



€2000 Prize for 2024 Winner of Mary Mulvihill Award

Launch of Science Media Competition for Third Level Students

€2,000 Award for Best Work on the theme ‘Intelligence’

Deadline for submissions Midnight Tuesday 2 April 2024

10 OCTOBER 2023

DUBLIN—The Mary Mulvihill Association invites submissions to its 2024 student media competition on the theme of ‘Intelligence’. Entries are sought from students of all disciplines—undergraduate or postgraduate—studying at third-level institutions anywhere on the island of Ireland. The closing date is **Midnight, Tuesday 2 April 2024**.

The topic may be addressed in scientific, critical, imaginative or other terms. Entries are welcome in any media format: written texts, photos, infographics, comic strips, or other visual forms. Interviews may be presented as text, video, or audio. There are no prescriptions on how it might be approached.

As a theme, intelligence offers myriad routes for exploration. Although generally linked to abilities to perform cognitive tasks efficiently, intelligence, as a concept, has always been both ideologically loaded and difficult to define. There are no universally agreed methods for objectively evaluating or assessing intelligence—and the early efforts to do so are rooted in the pseudoscience of ‘scientific’ racism and the eugenics movement it engendered over a century ago. So-called standardized assessments of children are not universally accepted. Critics say they are narrowly defined to identify a certain set of competencies, they ignore socioeconomic and cultural factors, and they fail to take into account variations in children’s development and neurodiversity.

Analyzing the biological basis of intelligence has long been a prominent topic in neuroscience research. Although considerable effort has been expended on the anatomy, physiology, cell biology, molecular biology, and genetics of the brain, a comprehensive understanding of how its function is linked to what is understood to constitute intelligence has so far proved elusive.

Notwithstanding these uncertainties and difficulties, intelligence is, of course, a real and an important attribute of humans—and of other species. (So, too, is its opposite). Intelligence enables individuals to navigate the complexities of daily living, whether that involves a leopard hunting for food or a gifted child learning how to play a musical instrument, for example.

But the concept of intelligence is no longer considered solely an attribute of living entities. The emergence of artificial intelligence (AI) in the 1950s is synonymous with the wider growth of computer science. The original quest of that era—to build a machine that could mimic the human brain—now seems almost quaint, given the extraordinary power of contemporary systems such as ChatGPT, the chatbot developed by OpenAI which can generate large amounts of well written text in response to user prompts, or AlphaFold, developed by DeepMind and the European Molecular Biology Laboratory to predict three-dimensional protein structures from amino acid sequence information. We have entered a new era of technological development, which has aroused profound concerns about the potential harms—intentional and inadvertent—arising from AI systems. Some of

the issues, such as algorithmic bias, are intrinsic to the technology and arise from who has developed the systems and how they have done so. But there are additional structural issues, arising from who has control of and access to these technologies—and who does not—and for what purposes they are being deployed.

We invite entrants to explore the theme of intelligence from any angle.

The theme of the award changes every year, reflecting Mary Mulvihill's broad interests in science and technology and its interrelationships with other aspects of human culture and the natural world. That breadth also applies to how competition participants could address the theme.

The award is open to undergraduate and postgraduate students enrolled in an Irish higher education institution at the time of submission. In addition to the overall award of €2,000, the judges may, at their discretion, make an additional award of €500 for a highly commended entry.

For further information on the award, including guidance to entrants and past winners, see <https://marymulvihillaward.ie>. The deadline for submissions is **Midnight Tuesday 2 April 2024**.

The Mary Mulvihill Award is a project of Remembering Mary, an initiative established by family and friends of the late Mary Mulvihill (1959–2015) to honour her memory and her work in science journalism, science communication and heritage and to promote her legacy. It administers and awards funds to commemorate her work and its significance.