







Modulul 3 Procedura de "peer review"

Prof. Dr. Mihail Hinescu, Dr. Carmen Diaconu, Prof. Dr. Monica Acalovschi

Definiția procedurii de peer review "Peer review" reprezintă evaluarea critică a manuscriselor transmise revistelor științifice, realizată de către experți care nu fac parte din echipa editorială".

International Committee of Medical Journal Editors (ICMJE). Uniform





















2007

PEER REVIEW **AND** MANUSCRIPT MANAGEMENT SCIENTIFIC **JOURNALS**

Guidelines for Good Practice

Irene Hames









Scopurile

- Prevenirea publicării unor lucrări de proastă calitate (deficite de concepție, design sau execuție)
- Rezultatele au fost interpretate corect și au fost considerate toate interpretările posibile
- Rezultatele sunt corect prezentate, fără ambiguități și în raport cu datele deja publicate
- Rezultatele nu sunt prea preliminare sau prea speculative
- Selecția lucrărilor de cel mai mare interes pentru cititori
- Să furnizeze editorilor dovezi pentru judecăți de valoare
- Să asigure îndeplinirea criteriilor de selecție pentru o anumită publicație
- Să conducă la îmbunătățirea calității revistei





De când se practică peer review?

The practice of reviewing manuscripts for publication has been around for nearly 300 years, since the Royal Societies of Edinburgh* and London started seeking the advice of their members in the early to mid-18th century to help them select articles for publication. Gradually, a number of other scientific and professional societies adopted the practice, but procedures developed in a rather haphazard and ad hoc







De ce se practică pe scară largă peer review?

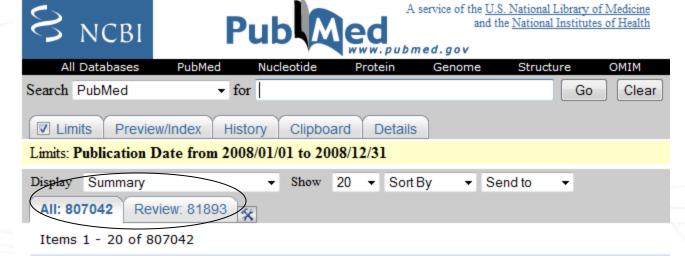
Two main factors led to the spread of peer review. Firstly, until the relatively recent past, editors frequently had to struggle to find enough material to publish and so did not need to be selective. Over the past 50 years this has changed, to the point where submissions to scientific journals are burgeoning and editors need to be highly selective in what they publish in their journals. Secondly, as scientific areas expanded and became increasingly specialized and sophisticated, editors were no longer able to be experts in all areas. They needed to seek the opinion and advice of others. Today, peer







Ce înseamna peer review pe scară largă?



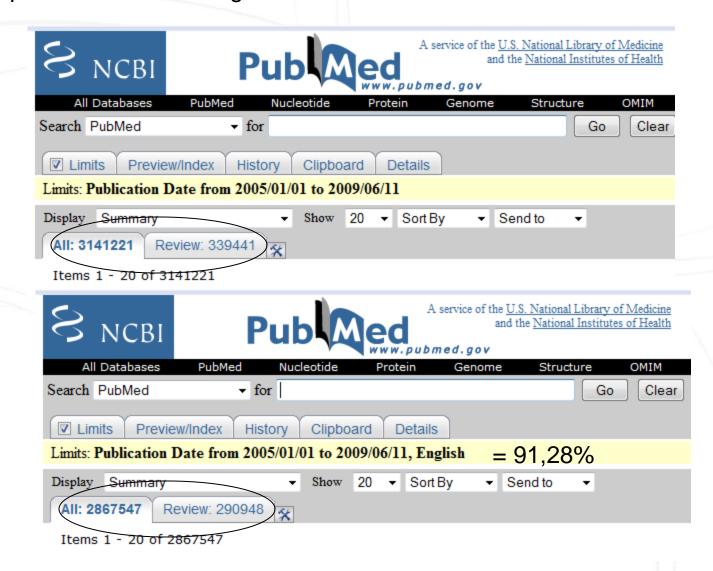
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All: 392027 Re	view: 17839								
Items 1 - 20 of 3	192027								





De ce (să) publicăm în limba engleză?

2005-2009







De ce se practică pe scară largă peer review? Revistele sunt în competiție!

☐ Journal Summary List		Journal Title Changes
Journals from: All Journals		
Sorted by: Impact Factor ▼ SORT AGAIN		
		-
Journals (81 - 200 (of 6426)		Page 10 of 322
MARK ALL UPDATE MARKED LIST	Ranking is based on your journal and sort selections.	

