



Editorial

www.diagnosticpathology.eu: Reflections 2020 and Perspectives 2021

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Abstract

Background and present situation: The journal www.diagnosticpathology.eu experienced a difficult year in 2020 and expects poor perspectives in 2021. It is still of interest to several colleagues and its articles are still cited after years. However, this journal with technically unique features such as publication of virtual slides, preformatted case reports, as well as advanced methods of annotations was not perceived as valuable for the career of the contributing authors.

Details: Authors are highly interested in the maximum benefit from their research which is obviously regulated by research financing and / or by their laboratory institution and administration.

Each administration has to implement financially oriented regulations in science which are based upon the 'scoring' of the publications. Therefore, certain score systems such as citation indices of various algorithms have been created. They possess remarkable financial impact. They automatically support the main stream of journals and regulate the market.

Furthermore, competition in open access journals has increased and predatory journals exist. To attract scientists several open access journals do not limit their publication area to specific medical research or disease specification and publish a broad spectrum of research themes, diseases and clinical presentations.

Forecast: The year 2021 will become as difficult as the year 2020 for the journal www.diagnosticpathology.eu if its goal and business model will remain. It was based on voluntary resources and focused on innovative research publication only. Therefore, new goals have to be defined. These will include:



1. Redefinition and reorganization of the journal. The journal might not remain a 'simple' communication tool for research and science. It might be expanded to become a 'real research tool' in scientific communication.

2. New automated features have to be implemented. These might include 'estimates for future impact' of published articles based upon entropy considerations and, automated review of submitted articles.

Conclusions: We still believe in our basic concept that 'communication in research' has to be separated from financial issues. It should take into account that nature can best be understood by investigating in its boundaries.

Keywords: [Open access publication](#), [diagnostic pathology](#), [automated](#)

Introduction

It is certainly hard to report missing success and weak response to innovative features which are thought to support new and future addressing ideas. However, failure and breakdown of certain models should not result in depression and pullout. On the contrary, they should be analyzed and modify the actual situation in search for new ideas and solutions.

The first step in this direction should be to define new goals and to analyze own errors, followed by including experiences, knowledge and promising circumstances in potential implementation of new communication features, and finally to forecast response and acceptance by scientists, medical colleagues and the society.

In this editorial we describe some potentially useful engines that are appearing at the horizon of artificial intelligence (AI). We hope that we can find some scientists who are interested in going with us and who are willing to assist us in crossing the stony bridge from business oriented scientific publication to innovative and bias free communication in medical sciences.

Errors and Mistakes

The first error **(1)** we had to learn and to accept is the common well known saying that 'the time must be ready' to accept innovative ideas. More than thirty years ago we created the first solely electronically distributed journal in pathology which included all at that time mandatory features of a scientific publication such as paper printing



adjusted formal structures, strict peer review performance, etc. The NIH library (pubmed) did not include the journal in its list and told us that solely electronically publication does not meet the conditions of including the journal in its data base.

The same reaction occurred in 2010, when the publication of short case reports with automated reference search and pre-prepared publication structures was not acknowledged. That idea was to implement a tool 'publish beside the microscope' and permit the upload of interesting cases just within the period of their microscopic diagnostics.

The lesson to accept is that the distance of new information and scientific communication tools should not be 'far away' from today's common business performance. Each business model possesses its own inertness which does not allow rapid opening of doors to future development.

The second error **(2)** was the implementation of unique and innovative publication tools. They only improved the article's reliability and scientific control of uploaded data, but apparently were not in the main interest of potential contributing authors.

The implementation of virtual slides, of open or private annotations and the idea to include the reader in automated image measurements did not attract scientists to submit their articles for publication. The opportunity to take advantage and become part of real innovative communication did not compensate the professional advantage to publish in 'high citation index journals'.

The third drawback **(3)** is the fact that voluntary work is closely associated with emotional issues. It cannot be compared with 'payed labor conditions'. It remarkably relies on potentially changing free time and 'homework conditions'. Interest by itself is not sufficient and should be accompanied by direct personal profit of the volunteers.

The fourth limitation **(4)** consists of the journal's focus on surgical pathology only. Many colleagues identify the journal's title with surgical pathology and application of digital (AI assisted) diagnosis.

Indeed, this was no problem at the beginning of the 'digital century'. Today, digital publication and the business model of open access publication have attracted many journals and created high business-oriented competition. Therefore, most open access journals have included many fields of medicine under one umbrella and aim to 'catch fishes which are swimming in different waters'. This kind of business model offers several advantages such as using the same technology for different medical approaches, creating a network of otherwise separated authors, minimizing the running costs and simultaneously increasing the number of potential readers.



