***Journal of Advances in Orthopaedics and Biomechanics***

**Author Guidelines**

**July 2021**

*The Journal of Advances in Orthopaedics and Biomechanics* is focused on publishing research that is pushing the boundaries in these two areas allied to medicine. Primarily the research needs to be clinically related and should address issues that arise in orthopaedic clinical practice (both “elective” and “trauma”) and in biomechanics. These two interrelated terms prompt any number of questions in the areas of, but not limited to, the following:

 Fracture management

 Elective surgery

Reconstructive surgery

 Novel / improved orthopaedic surgical procedures

 Outcome measurement and assessment

 Application and development of smart sensors for use in orthopaedics

 Big data analysis and machine learning

 Numerical modelling in biomechanics

 Numerical modelling of human/animal systems.

The papers we consider for the Journal can be theoretical, methodological or empirical, and they can examine any subject related to orthopaedics and biomechanics aligning to the following definitions:

Orthopaedics:- clinical interventions associated with the musculoskeletal system in humans and animals

Biomechanics:- the numerical modelling and /or assessment of actions, associated movements and systems in humans and animals (not just actions / movement associated with bones but blood, air, etc.)

All manuscripts are subject to a high-integrity peer review process. Those accepted will be published in the quarterly journal.

Special editions will be advertised. Papers accepted for these will be published in the special edition published on a regular basis.

The aim of this journal is to promote research in this important field of medicine. Whilst we are able to our aims are that:

this journal is open access,

there is no charge for access,

there is no charge for publication.

**Submission Guidelines**

*The Journal of Advances in Orthopaedics and Biomechanics* is a refereed journal published four times a year by Keele University.

Articles submitted to the journal should be original contributions and should not be under simultaneous consideration by any other publication.

**Submission of Manuscripts**

All submissions should be no more than 10 pages in total. Special editions may have more restrictive limits.

Manuscripts should be submitted in a “publishable ready” format as described below. Papers submitted that are not in this format will not be considered by the editorial panel.

**Style**

**Language:** English

**Spelling:** should conform to the Concise Oxford English Dictionary.

**Quotations 10 words or fewer:** Quoted material should be italicised and placed within double quotes.

**Quotations more than 10 words:** Quoted material should be indented, italicised and placed within quotes, and with a space above and below the quotation.

**Dates and numbers:** 9th November 1989; 1945–46, the 1970s

**Scalar quantities:** Symbol in italicised form

**Vector quantities:** Symbol in bold

**Figure Titles:** Figures should all have a unique number (e.g. Fig. 1 – title) and a title. The title should have no more than 50 words. Figure titles are placed below the figure and centralised with the figure itself.

**Table Titles:** Tables should all have a unique number (e.g. Table. 1 – title) and a title. The title should have no more than 50 words. Table titles are placed above the figure and left justified with the table itself.

**Photographs, images and graphs**: All images should be at 300dpi.

Fonts:

Body text: Calibri 11pt

**Section titles: Calibri 11pt Bold**

**Paper title: Calibri 12 pt Bold**

**Section numbering:** Apart from the abstract and references all sections are numbered in outline numbering 1., 1.1, 1.1.1. No more than two subsections are allowed (e.g. 1.1.1 is acceptable, 1.1.1.1 is not)

**Equations:** all equations should follow scalar and vector rules described above, they should be indented and have an equation number in round parentheses, for example:

**F**=*m***a** (1)

**Symbols:** all symbols used should follow that specified by international standards.

**Citations:** all citations should be superscript of the form geoff1, geoff1,2, or geoff1-5. The numbering should start at 1 and increase in order of appearance.

**References:**

All references should be in HARVARD style. Journal titles should be given in full and italicised. For example:

Ogrodnik, P.J. and Thomas, P.B., 2019. A practical, quantitative, fracture healing endpoint assessment criterion for tibial fractures treated with external fixation. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, *233*(5), pp.497-505.

Any references made from this journal should have the paper title in **bold**. For example

Ogrodnik, P.J. and Thomas, P.B., 2023. **Another practical, quantitative, fracture healing endpoint assessment criterion.** *International Journal of Advances in Orthopaedics and Biomechanics*, *1*(1), pp.1-3.

**Copyright and permissions**

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All accepted manuscripts, artwork, and photographs become the property of the publisher.

**Page proofs**

No page proofs will be supplied. The author is responsible for the production of the paper in the correct style and with no errors.

**PAPER FORMAT**

Submission format: PDF ONLY.

Paper format: Portrait, A4 ONLY.

Landscape pages (i.e. for large tables) are allowed but should be embodied in the submission.

Margins: All margins 25.4 mm (2.54 cm).

Title Page format

Title: Calibri 12 pt bold - page centred. -Single line spacing.

Author names: Calibri 11pt – page centred in the form – single line spacing

Two authors: N One and N Two

Three or more authors N One, N Two and N Three

Affiliations: Calibri 11 pt – page centred using superscript numbers as the link with author.

Abstract: Full page width, justified text. Calibri 11pt (superscript and subscript reduced as standard) Single line spacing

Keywords: Full page width, Left justified, no more than 10.