				JCR Data j)				Eigenfactor TM Metrics j			
Mark	Rank	Abbreviated Journal Title (linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor TM Score	Article Influence™ Score
	181	DEVELOPMENT	0950-1991	46024	7.293	7.387	1.462	413	7.3	0.21992	3.768
	182	BBA-REV CANCER	0304-419X	1955	7.264	9.699	2.741	27	5.5	0.00895	3.736
	182	MED RES REV	0198-6325	2196	7.264	8.597	1.467	30	5.6	0.00788	2.529
	184	HUM REPROD UPDATE	1355-4786	2965	7.257	6.498	1.319	47	5.4	0.01315	2.327
	185	TRENDS MOL MED	1471-4914	3762	7.244	6.725	1.984	63	3.7	0.02921	2.719
	186	ARTERIOSCL THROM VAS	1079-5642	27035	7.221	7.690	1.544	360	5.7	0.11470	2.797
	187	TRENDS ENDOCRIN MET	1043-2760	3762	7.195	7.954	0.915	59	5.0	0.02097	2.938
	188	HYPERTENSION	0194-911X	26664	7.194	6.961	1.824	347	6.3	0.08406	2.120
	189	REV MED VIROL	1052-9276	1146	7.174	6.048	1.174	23	4.3	0.00616	2.119
	190	J AM SOC NEPHROL	1046-6673	22501	7.111	7.150	1.504	341	4.7	0.10300	2.245
	191	CAN MED ASSOC J	0820-3946	8324	7.067	6.735	3.053	94	6.4	0.02893	2.292
	192	SEMIN IMMUNOL	1044-5323	2527	7.000	6.809	1.543	35	4.9	0.01733	3.566
	193	NUCLEIC ACIDS RES	0305-1048	83534	6.954	7.163	1.589	1012	6.5	0.35897	2.898
	193	PHYSIOLOGY	1548-9213	979	6.954	7.684	0.744	39	2.6	0.00887	3.347
	195	PHYS REV LETT	0031-9007	282787	6.944	6.906	1.645	3545	7.0	1.26804	3.218
	196	LEUKEMIA	0887-6924	13127	6.924	5.993	2.036	252	4.9	0.05620	1.931
	197	REV GEOPHYS	8755-1209	4582	6.900	12.375	0.720	25	>10.0	0.01176	7.902
	198(J CELL MOL MED	1582-1838	1801	6.807	5.631	0.408	103	2.8	0.01163	1.678
	199	FASEB J	0892-6638	32421	6.791	6.963	1.361	388	6.0	0.13042	2.491
	200	DRUG DISCOV TODAY	1359-6446	4779	6.761	6.951	1.123	122	3.4	0.02668	2.075

MARK ALL UPDATE MARKED LIST

Journals 181 - 200 (of 6426)

Page 10 of 322





Care sunt rezultatele practicii pe scara largă a peer review?

ISI Web of Knowledge™		
Journal Citation Reports®		
melcome 2 HELP		2007 JCR Science Edition
☐ Journal Summary List		Journal Title Changes
Journals from: All Journals		
Sorted by: Impact Factor SORT AGAIN		
Journals 3641 - 3660 (of 6426)	◀ ◀ ◀ [181 182 183 184 185 186 187 188 189 190] ▶ ▶ ▶	Page 183 of 322
MARK ALL UPDATE MARKED LIST	Ranking is based on your journal and sort selections.	

					JCR Data i)					Eigenfactor TM Metrics j		
Mark	Rank	Abbreviated Journal Title (linked to journal information)	ISSN	Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index	Articles	Cited Half-life	Eigenfactor TM Score	Article Influence™ Score	
	3620	RES NURS HEALTH	0160-6891	1748	1.000	1.528	0.074	54	>10.0	0.00222	0.447	
	3620	REV MED MICROBIOL	0954-139X	190	1.000	0.882	0.000	9	9.6	0.00038	0.214	
	3620	RIV NUOVO CIMENTO	0393-697X	363	1.000	2.375	0.000	6	>10.0	0.00114	1.020	
	3620	TRANSPORT RES E-LOG	1366-5545	350	1.000	1.391	0.191	47	5.3	0.00239	0.746	
(3620	USER MODEL USER-ADAP	0924-1868	336	1.000	2.576	0.200	15	6.2	0.00094	0.683	
	3646	ANZ J SURG	1445-1433	1402	0.998	1.096	0.323	192	3.7	0.00807	0.314	
	3646	SOUTH MED J	0038-4348	3962	0.998	0.985	0.410	210	>10.0	0.00779	0.290	
	3648	NUCL INSTRUM METH B	0168-583X	14570	0.997	1.090	0.103	1414	6.9	0.04811	0.351	
	3649	INT J PROD ECON	0925-5273	2601	0.995	1.490	0.066	212	6.2	0.01022	0.537	
	3650	CHILD NERV SYST	0256-7040	2435	0.993	1.232	0.184	201	7.2	0.00628	0.350	
	3651	ADV APPL PROBAB	0001-8678	1329	0.991	1.007	0.130	54	>10.0	0.00667	1.040	
	3651	CEREAL CHEM	0009-0352	5248	0.991	1.334	0.129	101	>10.0	0.00536	0.351	
	3651	J BASIC MICROB	0233-111X	658	0.991	1.066	0.143	63	6.5	0.00203	0.322	
	3651	PEDIATR RADIOL	0301-0449	2939	0.991	1.115	0.238	214	7.9	0.00828	0.357	
	3655	DIAGN CYTOPATHOL	8755-1039	1973	0.990	1.070	0.143	140	7.2	0.00439	0.254	
	3656	AM J MATH	0002-9327	2824	0.989	1.183	0.174	46	>10.0	0.00911	1.788	
	3656	FACIES	0172-9179	646	0.989	1.218	0.324	37	9.5	0.00176	0.424	
	3656	FOLIA MICROBIOL	0015-5632	922	0.989	0.883	0.079	89	5.8	0.00192	0.156	
	3656	J REINE ANGEW MATH	0075-4102	2804	0.989	1.006	0.135	96	>10.0	0.01693	1.465	
	3660	AIAA J	0001-1452	8683	0.988	1.245	0.113	311	>10.0	0.02523	0.680	





