



CURIOSITIES ABOUT DNA DISCOVERY

This year we celebrate the 70th anniversary of DNA discovery and the double helix structure by James Watson and Francis Crick in 1953. The discovery was a significant milestone in the history of science, leading to modern molecular biology and giving rise to ground-breaking insights into the genetic code and protein synthesis. Continue reading for two curiosities related to the discovery, including the first announcement of the DNA structure taking place in a pub and the contribution of Dr. Rosalind Franklin, who was unfortunately never included in any award for her role. Click [here](#) for more.

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THE NEW SHAPE OF THE ITALIAN ETHICS COMMITTEE

Exciting news for Medicines Development professionals in Italy as the Ministry of Health has finally issued guidelines to make the new Ethics Committees fully operational, following the implementation of the European Clinical Trials Regulation in January 2022. Italy has a good track record for clinical trials and with the new regulations, 2023 promises to be a turning point in the history of Italian Ethics Committees. Read about the different organizational models that have been followed since the first formal institution in 1998 and the three key factors that will determine the swift and successful completion of the reorganization. ¹

Click [here](#) to read more.



HUMAN MEDICINE HIGHLIGHTS FROM THE EMA



This report highlights information about human medicines and comes from the EMA. In 2022, EMA recommended 89 medicines for marketing authorization. Of these, 41 had a new active substance which had never been authorized in the European Union before. The overview of the 2022 key recommendations published today includes figures on the authorization of medicines and a selection of new treatments that represent significant progress in their therapeutic areas.

Public health emergencies remained a key priority for EMA in 2022. The highlights document summarises the most important recommendations on vaccines and treatments for COVID-19 and for monkeypox.

Stay informed and check out the full report [here](#) for more details. ²

BENEFITS LIMITS AND RISKS OF GPT-4 AS AN AI CHATBOT FOR MEDICINE

AI is becoming increasingly important in medicine, with applications including analyzing medical images, detecting drug interactions, identifying high-risk patients, and coding medical notes. Now, a new type of AI is emerging: the medical AI chatbot. The GPT-4 AI system, developed by Open AI, is a powerful tool with a chat interface that is widely available and currently in active development. As this technology advances, it has the potential to transform healthcare delivery and improve patient outcomes. However, as with any tool, caution must be taken to ensure it is used for good and not cause harm. The possibilities of medical AI chatbots are exciting, and we look on with anticipation about what the future holds.



“We predict that chatbots will be used by medical professionals, as well as by patients, with increasing frequency. Perhaps the most important point is that GPT-4 is not an end in and of itself. It is the opening of a door to new possibilities as well as new risks.”³

Read more [here](#).

TIME TO END THE STIGMA OF EPILEPSY



The International Bureau for Epilepsy and the International League Against Epilepsy have launched an awareness campaign on International Epilepsy Day to tackle stigma and misconceptions surrounding epilepsy. The Intersectoral Global Action Plan on Epilepsy and Other Neurological Disorders 2022–2031 identifies epilepsy as a priority disorder, particularly in low and middle-income countries where the burden of epilepsy is high and access to diagnosis and treatment is limited. The organizations have called for “greater understanding and intersectoral action to tackle the stigma and discrimination faced by people with epilepsy worldwide”. By implementing the IGAP, the aim is for no person with epilepsy to experience stigma or discrimination by 2031.⁴

Continue reading [here](#).

UNIVERSITIES MUST THINK SMARTER WHEN DEVISING EDTECH STRATEGIES FOR THE FUTURE

At any given time, there will be a range of new technologies whose proponents claim them to be transformational. In the early 2000s this included open educational resources, learning environments and virtual worlds such as Second Life. During the pandemic, the focus was mainly on those technologies that allowed us to deliver education at a distance, such as virtual and hybrid classrooms. We are now witnessing the emergence of new trends, including virtual, augmented and mixed reality, blockchain, NFTs, AI, datafication and analytics.

Not all these emerging technologies will be transformative, and many will only impact certain niches of the curriculum, if at all.



But one thing is clear, simply embracing new edtech trends – such as investing in VR headsets – cannot be a strategy in and of itself, and so a critical task for decision-makers within higher education is to identify which technologies have the potential to make a significant and long-lasting impact.⁵ Read more [here](#).

HOW LATIN AMERICA'S GENOMICS REVOLUTION BEGAN AND WHY THE FIELD IS UNDER THREAT



In 2005 scientists in Cuernavaca, nestled in the highlands 50 kilometers southwest of Mexico City, led a government-funded project to sequence the genome of *Rhizobium etli*, a bacterium that lives on the roots of some bean plants, helping them to fix nitrogen.

Mirroring a Brazilian effort at the University of São Paulo to sequence the bacterial plant pathogen *Xylella fastidiosa* five years earlier, the project was an ambitious attempt to build up the country's biotechnology infrastructure, providing with an opportunity to watch cutting-edge genomics at first hand.

Two decades later, the sequencing of a bacterium no longer sounds like much of a milestone, but with a US\$ 11.6-million grant from the São Paulo government, the project's leaders say the *X. fastidiosa* research received more state funding than any other single piece of Brazilian science. The Mexican project received \$2 million, also a major investment. To scientists across South and Central America, these projects represented more than just a loosening of governmental purse strings.⁶ Continue reading [here](#).

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Thanks for reading!

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