Creating an Academic Career in Respiratory Medicine

Natalja Skrebova Eikje and J. Patrick Barron

*Chest* 2007;131;1967-1969

DOI 10.1378/chest.06-3098

The online version of this article, along with updated information and services can be found online on the World Wide Web at:

http://www.chestjournal.org/content/131/6/1967.full.html
Creating an Academic Career in Respiratory Medicine*

Take-Home Messages From a Unique Symposium

Natalja Skrebova Eikje, MD, PhD; and J. Patrick Barron, BA

On November 19, 2006, on the occasion of the 11th Congress of the Asia Pacific Society of Respirology (Kyoto, Japan), a unique symposium on Creating an Academic Career in Respiratory Medicine was held. For the first time in the history of international medical publishing, a group of editors-in-chief representing a single medical specialty, in this case respiratory medicine, was invited to come together to talk about different aspects of medical publishing in the international literature and to subsequently discuss these issues directly with participants. Such lively interactive communication with the audience and among the editors further increased the value of this already unique and special symposium. The participants were Dr. Edward Abraham (Editor-in-Chief of American Journal of Respiratory and Critical Care Medicine or “Blue Journal”), Dr. Richard Irwin (Editor-in-Chief of CHEST), Dr. Klaus Rabe (Editor-in-Chief of European Respiratory Journal), and Dr. Philip Thompson (Editor-in-Chief of Respirology). The symposium was chaired by Professor J. Patrick Barron of the International Medical Communications Center, Tokyo Medical University, Japan.

Each of the editors-in-chief had been given a carefully selected lecture topic with the main aim to improve the ability of the audience to prepare and write publishable papers. The topics included how to select the most appropriate journal for the submission of your paper, the general and specific factors that positively and negatively affect acceptance or rejection by journals, and how to develop an overall strategy toward an academic career in medicine; there was a special presentation on recent changes in the form and substance of CHEST.

An important starting point for an author is how to choose the most appropriate journal among 33 available respiratory journals to submit a paper. As was largely presented by Professor Phillip J. Thompson, Editor-in-Chief of Respirology, this selection depends on the nature, standard, and depth of the work, as well as the aspiration of the author, the topicality of the subject, and the quality and performance of the available journal. Professor Thompson strongly encouraged the selection of the highest quality journal and advised tailoring papers to the standards set by the journal. The type of manuscript and its qualities should correspond well with the qualities of the journal. The latter is determined by good citations and impact factor level, the types and quality of the publications, wide recognition and access, good public relationship, and high evaluation by peers and mentors, in addition to the extent of society readership listed on MEDLINE or other search engines. The quality of the journal is also determined by editorial office factors (ease in following the instructions to authors, the availability of electronic submission systems, review process efficiency, constructive criticism of the review, fast-tracking capacity, timeliness of publication (an increasingly important issue!), publishing factors (ie, quality of the technical and layout aspects), and distribution factors (ie, available electronically print format, copyright issues, libraries worldwide, costs, and governance). Particularly for new and young authors, it is especially important to discuss these issues with peers and mentors, to carefully read the
instructions to authors, and to read articles in the journal they are selecting before committing to a particular journal.

After focusing on the journal selected for your publication, it is crucial to consider factors that would positively or negatively affect the acceptance of your paper. As described by Dr. Edward Abraham, general factors that enhance the likelihood that a manuscript will be accepted include the following: the novelty, creativity, originality, and scientific importance of the data presented; the study design; the interpretation of the results; the clarity and brevity of presentation; mechanistic insights; and the general interest in the subject studied. In terms of The American Journal of Respiratory and Critical Care Medicine, translational or human studies will receive a higher priority for acceptance if they are registered in a publicly searchable database (eg, www.ClinicalTrials.gov), are presented with meaningful primary and secondary end points, are sufficiently large to achieve statistically significant results, and follow the CONSORT guidelines (www.consort-statement.org) for clinical trials with ethical concerns. Regarding isolated cell studies, The American Journal of Respiratory and Critical Care Medicine will accept studies that describe cellular populations presented from humans or animals with disease, or studies that start with cells in culture and then extend to a human disease state or an animal model. In addition to the fundamental concerns of the studies and the importance of the results presented, the clear presentation of the data, a well-written abstract, a short and focused introduction, clear subheadings in the results section, the organized presentation of data with useful figures and tables, properly done statistics, and a discussion section that puts the findings into perspective, particularly with reference to previously published information, will all enhance the chances of the paper being accepted. The writing style should be clear and declarative.

Nevertheless, papers receiving positive reviews are frequently not selected for publication because of priority reasons. Common causes of the rejection of papers by the European Respiratory Journal listed by Dr. Klaus Rabe include lack of novelty, sets of data that are too small, reports that are too descriptive and are of limited interest, methodological issues, experimental models of questionable relevance, and flawed statistics that do not justify the conclusions. While there are accepted criteria that will determine the acceptability of a paper for publication in a journal, there are also strategic considerations such as the scope of the journal, and the perceived standards that can result in negative editorial decisions and that are sometimes more difficult to quantify. Eventually, a scientific journal is not just meant to handle manuscripts but has an editorial priority and decides on the appeal of the subject matter to the broad, multidisciplinary readership of the journal.