Cele 14 reguli de bază ale peer review (1-7)

- Responsabilitatea editorului: A) calitatea publicației,
 - B) ceea ce e publicat este corect, etic şi relevant pt cititori
- Peer review înseamnă evalaure de către referenți externi
- Transmiterea manuscrisului și detaliile asociate trebuie păstrate confidențiale
- Identitatea referenților trebuie să rămână confidențială (exceptie peer review deschis)
- Referenții consiliează și fac recomandări; EDITORUL IA DECIZII
- 6. Referenții evaluează obiectiv manuscrisele, nu evaluează autorii
- Redactorul sef are independență TOTALĂ







Cele 14 reguli de bază ale peer review (8-14)

- Decizia editorului: A) calitatea manuscrisului; adecvarea pt. publicație
 - B) neinfluentată de: ratiuni comerciale, originea manuscrisului, politicile altor institutii
- Peer review înseamnă standarde etice înalte
- 10. Detaliile întregului proces de evaluare nu pot fi folosite în avantajul celor implicati și nici pt a discredita
- 11. Conflictele de interes trebuie declarate înaintea demarării procedurii
- 12. Nici un conflict de interes nu trebuie să influențeze revizia științifică și nici decizia publicării
- 13. Suspiciunea sau indiciile de conduită incorectă nu trebuie ignorate
- 14. Atât editorii cât și publicațiile au datoria de a păstra înregistrări care să impiedice interpetări incorecte, pentru mediul academic



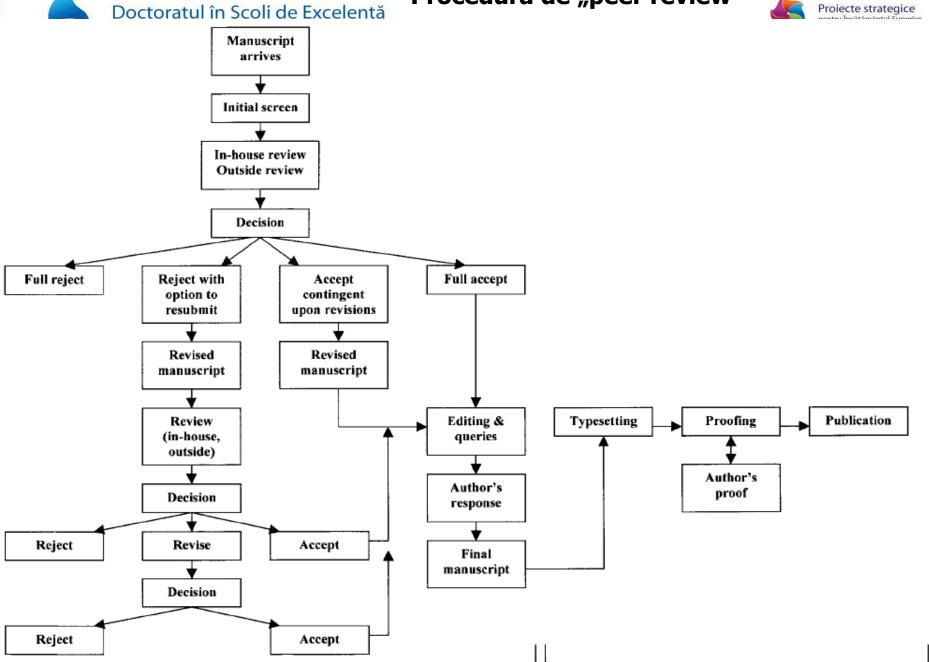




Table 2.4 Information that needs to be kept on manuscripts.



