Sixty years of Acta Biochimica Polonica: what can this journal offer to scientists?

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INTRODUCTION: SIXTY YEARS OF THE JOURNAL

The journal Acta Biochimica Polonica was created and established 60 years ago, in 1954. Since that time it provides a forum to communicate and discuss results of research in all areas of biochemistry, including basic studies and applied subjects. Currently, I have a honor and pleasure to continue the work started by the first Editor-in-Chief of Acta Biochimica Polonica, Ignacy Reifer, and subsequently conducted by Włodzimierz Mozołowski, Irena Mochacka, Konstancja Raczyńska-Bojanowska, and Liliana Konarska. I would like to thank all of them, as well as all editors and members of the editorial board, and the editorial staff for their excellent work. I would also like to thank all persons involved in the process of evaluation of the manuscripts submitted to the journal, particularly reviewers. Special thanks are given to Małgorzata Basaj, Joanna Krawiecz, Paweł Pomorski and Lech Wojtczak for their enthusiasm and every-day support for the journal. It is obvious that without their passion and hard work, this journal could not exist.

Nevertheless, apart from giving the credit to all these people, my intention is not to present the history of the journal. This was excellently documented 10 years ago, at the 50th anniversary of Acta Biochimica Polonica, by several articles published in 2003 (volume 50, no. 1). I suppose it is too early after that event to come back to details of this history, and all readers interested in this topic are referenced to that issue. On the other hand, I would like rather to present current situation and possibilities of the journal and its further perspectives. Below I will discuss some issues which I recognize important for Acta Biochimica Polonica, and which perhaps may be interesting for its readers, authors and potential authors. I hope this short editorial article may ensure current authors and readers of the journal that it is worth to use it in their scientific work, and may encourage researches which are not familiar with it to read papers published here and to submit their own manuscripts.

THE NAME OF THE JOURNAL

The journal has been created and named Acta Biochimica Polonica 60 years ago, and it has retained its name until now. Obviously, it publishes articles in English, but has a Latin name which to some scientists sounds not very modern. Another problem in the name is the word Polonica which means “Polish” and — to some scientists — suggests a local character of the journal, while it is a truly international journal, accepting and publishing papers from all countries. Since I became a member of the editorial board in 1999, I remember at least several serious discussions devoted to the question: to change or not to change the name of the journal? The arguments for the change were that (i) English name would be more informative and modern, and (ii) removing of the name of the country would destroy any putative doubts about international character of the journal. The arguments against the change were based mostly on tradition and the fact that the journal is known and recognized for 60 years as Acta Biochimica Polonica, and creation of a new name would result in a loss of its previous achievements as it would be recognized as a completely new journal rather than a successor of the old one. Finally, the editors and the editorial board have decided to keep the name Acta Biochimica Polonica.

It appears that the arguments for the change of the name were not strong enough. First, Latin names of scientific periodicals reflect the scientific tradition, through a reminiscence of the time when this language was commonly used for communication of results of studies. Indeed, Latin names are still obligatory in various disciplines, with medicine and biology being the best examples. In fact, many journals still keep Latin titles, including well-recognized and highly-ranked ones. Biochimica et Biophysica Acta or Acta Crystallographica can be good examples, to quote for journals which aims and scopes are similar to those of Acta Biochimica Polonica. Other examples of well-known and widely recognized journals with Latin names are Acta Biomatéria, Acta Diabetologica, Acta Materialia, Acta Neuropathologica, Acta Paediatrica, Annales Zoologici Fennici, Archivum Immunologicum et Therapiae Experimentalis, Clinica Chimica Acta, Electrochimica Acta, Geochimica et Cosmochimica Acta, Radiobiologia Acta and many others.

Second, the name of a country or a region in a journal title does not mean its local character. Rather, it reflects a tradition and/or localization of journal founder, owner or publisher. This is also true for Acta Biochimica Polonica which has been established as the journal of Committee for Biochemistry of Polish Academy of Sciences (in 1954), and now it is a journal of the Polish Biochemical Society and of the Committee of Biochemistry and Biophysics of Polish Academy of Sciences. Definitely, quality and a range of a journal does not depend on the presence or absence of a geographical or national name in its title. Just consider New England Journal of Medicine, one of the most prestigious medical journals. Nobody doubts...
that it is an international journal, not devoted solely to local problems of New England. Similarly, nobody suspects that American Journal of Medical Genetics, British Journal of Pharmacology, Canadian Journal of Microbiology, European Journal of Human Genetics, Italian Journal of Pediatrics or Spanish Journal of Agricultural Research are journals restricted only to America, Great Britain, Canada, Europe, Italy or Spain, respectively; it is obvious that they are high-standard, worldwide journals.

