



Medical Physics

The International Journal of Medical Physics Research and Practice

Should I submit my paper to *Medical Physics*? Or to *Journal of Applied Clinical Medical Physics (JACMP)*?

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American Association of Physicists in Medicine

Journal of Applied Clinical Medical Physics



Outline

- **Medical Physics and JACMP**
 - Core values and editorial vision
 - Review process
 - Journal performance statistics
 - Papers we want and don't want
 - Recent changes
- **Acknowledgement of potential Conflicts of Interest**
 - Both Jeff and Michael are compensated by AAPM for their editorial roles

Med Phys Vision and Mission

- **Bill Hendee (2005):** “...to publish the very best science that propels our discipline forward and improves our contribution to patient care.”
- **The discipline is broad:** “...application of physics concepts and methods to diagnosis and treatment of disease”
 - Medical imaging applications: psycho-physics, system design, image reconstruction/restoration
 - » X-rays, US, MR, RF, etc. for anatomy, elasticity, electrical impedance, molecular state, physiology, etc.
 - Therapy: equipment optimization, planning, tracking, dosimetry, outcome modeling, biology, response imaging
 - » RT, IG surgery, RF/US ablation and thermal therapy
 - Basic research:
 - » Segmentation, registration, feature extraction, voxel labeling
 - » Imaging and dosimetry
 - » Physiology, biology, statistics

Medical Physics: Desirable Articles

- To identify and publish the best contributions in
 - Basic science developments with potential for improving patient care
 - clinical translation and validation of previous basic science innovations
 - High impact clinical physics innovations addressing a significant problem of broad interest
- Features of publishable articles
 - Novelty and/or high potential clinical/scientific impact
 - Generalizable scientific data or conclusion
 - Addresses unsolved problems of concern to our readership

Med Phys: Types of articles

- Research Article: report of original experimental or theoretical research
 - Up to 10 pages free: \$200/ page >10
- Technical Note (5 pages)
- Medical Physics Letter (5 pages)
 - Rapid review: highly novel, high impact development
- Medical Physics Dataset article
 - Publically accessible dataset of interest to researchers
- Review article
- Future of Medical Physics (previously Vision 20/20) article
- Point/Counterpoint
- Task Group Reports and Special Reports

Heavily represented Med Phys Research Areas

- Image processing/analysis
 - Segmentation, feature extraction, registration
- Dosimetry and radiation detectors
- X-ray CT, CBCT, PET physics
 - Reconstruction, performance assessment, dose reduction, artifact mitigation, detector
 - Phase-contrast imaging
- Radiation therapy
 - 2D/3D dosimetry, Monte Carlo planning, plan optimization, IMPT, motion management
- Breast imaging: new modalities, CAD
- Basic research: elastography, electrical impedance, fractal analysis,

Articles we don't encourage

- Educational articles and teaching innovations
- Peripheral/outside medical physics
 - Engineering technology, e.g., image processing, without clear translational or clinical application
 - Clinical studies with little medical physics content
- Limited novelty/impact
 - Clinical physics/QA/technical of narrow scope, i.e., evaluation of single commercial product
 - Duplication of existing studies
 - No new generalizable data or novel technology
 - Excessively incremental “salami” publications
 - Premature/underdeveloped
- Poorly written articles

GENERAL JOURNAL PHILOSOPHY

- *The Journal of Applied Clinical Medical Physics (JACMP) is an applied journal, which publishes papers that will help clinical medical physicists perform their responsibilities more effectively and efficiently for the increased benefit of the patient.*
- *The overriding focus of any JACMP paper should be its clinical application and value.*
- *If the treatment quality is better because of the paper or if the work to treat the patient is made more efficient, this is the type of paper we want.*
- *The JACMP does not want papers where the primary focus of the article is a contribution to the science of medical physics and the clinical component is missing or diminished.*

JACMP

PAPERS WE WOULD LIKE TO GET

- CLINICAL Review Articles
- CLINICAL Radiation Oncology Physics
- CLINICAL Imaging Physics
- CLINICAL Radiation Measurements
- CLINICAL Non-Ionizing Topics
- Radiation Protection & Regulations
- Management and Profession
- Education

JACMP

PAPERS WE WOULD NOT LIKE TO GET

- SCIENTIFIC Review Articles
- SCIENTIFIC Radiation Oncology Physics
- SCIENTIFIC Imaging
- SCIENTIFIC Radiation Measurements
- SCIENTIFIC Non-Ionizing Topics
- Clinical Radiation Biology
- Clinical Biophysics
- Clinical Radiation Oncology
- Clinical Radiology
- *In short, if the paper does not help the practicing clinical medical physicist save time or do a better job for the patient, I would like not to get the paper!*

Review Process: Med Phys

- **Single-blind review system**
 - Referees know who authors are
 - Associate editor (AE) and referees (Ref) are anonymous to authors
- **Process: for each manuscript**
 - One of three Editors (ED), Williamson, Das or Goodsitt, recruits an AE from our pool of 150 topical specialists, AEs, who in turn recruit referees
 - AE makes recommendation to ED
 - ED makes final decision
- **Outcomes**
 - 2015 Acceptance rate: 45%
 - 2 to 3 cycles of review
 - Culture: we work with authors to improve their Ms.