Manuscript details

Required

Reference number

Title

Authors

Corresponding author (CA)

Address and contact details of CA

Type of article

Whether for a special or themed issue

Whether it is a revision

Whether it is a resubmission (with previous manuscript number)

Handling editor

Whether copyright assignment or licence to publish received if required

Whether all permissions and required correspondence received

Charges due

Any requests for waivers of charges

Any non-compliance with journal policy

Relevant notes

Optional (but recommended)

Length (word count or pages), possibly broken down into sections

Number of figures and tables

Number of colour figures

Whether supplementary material provided

Whether cover image submitted

Suggested and/or excluded reviewers from author

Procedura de "peer review"

PEER REVIEW
AND
MANUSCRIPT
MANAGEMENT
IN
SCIENTIFIC
JOURNALS
Guidelines for Good Practice

Irene Hame

ALPSP





Doctoratul în Școli de Excelență



Transaction information

Required

Procedura de "peer review"

Date manuscript received

Date manuscript assigned or sent to editor

Date reviewer list received from editor (if applicable to process operated)

Details of all individuals approached to review, with dates and outcome

Names of reviewers found

Dates manuscript assigned or sent to reviewers

Dates reviews due

Dates reviewers reminded

Dates reviews returned

Date reviews to editor

Date decision to CA

Decision

Date revision received (with above details if sent for review)

Date decision on revised manuscript to CA

Relevant notes

Current status

Date accepted manuscript to production and any relevant notes

Publication details for accepted manuscript

Volum mare de date = solutii informatice necesare!





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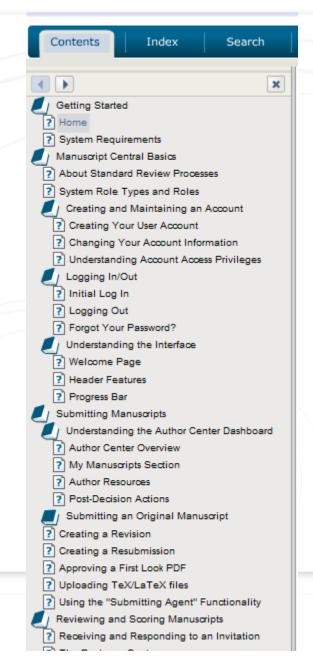
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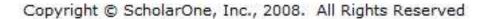
Doctoratul în Școli de Excelență

Procedura de "peer review"



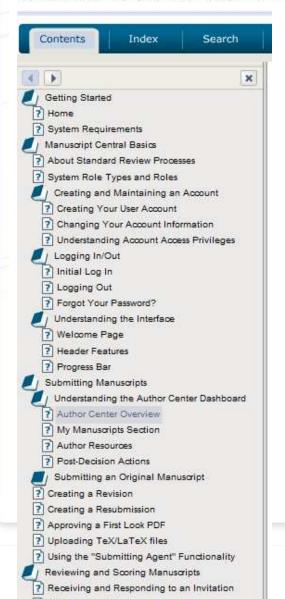


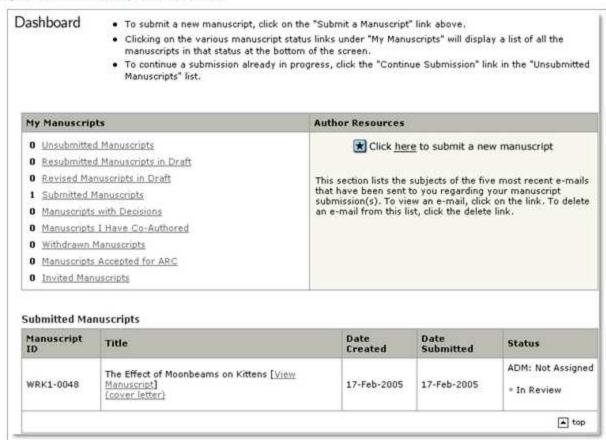


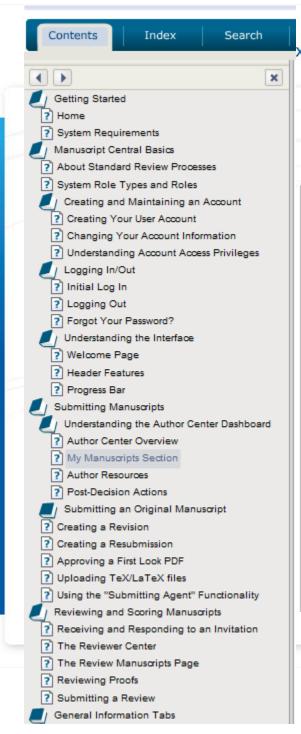


Author Center Overview

When you log in and click the Author Center link, the Dashboard page opens. This is where you submit your manuscripts. Also, at a glance view details of all your manuscripts in the journal's Manuscript Central site.







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http://mcv3help.manuscriptcentral.com/tutorials/Author.pdf

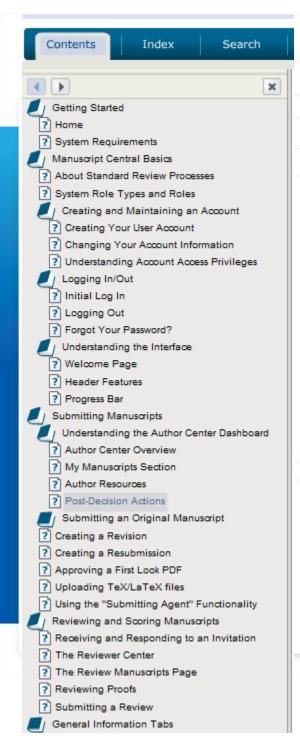
Dashboard

- · To submit a new manuscript, click on the "Submit a Manuscript" link above.
- Clicking on the various manuscript status links under "My Manuscripts" will display a list of all the manuscripts in that status at the bottom of the screen.
- To continue a submission already in progress, click the "Continue Submission" link in the "Unsubmitted Manuscripts" list.