In summary, it is obvious that neither language of the title nor the presence or absence of geographical or national name in the title decides about the quality and reputation of a journal. Therefore, the original name of the journal Acta Biochimica Polonica, established at the time of its creation, is being kept.

WHAT ARE AIMS AND SCOPE OF THE JOURNAL, AND WHAT ARE BENEFITS TO AUTHORS AND READERS?

Acta Biochimica Polonica is a journal covering all aspects of modern biochemistry and related fields. The idea is to form a platform for publishing results of studies on both basic research and more applied biochemical aspects, including bio-medical issues and clinical biochemistry. There are many known examples that effects of basic studies were inspirations for biotechnological or pharmaceutical applications, and vice versa, results of clinical observations led to discoveries of basic biochemical rules. Therefore, the journal considers works on different aspects of biochemistry as enzymology, metabolism, membranes, bioenergetics, gene structure and expression, and protein, nucleic acid and carbohydrate structure and metabolism. We publish various types of articles: full length papers, short communications, review articles and book reviews. The criteria of acceptance of manuscripts which contents are related to biochemistry and can provide a significant input into this subject are based solely on scientific excellence and novelty, and on complying ethical rules.

One can ask what are benefits for authors publishing in Acta Biochimica Polonica and for readers of this journal? In my opinion, this is a unique journal which provides many advantages for authors and readers. Perhaps each one is available in some other journals but there are not combined to such extent as in our journal to provide an exceptional platform for publication of results of biochemical studies. These advantages are listed below in several points.

First, Acta Biochimica Polonica is an open access journal, which means that every article published by us is freely available to each person interested in it. In addition, a printed version of each journal issue is also published. As in all journals publishing in the open access system, authors are expected to pay charges for their published articles. However, Acta Biochimica Polonica appears to be one of the cheapest open access journals in the world. Current charge is equal to 60 EURO per printed page and is among the lowest in this category. This is mainly because owners and publisher of this journal are non-for-profit organizations (a scientific society and a scientific committee), thus, page charges are calculated just to cover publishing costs, without any earn of funds. Moreover, in some cases authors can apply for reduction of the charge, particularly if their work has not been supported by a grant or other kinds of special funds.

Second, Acta Biochimica Polonica is indexed in: Current Contents, Biochemical and Biophysical Citation Index, BIOSIS, Chemical Abstracts, Excerpta Medica, Medline, Index Copernicus, CBR. Therefore, articles published in this journal and highly visible in the most commonly used data bases in fields of biochemistry and bio-medical sciences. During last 10 years, Impact Factor of the journal was between 1 and 1.8.

Third, the editors — while putting special attention on scientific and ethical quality of the submitted manuscripts — want to keep the editorial process as simple as possible, with as few administrative issues as utterly indispensable. Therefore, we have developed our own, simple on-line submission system, and specific technical requirements for submitted manuscripts are kept at the minimum. We are very flexible with the format of submitted papers, and accepted papers are formatted at the article production stage by editorial staff.

Fourth, there is no fixed or restricted length of an article published in Acta Biochimica Polonica. Therefore, the authors may present as many results as they wish, provided they are important contributions to the field of study. There is also no limit in numbers of cited articles, and presented figures or tables.

Fifth, the editors are doing their best to make the period from submission of the manuscript to the first editorial decision short. However, if authors need — for any reason — to be assured that such a decision is made within three weeks from submission, we can guarantee this. However, as this means special efforts of editors and reviewers, such an option requires also an additional charge. Please, note that paying the additional fee does not mean that the decision is positive. The peer-review process will be as rigorous as usually, and the only difference is assurance to get the decision within 3 weeks.

Sixth, particular attention is put in the journal on ethical aspects of the process of publishing scientific results. Acta Biochimica Polonica is a member of the Committee on Publication Ethics (COPE) which helps us to keep the highest ethical standards of the publishing process.

Seventh, Acta Biochimica Polonica provides the service of language edition of accepted manuscripts. This service is at no additional cost for authors, and may be particularly useful for those which are not native English speakers. Nevertheless, after language edition, each manuscript requires acceptance by authors to be sure that no changes in the merit of their articles were introduced.

