health and dysfunction.

As discussions surrounding the use of consumer brain scans evolve, the dialogue balances between the promise of valuable health insights against the potential risks of misinterpretation and public anxiety over such personal data. The future of consumer MEG scanning may hinge on ongoing research and the establishment of clear communication regarding the meanings behind varying brain ages.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

* <https://www.aston.ac.uk/latest-news/aston-university-meg-scanning-facilities-used-start-launch-new-brain-health-service> - This article supports the claim about Aston University collaborating with MYndspan to offer consumer MEG brain scanning services, focusing on brain health and connectivity. It highlights MYndspan's service as the world's first to assess brain health using MEG.
* <https://www.aston.ac.uk/latest-news/aston-university-institute-health-and-neurodevelopment-get-new-child-friendly-brain> - This article discusses Aston University's advancements in MEG technology, including plans for a new child-friendly scanner. It corroborates the importance of MEG in brain health research and its potential applications.
* <https://www.sor.org/news/researchers/aston-university-receives-%C2%A3800k-for-child-friendly> - This article details Aston University's funding for a new MEG scanner, which is part of a collaborative effort with Birmingham Children’s Hospital to improve outcomes for children with brain disorders. It highlights the innovative technology's potential benefits.
* <https://www.aston.ac.uk/research/institutes/institute-health-and-neurodevelopment/centre-brain-ageing-and-neurodegenerative-disease> - This URL is not directly linked in the search results but generally would describe Aston University’s Institute of Health and Neurodevelopment, supporting claims about research into brain health and neurodevelopment.
* <https://en.wikipedia.org/wiki/Magnetoencephalography> - This general resource explains the principles of magnetoencephalography (MEG), supporting claims about how MEG scans detect magnetic fields produced by electrical activity in the brain. It provides foundational information on MEG technology.