My Manuscripts	Author Resources			
0 Unsubmitted Manuscripts	Click here to submit a new manuscript			
Resubmitted Manuscripts in Draft				
Revised Manuscripts in Draft	This section lists the subjects of the five most recent e-mails			
1 Submitted Manuscripts	that have been sent to you regarding your manuscript submission(s). To view an e-mail, click on the link. To delete			
Manuscripts with Decisions	an e-mail from this list, click the delete link.			
Manuscripts I Have Co-Authored				
Withdrawn Manuscripts				
Manuscripts Accepted for ARC				
0 Invited Manuscripts				

Submitted Manuscripts

Manuscript ID	Title	Date Created	Date Submitted	Status
WRK1-0048	The Effect of Moonbeams on Kittens [View Manuscript] (cover letter)	17-Feb-2005	17-Feb-2005	ADM: Not Assigned • In Review



Excelență Procedura de "peer review"



http://mcv3help.manuscriptcentral.com/tutorials/Author.pdf

Glossary Print

Post-Decision Actions

You can view journal decisions about your submitted manuscripts from your Author Center dashboard.

My Manuscripts	Author Resources			
1 Unsubmitted Manuscripts	Click here to submit a new manuscript			
Resubmitted Manuscripts in Draft				
Revised Manuscripts in Draft	This section lists the subjects of the five most recent e-mails			
2 Submitted Manuscripts	that have been sent to you regarding your manuscript submission(s). To view an e-mail, click on the link. To delet an e-mail from this list, click the delete link.			
6 Manuscripts with Decisions				
3 Manuscripts I Have Co-Authored				
1 Withdrawn Manuscripts				
0 Menuscripts Accepted for ARC				
Invited Manuscripts				

Manuscripts with Decisions

Manuscript ID	Title	Date Submitted	Date Decisioned	Status	Actions
WRK1-0006	Title - Test Article - 1/19/2005 8:55 [View Manuscript]	19-Jan-2005	21-Jan-2005	ADM: King, Kitty * Accept Scheduled for archiving in 25 days view decision letter	
WRK1-0010	Title - Test Article - 1/20/2005 7:36 [View Manuscript]	20-Jan-2005	21-Jan-2005	Minor Revision a revision exists wiew decision letter	a revision has been started (WRK1- 0010.R1)
WRK1-0015	Title - Test Article - 1/24/2005 8:24 CΩ [View Manuscript]	24-Jan-2005	18-Feb-2005	* Immediate Reject & Resubmit due on 20-Mar-2005 (27 days left) view decision letter	sceate a resubmission (27 days left)

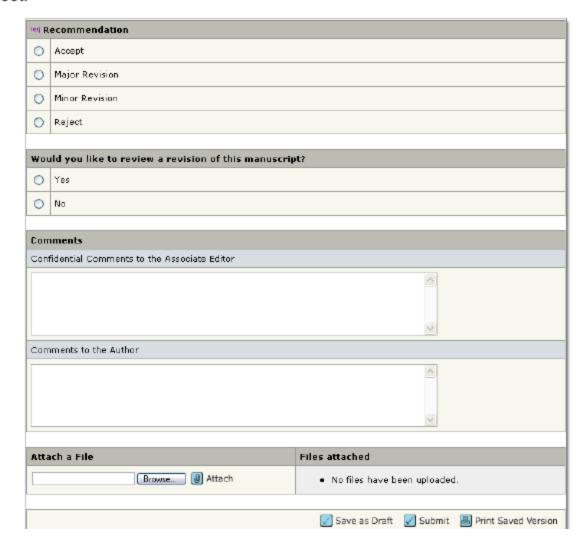


Doctoratul în Şcc Scoring & Submitting Your Review



Click the Scoresheet tab to review and score the manuscript. The format varies by journal and may include journal-specific questions, a recommendation field, comments to the author, comments to the editor, and possibly the ability to attach files.

Any fields marked with a red "req" symbol require an answer before you can submit the scoresheet.









Manuscript Home

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Referee Instructions

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Journal Home

To ensure proper functionality of this site, both <u>JavaScript and Cookies</u> must be enabled.

Click for reviewer guidelines

Reviewer Instructions

Contents:

Review Process Navigating the System Review Manuscript Getting Help Manuscript Status

Review Process

The manuscript submission and peer review process is broken down into the following steps:

- 1. The Author submits a manuscript.
- 2. The Editor assigns Reviewers to the manuscript.
- 3. The Reviewers review the manuscript.
- 4. The Editor drafts a decision to be sent to the Author.

As a Reviewer, you are responsible for step #3.