Eighth, manuscripts accepted for publication are shortly after that available on-line as “papers in press”. They can be freely accessed in their full version at the journal web pages, and are fully citable.

Ninth, since several years, articles published in Acta Biochimica Polonica are freely available on-line. All volumes of this journal will be digitalized by the Library at the Nencki Institute of Experimental Biology of Polish Academy of Sciences (Warsaw, Poland) as a part of Digital Repository of Scientific Institutes, to make all papers, from the oldest to the newest, accessible to readers. Therefore, we are going back to previous issues and producing pdf files of each article published before the era of electronic publications. Currently, all articles published in volumes 24–60 (years 1977–2013) are available as pdf files.

THE EDITORIAL PROCESS AND QUALITY OF THE REVIEWING SYSTEM

Each manuscript submitted to Acta Biochimica Polonica is preliminary assessed at the editorial office for completeness and basic technical requirements. If anything is missing, the authors are asked to make appropriate cor-
rejections. Then, the manuscript is seen by Editor-in-Chief who decides if a subject of the paper is within the scope of the journal, and if basic scientific and ethical standards are met. If yes, a handling editor is chosen from associate editors, whose field of expertise is the closest to the topic of the manuscript. This editor organizes the review process by sending the paper for evaluation to members of the editorial advisory board and/or to external reviewers. When reports of reviewers are ready, the handling editor makes decision about acceptance, rejection or revision of the manuscript. When revised version is submitted, it can be assessed by the handling editor or sent for the next round of review (this decision is made at the discretion of the handling editor). Then, the final decision is made by the handling editor, and it is always approved by Editor-in-Chief.

How does this system work? We believe it allows the editors to make the most appropriate decisions, based on opinions of experts in particular fields. In recent years, the rejection rate was about 50%. There is no simple method to evaluate the quality or efficiency of editorial systems. However, sometimes unexpected “experiments” become useful in assessment of effects of both our work and quality control systems. Recently, such an “experiment” has been performed by John Bohannon (2013). To test efficiency of peer review systems of different journals, he has submitted a research paper he wrote on the basis of fabricated results to over 300 journals. In each version of this paper, different names of authors and different affiliation(s) were used, however, all names and all affiliations were fictitious. This manuscript contained evident methodological errors, and conclusions were not substantiated by the presented results. Therefore, one might suppose that most journals should reject this paper on the basis of either initial editorial evaluation or opinions received during the peer review. In over 250 journals, slightly modified (the differences concerned names of authors and institutions, names of tested chemicals, and names of organisms and cell lines) versions of the manuscript underwent the entire editing process to acceptance or rejection (some journals did not respond, and some did not make any decision). Surprisingly, about 60% journals accepted for publication this flawed manuscript (in every such case, John Bohannon – acting as the corresponding author, and using one of fictitious names – asked for withdrawing the paper, thus, none of them was published) (Bohannon, 2013). These results were unexpected and indicated the existence of serious problems in quality of the editorial peer review processes in a surprisingly high fraction of journals (all tested journals declare on their web pages that decisions about acceptance or rejection of submitted manuscripts are based on peer review).

*Acta Biochimica Polonica* was among the tested journals. Obviously, like all other tested journals, we were not aware about the “experiment” until the article by Bohannon (2013) was published. On 12th April, 2013 we have received, through our manuscript submission system, the paper entitled “4’-O-methylnorhomosekikaic acid inhibits the growth of murine SV40 transformed myeloid carcinoma cells in vitro” (authors: Ahjallah J. T. Obitarday, Enjay L. C. Ogutorlar, and Adomy Y. Mahsami-betaa; affiliation: *Dawah African Research Foundation, Dakar, Senegal*). All formal requirements were fulfilled, therefore the manuscript received its reference number (ABP: 2013_479). Not knowing that the submission of this manuscript is a part of the “experiment”, and that authors and their affiliation are fictitious, the evaluation process was started. However, the evaluation was relatively quick. The paper has not been sent out for external review, as editors decided that its scientific quality was so poor that it could not be accepted for publication. Therefore, on 25th April, 2013 a letter was sent from the editorial office to the corresponding author with the information about rejection of the manuscript. Figure 1 presents a copy of this letter, which I have signed as Editor-in-Chief, on behalf of editors, and which informed Dr. Obi- 

Figure 1. A copy of the letter with editorial decision on the manuscript no. ABP: 2013_479, sent to Dr. Ahjallah J. T. Obi- 

day (a fictitious person) on 25th April, 2013.

