

# Reflections Towards the Future of Medical Informatics

## A Farewell Lecture after Almost Half a Century of Medical Informatics Activities

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### Summary

**Objective:** To provide guidance on the future development and role of medical informatics, or biomedical and health informatics, in form of reflections.

**Method:** To report on the author's previous activities as a medical informatician, which spans almost half a century. It begins in 1973 when he started to study medical informatics. In 1978, more than four decades ago, his professional work started. He retired at the end of summer semester 2021. This was the occasion to prepare this farewell lecture.

**Results:** In twenty reflections, thoughts are presented on professional careers (R1 – 'places'), on medical informatics as discipline (R2 – 'interdisciplinarity', R3 – 'theses', R4 – 'affiliations'), on research (R5 – 'duality', R6 – 'confluence', R7 – 'connections', R8 – 'collaboration'), on education (R9 – 'community', R10 – 'competencies', R11 – 'approaches'), on academic self-governance (R12 – 'autonomy'), on engagement (R13 – 'Soyuzhes', R14 – 'professional societies', R15 – 'respect', R16 – 'lightstep walk'), and on good scientific practice (R17 – 'time invariants', R18 – 'Zeitgeist', R19 – 'knowledge gain', R20 – 'searching').

**Conclusions:** It has been a pleasure for me to participate in medical informatics activities for almost fifty years. During that time, there have been significant advances, including in medicine and in informatics, and also in medical informatics itself. And now it is the turn of others. While keeping in mind that tradition is not preserving the ashes, but passing on the fire, this report with its reflections may be of some help.

### Keywords

Medical Informatics; Biomedical and Health Informatics; Research; Education; Academic self-governance; Engagement; Good Scientific Practice

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## 1 Introduction

### 1.1 About this Manuscript

When the regular term of a professor ends, and the new professional life phase as a professor emeritus is about to begin, it is a tradition at German universities to give a so-called farewell lecture (in German: Abschiedsvorlesung). My farewell lecture was first presented on September 22, 2021, at TU Braunschweig in German [1]. In addition, I had the opportunity to give this lecture also in English on October 16, 2021, in Athens, Greece, during ICIMTH (International Conference on Informatics, Management, and Technology in Healthcare) 2021. This manuscript is an updated edited written version of the farewell lecture in English.

This English version started from the German version in [1], which I first translated and to some extent modified, supported by the DeepL program [2]. Then, Casimir Kulikowski kindly read the first version and suggested edits to my German-biased English, which developed into the present manuscript.

Please note that the German manuscript is more extensive, especially with the inclusion of a commented poem and nine appendices. Some details related to these appendices in [1] will occasionally be referred to here. As the German manuscript has been published in GMS MIBE, the official journal of the German Association of Medical Informatics, Biometry and Epidemiology (GMDS) – an Open Access journal – the German manuscript and its appendices can be easily accessed.

### 1.2 Objective(s) and Method

One objective of this farewell lecture is to reflect on future developments and on the role of medical informatics as a discipline. The manuscript contains twenty reflections, related primarily, but not exclusively, to medical informatics. These reflections may be of primary interest to readers.

In order to set the context for as well as to explain and elaborate on these reflections, it seemed necessary first to report about my work as a medical informatician. This part of the report might be of less interest to readers. Reporting about my work was both, method and another objective.

Please note that in this farewell lecture I will once again use the term medical informatics in its wide, comprehensive sense ([3], p. 256, and section 2.2 in this manuscript). Others may prefer to call this discipline biomedical informatics, or health informatics, or biomedical and health informatics or yet something else [4, 5–8].

My reflections on the future are presented after almost half a century of medical informatics activities, which I began studying almost fifty years ago in 1973. In 1978, more than four decades ago, my professional career started.

Do I really report on my activities? Actually, this is not possible, because I have always collaborated with others. Many people I have met during these almost five decades have shaped me. I have learned from them and I am still learning today. If I mention achievements here, then these people have helped to achieve them.

# Reflections At The End Of A Century

**Eve Tavor Bannet**



## **Reflections At The End Of A Century:**

## **Reflections At The End Of A Century** Book Review: Unveiling the Magic of Language

In a digital era where connections and knowledge reign supreme, the enchanting power of language has become much more apparent than ever. Its power to stir emotions, provoke thought, and instigate transformation is actually remarkable. This extraordinary book, aptly titled "**Reflections At The End Of A Century**," published by a highly acclaimed author, immerses readers in a captivating exploration of the significance of language and its profound effect on our existence. Throughout this critique, we will delve into the book's central themes, evaluate its unique writing style, and assess its overall influence on its readership.

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