Navigating the System

There are two ways to gain access to the system. First, if you know your login name and password, you may log into the system from the home page. Alternatively, i to review, you may use the encrypted link from this email to be logged in and taken directly to the manuscript.

When you log into the system, you will be taken to your "Home" page. If you have been asked to review any manuscripts, you will see a link (or several links) with a r the "Reviewer Tasks" header. Clicking this link will display the "Manuscript Details Screen," containing:

- · Detailed Information about a specific manuscript.
- Links to the manuscript and associated figures/images.
- . A list of "Manuscript Tasks" or links allowing you to:
 - Accept/Decline Reviewer Position
 - o Check Status
 - Review Manuscript



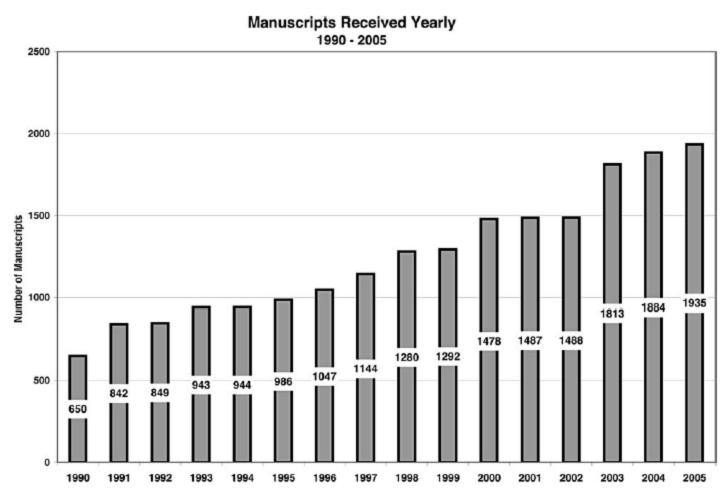


Figure 1. Number of submissions to Circulation Research by calendar year for 1990 to 2005.





292 Circulation Research February 17, 2006

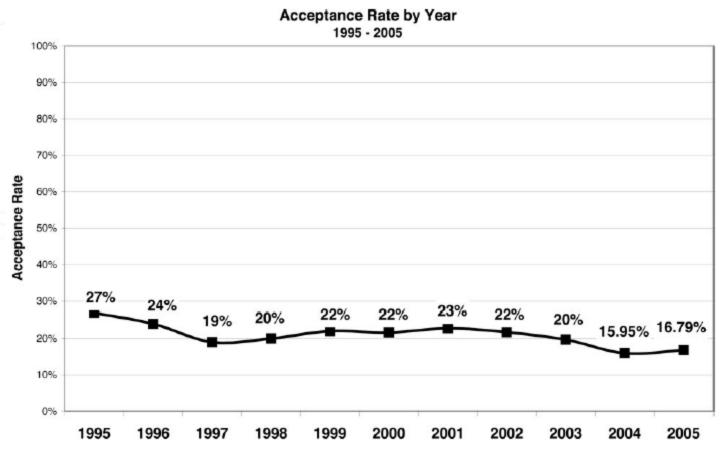


Figure 4. Acceptance rate trend by calendar year for 1995 to 2005.



CHEST

Postgraduate Education Corner

MEDICAL WRITING TIP OF THE MONTH

Handling Manuscript Rejection* Insights From Evidence and Experience

Karen L. Woolley, PhD; and J. Patrick Barron, BA

(CHEST 2009; 135:573-577)

The purpose of this article is to provide authors with insights gained from evidence and experience on how to handle rejected manuscripts.

How Common Is Manuscript Rejection?

Authors, particularly inexperienced authors, may take comfort in knowing that manuscript rejection is common.^{1,2} One study³ showed that 62% of published papers had been rejected at least once. Authors should also be aware that many top-tier journals have high rejection rates.⁴ Since 2005, the rejection rate for unsolicited manuscripts submitted to CHEST has ranged from 87 to 91% (R. Irwin, MD; personal communication; September 2008).

REJECTION HURTS, BUT IS IT FATAL?

Most, if not all, authors feel some level of pain when their manuscript is rejected. We find it helpful to remind disappointed authors of the

*From ProScribe Medical Communications (Dr. Woolley), Oueensland Australia: and International Medical Communicafollowing: (1) rejected manuscripts still have a reasonable chance of being published within a reasonable time frame (Table 1). In most studies. at least 50% of rejected manuscripts were published within 2 years. At each of our organizations, > 90% of manuscripts are eventually published in a timely manner in journals with an impact factor. (2) The peer-review process means almost all authors receive criticism.5 (3) Reviewers can provide free and useful suggestions for manuscript improvement. 1,5 Reviewers' comments were deemed valuable by 76% (176 of 231 authors) of authors whose manuscripts were eventually accepted and 60% (21 of 35 authors) of authors whose manuscripts were rejected or withdrawn.6 (4) Many editors who receive more submissions than they can accept have to reject good manuscripts. 4,7,8 Editors may decide to reject manuscripts without sending them out for peer review.

WHAT CHOICES CAN AUTHORS MAKE WHEN THEIR MANUSCRIPT IS REJECTED?