Modifications and Perspectives

Thorough analysis of the described errors and potential corrections might open a new road for success and progress of electronical publication and communication in medical sciences.

Solution, correction or reduction of the described problems might occur in two different approaches, namely **(a)** to switch to a dominating financial business model, for example to cooperate with an established publishing company, or to leave the conventional publication environment **(b)** and to focus on experimental issues of communication, i.e., to enter a new, until today not or only limited existing communication discipline.

The first option **(a)** will shorten the distance between innovation and established scientific publication, whereas the second option **(b)** will enter a new world without existing boundaries to the present scenario. The first option **(a)** has to address financial behavior at least to a certain degree; the second option **(b)** has to thoroughly explore the new terrain.

The selected correction of problem **(1)** modifies also the other problems **(2-4)**. To remain in the established world of open access publication will automatically reduce the influence of innovative publication tools. Advertisement and competition will go to the front. The maintenance of existing publication tools **(a)** might become reduced in contrast to the experimental solution **(b)**. The latter might probably augment the already implemented tools.

The same holds true for the third drawback **(3)** the impact of voluntary assistance. The fourth problem **(4)** will become solved by itself if the journal's future will remain in its common publication milieu or it might become non-relevant if the other solution **(b)** is chosen.

Questionnaire and asking for advices

A reliable and science-oriented re-organization of the journal should start with a clear definition of the goal in 2021. Therefore, we ask our authors and readers for the most promising solution. We are very grateful if they could use the attached email link and add commentaries and annotations to the questionnaire:

Q1: Should the journal remain in its present publication scenario?
<mailto:info@diagnosticpathology.eu?subject=Question%201%20-%20don't%20change%20this>.

<yes> <no>



Q2: Should *interactive review procedures such as 'chat' or open platforms be implemented? <mailto:info@diagnosticpathology.eu?subject=Question 2 - don't change this.>

<yes> <no>

Q3: Should automated self - learning review procedures be provided? <mailto:info@diagnosticpathology.eu?subject=Question 3 - don't change this.>

<yes> <no>

Q4: Should automated image analysis (measures) of virtual slides be included? <mailto:info@diagnosticpathology.eu?subject=Question 4 -don't change this.>

<yes> <no>

Q5: Should own citation indices be created? <mailto:info@diagnosticpathology.eu?subject=Question%205%20-don't%20change%20this.>

<yes> <no>

If *no*: Should the 'idea' include:

Q6: Is the time ready to remove the journal from its present open access scientific environment and to focus on new experimental communication and self-addressing ideas? <mailto:info@diagnosticpathology.eu?subject=Question 6 -don't change this.>

<yes> <no>

Q7: Should automated communication algorithms of scientific articles be included? <mailto:info@diagnosticpathology.eu?subject=Question 7 -don't change this.>

<yes> <no>

Q8: Should automated iterative release of new title and keyword – associated references in scientific communication be included? <mailto:info@diagnosticpathology.eu?subject=Question 8 -don't change this.>

<yes> <no>



Q9: Should an automated estimation of the article's future significance in its scientific community be addressed? <mailto:info@diagnosticpathology.eu?subject=Question 9 - don't change this.>

<yes> <no>

Q10: You are very welcome to add further suggestions:
<mailto:info@diagnosticpathology.eu?subject=Question 10 -don't change this.>

Conclusions

Corona or COVID-19 disease is considered a highly infectious virus pandemic which climbs from its molecular biology level to the top of human life. It significantly damages social behavior and communication. Its diagnosis, therapy and prevention address in addition to biochemical issues human communication and different kinds of natural laws.

Especially in our days it seems to be promising to address scientific research on communication and its structured distribution in the medical and natural sciences community.

We invite you to let us know your opinion realizing new tools as described above. We welcome you to contact and collaborate with us via our technical director Dr. Stephan Borkenfeld (s.borkenfeld@web.de).

Christmas is arriving soon. Viruses do not care about human feelings, belief or wishes. They solely follow their own eternal rules. Christmas strongly calls for a peaceful, merciful, future oriented and educated world, especially in 'Corona times'.

We wish all our readers, reviewers, and interested colleagues a Merry, Peaceful Christmas, and a Happy, Healthy and Successful New Year.

'Please, stay at a secure distance from any evil!'

Klaus Kayser, Editor in Chief