Dear Dr. Obitarday,

Thank you for sending us the above manuscript which has been evaluated by the Editor. I regret to inform you that I am unable to accept your manuscript for publication in *Acta Biochimica Polonica*.

The presented experimental evidence is not sufficiently solid to envisage publication of this manuscript and seems to be rather a preliminary data. In addition, there are many errors that preclude publication of this work in *Acta Biochimica Polonica*. The scientific standards in analysis and presentation of obtained data are also not fully met.

Sincerely,

Editor-in-Chief

Grzegorz Węgrowski

*Acta Biochimica Polonica* was relatively quick. The paper has not been sent out for external review, as editors decided that its scientific quality was so poor that it could not be accepted for publication. Therefore, on 25th April, 2013 a letter was sent from the editorial office to the corresponding author with the information about rejection of the manuscript. Figure 1 presents a copy of this letter, which I have signed as Editor-in-Chief, on behalf of editors, and which informed Dr. Obitarday, in a delicate way, that *Acta Biochimica Polonica* will not publish the paper. Following problems were indicated as the basis of this decision: (i) the presented experimental evidence is not sufficiently solid to envisage publication of this manuscript, (ii) there are many errors that preclude publication of this work, and (iii) the scientific standards in analysis and presentation of obtained data are also not fully met.

According to Bohannon (2013), rejection of the “fictional” manuscript directly by journal’s editor, without an external review, is a good sign. He wrote: “It means that the journal’s quality control was high enough that the editor examined the paper and declined it rather than send it out for review”. The final editorial decision took two weeks (from 12th April to 25th April) in *Acta Biochimica Polonica*, which is a significantly shorter period than average time from submission to rejection in this “experiment”, calculated as 24 days (acceptance took 40 days on average) (Bohannon, 2013). These results indicate that *Acta Biochimica Polonica* passed the “quality control exam”. Obviously, it is not a surprise to us (the editors of this journal) as we are doing our best to maintain high editorial standards. There is also no reason to be proud that our system works as it should work; this is just a normal situation. Nevertheless, it is good to know that our quality control system is not leaky, which could be assessed only in such an unexpected external test as performed by Bohannon (2013). Our feeling is just analogous to your feeling after periodic medical examination when you are receiving information that there is no serious disease. Even if there are no worrisome symptoms,
it is good to be assured, on the basis of professional examination, that everything works well.

In fact, the increasing problem with the global peer review system and strategies to publish results of studies by researchers has been signaled earlier (see Ioannidis et al., 2010, and references therein). Currently, we are in the era of a huge number of scientific journals and enormous number of manuscripts submitted to them every day. This makes serious problems with keeping the editorial processes and peer review systems at sufficiently high levels, and with maintaining high scientific and ethical standards in all cases. Such a situation may be partially caused by systems of evaluation of researches, which in many countries are based on number of publications and journal-based metrics, like Impact Factors of journals in which given researcher published his/her papers, rather than on the merits of results of studies. Therefore, there are initiatives and declarations highlighting these problems and appealing for assessing research on its own merits, not on the above mentioned metrics. Perhaps the best known, among them, is The San Francisco Declaration on Research Assessment (DORA) that has been initiated by the American Society for Cell Biology together with a group of editors and publishers of scholarly journals (see: http://am.ascb.org/dora). As it is stated in DORA, they “have recognized the need to improve the ways in which the outputs of scientific research are evaluated”. Moreover, DORA votes against “the use journal-based metrics, such as Journal Impact Factors, as a surrogate measure of the quality of individual research articles, to assess an individual scientist’s contributions, or in hiring, promotion, or funding decisions”. The declaration is signed now (as by 31\textsuperscript{st} December, 2013) by over 420 institutions or organizations, and by over 10000 individuals (http://am.ascb.org/dora). Many journals have also supported this initiative (see, for example, Raff, 2013). I, as Editor-in-Chief of Acta Biochimica Polonica, also agree with the recommendations of DORA, and declare to follow them in all activities of this journal.

CONCLUDING REMARKS

In conclusion, after 60 years of serving as a medium for publication of results of biochemical studies, Acta Biochimica Polonica is a journal aiming to keep the highest standards in editorial and evaluation processes. We encourage researchers to read articles published in this journal and to submit manuscripts demonstrating results of their own studies. The editors are always open for collaboration, and also ready to answer any questions regarding the journal, as well as to solve any problems related to the journal, to listen critical opinions, and to consider suggestions which might cause further improvement of our services.

REFERENCES