The choices authors make after manuscript rejec-

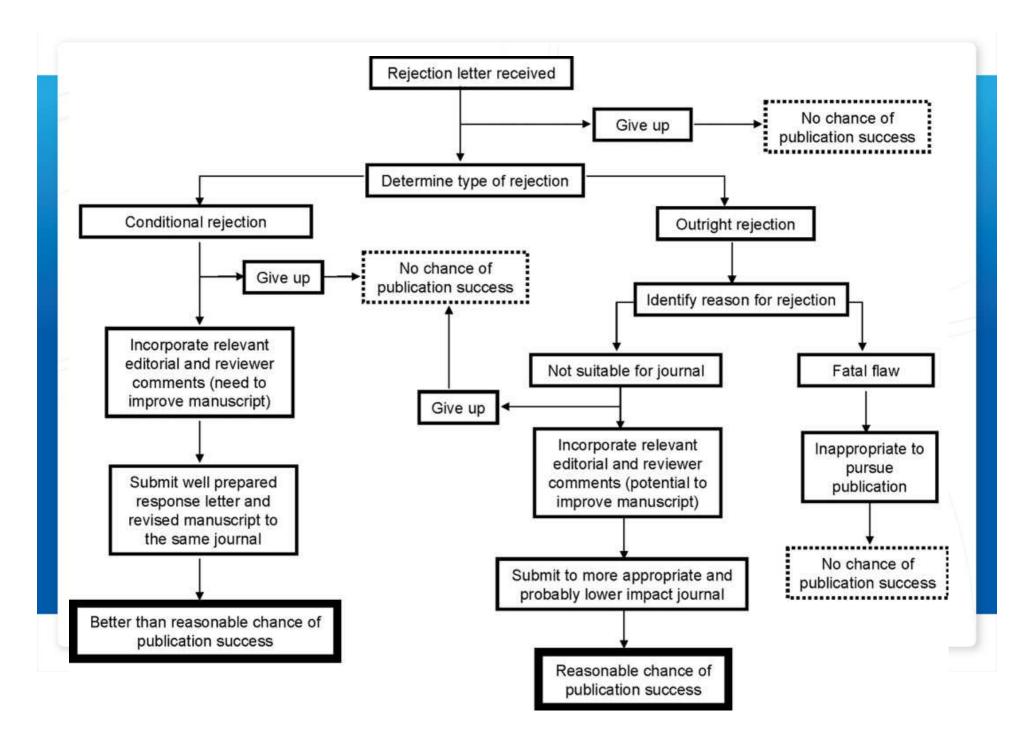






Table 1—Publication Success Rates for Previously Rejected Manuscripts*

		Rejected Manuscripts,	Rejected Manuscripts Subsequently Published in Other Journals,	
Study†	Therapeutic Area	No.	No. (%)	Publication Delay
Hall and Wilcox, 2007 ³	Epidemiology	155	116 (75)	Most published within 19 mo
Mundy, 1984 ¹⁸	General medicine	113	82 (73)	Most published within 23 mo
Koch-Weser and Yankauer, 1993 ¹⁹	Public health	83	60 (72)	Most published within 30 mo
Ray et al, 2000 ²⁰	General medicine	350	240 (69)	Mean time from rejection to publication elsewhere was 18 mo (minimum, 4 mo; maximum, 60 mo)
Chew, 1991 ¹	Diagnostic radiology	254	162 (64)	Mean time from rejection to publication elsewhere was 15 mo (minimum, 2 mo; maximum, 38 mo)
McDonald et al, 2007 ⁸	Radiology	554	304 (55)	Mean time from rejection to publication elsewhere was 16 mo (minimum, 1 mo; maximum, 37 mo)
Nemery, 2001 ¹²	Occupational and environmental medicine	405	218 (54)	Most published within 24 mo
Liesegang et al, 2007 ⁷	Ophthalmology	1344	686 (51)	Most published within 24 mo (median, 15 mo; minimum, 0.4 mo; maximum, 39 mo)
Opthof et al, 2000 ¹³	Cardiovascular	644	301 (47)	Most published within 36 mo
Armstrong et al, 2008 ¹¹	Dermatology	489	201 (41)	Most published within 28 mo
Green and Del Mar, 2006 ⁶	General medicine	11	3 (27)	Not reported

Title, Authors, and Abstract

Georges Bordage and William C. McGaghie

- The title is clear and informative.
- The title is representative of the content and breadth of the study (not misleading).
- The title captures the importance of the study and the attention of the reader.
- The number of authors appears to be appropriate given the study.
- The abstract is complete (thorough); essential details are presented.
- The results in the abstract are presented in sufficient and specific detail.
- The conclusions in the abstract are justified by the information in the abstract and the text.
- There are no inconsistencies in detail between the abstract and the text.
- All of the information in the abstract is present in the text.
- The abstract overall is congruent with the text; the abstract gives the same impression as the text.



