

# Fifty Years of Biomedical Science Advancement

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## Introduction

In fact, Watson and Crick's success in deciphering the double helix structure of deoxyribonucleic acid (DNA) more than half a century ago is the foundation for a lot of the advances in biomedicine that have been made in the last 50 years. Around twenty years after the fact, in 1972, Paul Berg made the primary recombinant DNA particle by means of consolidating qualities from two distinct life forms, exploiting the limitation protein disclosure in 1970. Werner Arber, Daniel Nathans and Hamilton O. Smith shared the Nobel Prize in Physiology or Medicine in 1978 for their discovery of restriction enzymes and application to molecular genetics issues. The Computed Tomography (CT) scan diagnostic machine and technique were independently invented in 1972 by British engineer Godfrey Hounsfield and US physicist Allan Cormack, both of whom were born in South Africa. In 1979, they were awarded the Nobel Prize for Physiology or Medicine [1].

## Description

One of the most significant accomplishments in medical history is the vaccination-mediated eradication of small pox in 1977. Frederick Sanger and Walter Gilbert, who independently developed rapid DNA sequencing methods, shared half of the 1980 Chemistry Nobel Prize. In 1980, a clinical whole-body MRI scan was also performed for the first time. After two years, the groups of Robert Weinberg, Michael Wigler and Mariano Barbacid detailed the principal human oncogenes and demonstrated that cancers are the consequence of transformations in the genome [2].

The publication of research articles in predatory journals has caused significant havoc in a world where biomedical science is constantly under threat from a variety of sources. Real researchers and avid readers of genuine biomedical journals will be haunted for several decades by these predatory journals' publication of worthless biomedical science. Subsequently, specialists of different disciplines and scholarly experience ought to be ceaselessly made mindful of these savage distributors and expected ways of remembering them. The main goal of this article is to talk about the problems with publishing in predatory journals, the ways in which these journals target young researchers with little experience and the drawbacks of doing so [3].

Biomedical laboratory scientists (BLS) play crucial roles in a variety of settings, including pharmaceutical and academic research laboratories, health and medical care clinics and labs and clinics. In order to meet the challenges posed by an aging population, an increase in chronic diseases and skyrocketing costs, a healthcare revolution is underway and technology is rapidly evolving. Patients of the future are well-informed, anticipate choices and anticipate personalized, high-quality care. BLS must adapt to participate in, keep up with and frequently lead the rapidly evolving technologies and new methods

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of providing healthcare in order to keep up with these changes. Professionals can be supported by a strong professional identity created through ethical reflection and solid core values, in addition to core competencies [4]. In order to guarantee that the BLS will continue to bring unique knowledge, competencies and skills to a wide variety of fields, including biotechnology research and being a person-centered healthcare partner, IFBLS works to stimulate discussion and raise practitioners' awareness.

The mindsets of people of all ages have probably been largely shaped by the technology that was available at the time and, as a result, the instrumentalism that people can use. Ours is heavily influenced and defined by such accomplishments: commodified consumerism, precision engineering and remote control. Over the past century, current cultural mindsets have had enormous short-term benefits. However, the accumulating but nefarious liabilities are also present and our most ominous example right now is our almost unfathomable, unraveling environmental apocalypse. There will undoubtedly be numerous heralding microcosms, examples from our everyday lives, to configure this larger picture of unviabilities if that threatened great unraveling is the signed macrocosm of 21st-century evolution. We're talking about the future of NHS general practice here [5].

By targeting eager-to-publish authors or young academic researchers with their fast or rapid review process for quick publishing, these pseudo or predatory journals have emerged as a threat to the integrity of academic publishing. Predatory publishers may be a standalone journal or have a large number of journals published under their own name. These fictitious or predatory publishers take advantage of the open access (OA) model by manipulating the minimal or nonexistent peer review process. These predatory journals are, to put it simply, a byproduct of the open access movement that began in the early 1990s. By operating through a highly sophisticated and mirror image webpage of reputable indexed mainstream journals, these journals entice young and inexperienced scientists to submit manuscripts in order to receive monetary benefits in the form of an article processing fee or publication fee.

In the last ten years, the whirlwind of advancements in biological science has accelerated. In 2010, Craig Venter and partners made the primary manufactured bacterial cell, named *Mycoplasma mycoides* JCVI-syn1.0, which was comprised from synthetically blended 1.08-super base matches. 3 In 2012, Jennifer A. Doudna and Emmanuelle Charpentier, who recently received the Nobel Prize in Chemistry, developed the clustered regularly interspaced short palindromic repeats (CRISPR)-Cas 9 technology. This technology has the potential to be used as a precise scissor for genome editing on a large scale, opening up new avenues for genetic engineering.

## Conclusion

Over 3,000 attendees attended the IBMS's biennial conference in Birmingham, UK, in March 2022 at the International Convention Centre. Notwithstanding the fundamental program, biomedical researchers introduced north of 80 banners or short interchanges on a scope of examination subjects. The journal will collaborate with Frontiers to publish all accepted abstracts in an electronic book that can be accessed through the journal's website. This will allow the journal to capture and record the valuable contributions made by IBMS members. This will start at the following IBMS Congress in 2023.

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None.

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## Conflict of Interest

There are no conflicts of interest by author.

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