Dr. Richard Irwin described how CHEST has developed new strategies on changing its form and substance while preserving what the readers of CHEST expect and need. Beginning in 2005, the journal began to change its editorial stewardship and commitments to improving the quality of research and scholarly works it publishes and to publishing new educational offerings. Decisions were made to have a sharper focus on content: to have CHEST become more reflective of contemporary societal issues and the practice of medicine; to enhance the subject matter published in print and online to make CHEST easier and faster to read and access; to publish as quickly as possible the large backlog of accepted manuscripts; and to appoint an outstanding group of associate editors and editorial board members with superior credentials and reviewing skills; and to clearly define the reviewing expectations and responsibilities.

High-quality external invited reviewers are essential for a high-quality journal, although the peer review process also involves an evaluation by chief editors (ie, the editor-in-chief and/or associate editors), the editorial board, and technical editors. For example, on arrival in the CHEST editorial office, all papers are assessed by the chief editors before they are forwarded to others. At this stage, the scope of the manuscript, its novelty, methodological concerns, and presentation of the manuscript are assessed. These affect the priority rating of the chief editors and the acceptance or rejection of a paper. Responsible editorial policy requires at least an explanation of why an editor came to a negative decision, and these criteria may also vary among different publication categories. Manuscripts that are forwarded to the associate editors will usually be seen by at least two outside reviewers before the final decision by the chief editor. The recommendations of reviewers together with the assessment of the chief editors form the basis of the final decision on the acceptance or rejection for publication of a research paper in CHEST.

This process is similar in all journals in biomedical science. The reviewing process obviously aims to be as objective as possible, but the selection of reviewers may sometimes be governed by factors of availability and/or collegial relations. Because this process may introduce some form of variability, it is the chief editors who in the end have to decide.

Nevertheless, it is probably underrecognized that it is the authors who play a major role in the decision about whether or not to publish a trial in the first
place. A follow-up study by Dickersin et al\textsuperscript{1} showed that only 6 of 124 studies not published were rejected for publication by a journal, concluding that publication bias originated primarily with the investigators and not with journal editors. The same investigators and others\textsuperscript{1,2} have proven that the most influential factor in the acceptance of the manuscript is the significance of the results. However, lack of statistical significance should not stop authors from publishing papers!\textsuperscript{3} Well-done randomized clinical trials that have yielded negative results have been published in high-impact/high-profile journals. Further noted by Dr. Klaus Rabe was the fact that negative study data from clinical trials are frequently found on the Web sites of pharmaceutical manufacturers, and some of those data may be worth reporting.

Besides the role of the authors and the role of the journal, other factors determining the submission of the paper must be taken into consideration. Specifically, the obtaining of research funding is now more competitive than ever. Moreover, the lack of research funding can limit multidisciplinary research approaches, participation at meetings, professional networking, and, of course, publications. As a whole, all of the points made in this symposium will aid potential authors in constructing more effective publications, which will result in advances in human knowledge and patient care, and simultaneously will contribute to the development of the academic careers of authors.

**Take-Home Messages**

1. The qualities of the manuscript and the journal must match;

2. Evaluate journal quality by editorial office, publishing, and distribution factors;

3. Read the instructions to authors carefully;

4. Read the journal;

5. Novelty, creativity, and level of interest are important factors;

6. Check for methodological quality;

7. Register human studies/clinical trials;

8. Place findings in perspective;

9. Ensure clarity of presentation;

10. Avoid paucity of data;

11. Check the appropriateness of the statistical methods;

12. Emphasize the clinical significance of the study;

13. Enhance the rapid readability and comprehension of the paper; and

14. Pay attention to how *CHEST* has changed in the last year and a half.

**ACKNOWLEDGMENT:** A Chairman of the symposium, Professor J. Patrick Barron, is grateful to all of the societies that funded the attendance of the editors-in-chief.

**REFERENCES**

1. Dickersin K, Min YI, Meinert CL. Factors influencing publication of research results: follow-up of applications submitted to two institutional review boards. JAMA 1992; 267:374–378


**Creating an Academic Career in Respiratory Medicine**
Natalja Skrebova Eikje and J. Patrick Barron
*Chest* 2007;131; 1967-1969
DOI 10.1378/chest.06-3098

This information is current as of March 26, 2009

<table>
<thead>
<tr>
<th>Updated Information &amp; Services</th>
<th>Updated Information and services, including high-resolution figures, can be found at: <a href="http://www.chestjournal.org/content/131/6/1967.full.html">http://www.chestjournal.org/content/131/6/1967.full.html</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>References</td>
<td>This article cites 3 articles, 2 of which can be accessed free at: <a href="http://www.chestjournal.org/content/131/6/1967.full.html#ref-list-1">http://www.chestjournal.org/content/131/6/1967.full.html#ref-list-1</a></td>
</tr>
<tr>
<td>Open Access</td>
<td>Freely available online through CHEST open access option</td>
</tr>
<tr>
<td>Permissions &amp; Licensing</td>
<td>Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at: <a href="http://www.chestjournal.org/site/misc/reprints.xhtml">http://www.chestjournal.org/site/misc/reprints.xhtml</a></td>
</tr>
<tr>
<td>Reprints</td>
<td>Information about ordering reprints can be found online: <a href="http://www.chestjournal.org/site/misc/reprints.xhtml">http://www.chestjournal.org/site/misc/reprints.xhtml</a></td>
</tr>
<tr>
<td>Email alerting service</td>
<td>Receive free email alerts when new articles cit this article. sign up in the box at the top right corner of the online article.</td>
</tr>
<tr>
<td>Images in PowerPoint format</td>
<td>Figures that appear in CHEST articles can be downloaded for teaching purposes in PowerPoint slide format. See any online article figure for directions.</td>
</tr>
</tbody>
</table>