MANUSCRIPT INTRODUCTION

Problem Statement, Conceptual Framework, and Research Question

William C. McGaghie, Georges Bordage, and Judy A. Shea*

- The introduction builds a logical case and context for the problem statement.
- The problem statement is clear and well articulated.
- The conceptual (theoretical) framework is explicit and justified.
- The research question (research hypothesis where applicable) is clear, concise, and complete.
- The variables being investigated are clearly identified and presented.



Reference to the Literature and Documentation

Sonia J. Crandall, Addeane S. Caelleigh, and Ann Steinecke

- The literature review is up-to-date.
- The number of references is appropriate and their selection is judicious.
- The review of the literature is well integrated.
- The references are mainly primary sources.
- Ideas are acknowledged appropriately (scholarly attribution) and accurately.
- The literature is analyzed and critically appraised.

Relevance

Louis Pangaro and William C. McGaghie

- The study is relevant to the mission of the journal or its audience.
- The study addresses important problems or issues; the study is worth doing.
- The study adds to the literature already available on the subject.
- The study has generalizability because of the selection of subjects, setting, and educational intervention or materials.





METHOD

Research Design

William C. McGaghie, Georges Bordage, Sonia Crandall, and Louis Pangaro

- The research design is defined and clearly described, and is sufficiently detailed to permit the study to be replicated.
- The design is appropriate (optimal) for the research question.
- The design has internal validity; potential confounding variables or biases are addressed.
- The design has external validity, including subjects, settings, and conditions.
- The design allows for unexpected outcomes or events to occur.
- The design and conduct of the study are plausible.

Instrumentation, Data Collection, and Quality Control

Judy A. Shea, William C. McGaghie, and Louis Pangaro

- The development and content of the instrument are sufficiently described or referenced, and are sufficiently detailed to permit the study to be replicated.
- The measurement instrument is appropriate given the study's variables; the scoring method is clearly defined.
- The psychometric properties and procedures are clearly presented and appropriate.
- The data set is sufficiently described or referenced.
- Observers or raters were sufficiently trained.
- Data quality control is described and adequate.





Population and Sample

William C. McGaghie and Sonia Crandall*

- The population is defined clearly, for both subjects (participants) and stimulus (intervention), and is sufficiently described to permit the study to be replicated.
- The sampling procedures are sufficiently described.
- Subject samples are appropriate to the research question.
- Stimulus samples are appropriate to the research question.
- Selection bias is addressed.

Data Analysis and Statistics

William C. McGaghie and Sonia Crandall*

- Data-analysis procedures are sufficiently described, and are sufficiently detailed to permit the study to be replicated.
- Data-analysis procedures conform to the research design; hypotheses, models, or theory drives the data analyses.
- The assumptions underlying the use of statistics are fulfilled by the data, such as measurement properties of the data and normality of distributions.
- Statistical tests are appropriate (optimal).
- If statistical analysis involves multiple tests or comparisons, proper adjustment of significance level for chance outcomes was applied.
- Power issues are considered in statistical studies with small sample sizes.
- In qualitative research that relies on words instead of numbers, basic requirements of data reliability, validity, trustworthiness, and absence of bias were fulfilled.



RESULTS

Reporting of Statistical Analyses

Glenn Regehr

- The assumptions underlying the use of statistics are considered, given the data collected.
- The statistics are reported correctly and appropriately.
- The number of analyses is appropriate.
- Measures of functional significance, such as effect size or proportion of variance accounted for, accompany hypothesis-testing analyses.



Presentation of Results

Glenn Regehr

- Results are organized in a way that is easy to understand.
- Results are presented effectively; the results are contextualized.
- Results are complete.
- The amount of data presented is sufficient and appropriate.
- Tables, graphs, or figures are used judiciously and agree with the text.

DISCUSSION AND CONCLUSION

Discussion and Conclusion: Interpretation

Sonia J. Crandall and William C. McGaghie

- The conclusions are clearly stated; key points stand out.
- The conclusions follow from the design, methods, and results; justification of conclusions is well articulated.
- Interpretations of the results are appropriate; the conclusions are accurate (not misleading).
- The study limitations are discussed.
- Alternative interpretations for the findings are considered.
- Statistical differences are distinguished from meaningful differences.
- Personal perspectives or values related to interpretations are discussed.
- Practical significance or theoretical implications are discussed; guidance for future studies is offered.



Presentation and Documentation

Gary Penn, Ann Steinecke, and Judy A. Shea

- The text is well written and easy to follow.
- The vocabulary is appropriate.
- The content is complete and fully congruent.
- The manuscript is well organized.
- The data reported are accurate (e.g., numbers add up) and appropriate; tables and figures are used effectively and agree with the text.
- Reference citations are complete and accurate.





Scientific Conduct

Louis Pangaro and William C. McGaghie

- There are no instances of plagiarism.
- Ideas and materials of others are correctly attributed.
- Prior publication by the author(s) of substantial portions of the data or study is appropriately acknowledged.
- There is no apparent conflict of interest.
- There is an explicit statement of approval by an institutional review board (IRB) for studies directly involving human subjects or data about them.