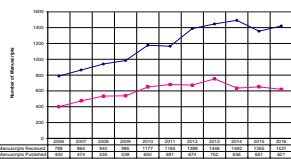
JACMP

REVIEW PROCESS

- JACMP uses a double blind review process. Submitted articles are anonymized and acknowledgements are redacted. The author(s) are unknown to the reviewers and the reviewers are unknown to the authors.
- Section Editors are identified based on their familiarity with the technologies and concepts discussed in the submission.
- The Section Editor has the final say respecting the final disposition of the article.
- 2015 Acceptance Rate: 50%

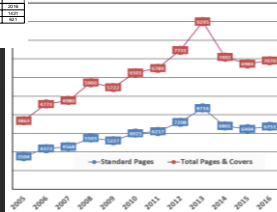
Med Phys: Size

Medical Physics Manuscripts by year of receipt and manuscripts published (by volume) 2005-2016, as of July 6, 2016



- Unsustainable growth stabilized
- 15% below peak

MPH Yearly Journal Article Pages Published by Volume, as of June 2016



- Increase focus on
 - Best science
 - Widely read guidance, review, and opinion

JACMP

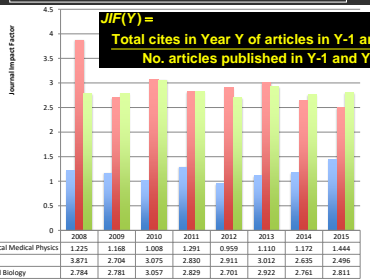
NUMBER OF PAPERS RECEIVED IN A MONTH

% OF PAPERS ACCEPTED / DECLINED

Year / Month	# Papers Received
2010	249 / 21 per month
2011	266 / 22 per month
2012	351 / 29 per month
2013	430 / 36 per month
2014	511 / 43 per month
2015	582 / 49 per month

Year	% Accepted
2010	52%
2011	50%
2012	48%
2013	51%
2014	51%
2015	50%

Journal Impact Factors



$$JIF(Y) = \frac{\text{Total cites in Year Y of articles in Y-1 and Y-2}}{\text{No. articles published in Y-1 and Y-2}}$$

- MP JIF has fallen from 3.0 to 2.5 in last two years: JACMP increasing
 - MP: mount author-focused marketing campaign
- JACMP IF increasing

Review Timeliness

Mean time: submission to	Med Phys	JACMP
final decision	105 days	46
Online publication	196 days	179

Major Changes for 2016-2017

- In January 2017, Wiley will become publisher of both Med Phys and JACMP
 - Peer review will be hosted on same peer-review management platform EJP
 - » Very similar to PXP platform used by AIPP for Med Phys
 - » MP and JACMP will share manuscripts and reviews with each other
 - » JACMP manual Ms processing/tracking vastly reduced
 - Hosted on same online platform
- Advantages of large publisher: enhancing impact
 - Vast increase in institutional subscribers/access
 - Substantial resources and commitment to major author- and reader-focused marketing campaign
 - Social media, dynamic article, and interactive features

Strategically Increase AAPM's Global Reach

We have developed a tailored approach to the markets we serve to ensure that we are securing the best possible outcomes for our partners. In mature markets, like North America and Europe, our focus is on protecting your existing market share. In growing markets, we leverage subscription sales, licensed and database access, third party aggregators, and philanthropic programs to bring AAPM content to interested students, scientists, and academics.



JACMP

Article Publication Charge (APC)

\$500 for each article published for submission after 11/1/15

- Previously, with no subscription income and no author fees for gold open-access JACMP papers
- 20% annual rate of growth is unsustainable in absence of any significant income
- The \$500 APC fee covers only 50% of the direct cost of peer review and online publication
- APC waiver or discounting available
 - Inari Group A and B countries
 - Medical Physics graduate students and trainees who are first authors
- Med Phys income subsidizes AAPM activities
 - About 1/3 of AAPM operating income is derived from AAPM publishing activities