Main body: Two columns, equal width 77.5 mm (7.75cm) Calibri 11 pt, single line spacing.

Sample Paper format that may be used as a template for producing YOUR paper.

**Editorial Guidelines**

The journal editors are

Prof Peter J Ogrodnik Editor (Medical devices)

Keele University

Prof Peter B M Thomas Co-Editor (Fracture Management & Hand)

University Hospital North Midlands Trust

Editorial Panel (specialism in parentheses)

Mr D McClelland (Shoulder and Upper arm) University Hospital North Midlands Trust

Prof P Andras (Software and big-data) Napier University

Mr A Quershi (Reconstruction) University Hospital Southampton

Dr K Wright (Tissue Engineering) Robert Jones and Agnes Hunt Hospital

Dr JH Kuyper (Biomechanics) Robert Jones and Agnes Hunt Hospital

Dr SI Wooley (Wearable Technologies) Keele University

Prof N Forsyth (Cellular Engineering) Keele University

Ms H Morris (Smart Textiles) Chesterfield Hospital

Ms A McBride (Specialist Nursing) University Hospital North Midlands Trust

Prof K Maddock (Smart Pharmacy) Keele University

**Procedure**

All papers received are passed to the relevant expert for grading. They are supplied anonymised. Grading will involve multiple reviewers grading the paper to the scheme illustrated in Table 1. A score is created and the normal outcome would be as follows:

Score = SUM(A to K).

< 21: reject

> 20 and < 41: accept with major amendments

 >40 and <51: accept with minor amendments

>50: accept

Table 1: paper scoring scheme. The relevant box for each parameter is ticked by the reviewer and scored by the editorial panel.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Unsatisfactory** | **Poor** | **Good** | **Above average**  | **Excellent** |
| **General presentation**  |
| Score | 0 | 1 | 2 | 3 | 4 |
| 1. Use of English
 | Many grammatical / spelling errors /hard to read or understand | A few grammatical / spelling errors making reading quality poor | Minor corrections | A few small errors / typos | No grammatical / spelling errors at all |
| 1. References and citations
 | Not to style / no citations, | More than 10 errors | Maximum of 5 errors | A few small errors or typos | No citation / referencing errors at all |
| 1. Layout
 | Not to layout at all |  | Minor corrections required |  | No layout errors at all |
| 1. Equations

(%age = number of errors / (no figs + no tables) | Poor quality, equations , no notation section, no equation  | Maximum of 75% errors | Maximum of 50% errors | Maximum of 25% errors | No errors at all |
| 1. Figures and Tables

(%age = number of errors / (no figs + no tables) | Poor quality, Figure numbers and titles wrong, Table numbers and titles wrong | Maximum of 75% errors | Maximum of 50% errors | Maximum of 25% errors | No errors at all |
| **Contents** |
| Score | 0 | 1.5 | 3 | 4.5 | 6 |
| 1. Novelty
 | No novelty |  | Some novelty |  | Completely new |
| 1. Clinical relevance
 | No relevance |  | Some clinical relevance |  | Outstanding clinical relevance |
| 1. Methodology
 | Unsound methodology | Methodology explained but with major amendments required | Methodology explained but with some minor amendments required | Methodology explained fully but with a dew suggestions for improvement | Methodology wholly relevant and explained fully |
| 1. Results
 | No results presented, not discussed, not pertinent  | Some results explained but major amendments required | Some results explained but minor amendments required | All results explained but minor amendments required | Results fully explained and wholly relevant |
| 1. Discussion
 | No discussion, discussion not relevant, discussion has not citations to back up claims | Major amendments required | Some discussion but minor amendments required | Full discussion but minor amendments required | Discussion complete and wholly relevant |
| 1. Conclusions
 | No conclusions, conclusions irrelevant or inconclusive | Some conclusions but major amendments required | Some conclusions but minor amendments required | Full conclusions but minor amendments required | Conclusions complete and wholly relevant |

**Sample paper layout: copy and paste into new document**

**Here is the title, it should be no more than 2 lines, calibri 12 pt bold, centralised.**

 A N Other1, A Nother1,2 and A N Otherone3

1 A University 1, UK

2 A+ University 2, DE

3 A++ University 3, NZ

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**Abstract**

|  |  |
| --- | --- |
| **Keywords**Here, is, the, list, of, keywords, no, more, than, ten. | **Aims and Objectives:** **Methods:****Results:****Conclusions:**Create abstract using a table of 2 columns, the first 2cm wide the second 13.6cm wide. No border and shaded with the lightest grey in the selection. The first column contains keywords, the second contains the abstract itself.The abstract should be no more than 300 words in length, use the headings given above and contain no citations. It is in Calibri 10 pt and is fully justified across the whole width. Page setting is 2.5 cm margins all round. Header and footer at 1.25 cm. DO NOT delete the header on the first page. Simple header on all subsequent pages as depicted below. |

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**1. Introduction**

This is the main body of the text. It is in calibri 11 pt and in two columns 7.75cm wide. The text is fully justified. Section titles are outline numbered starting at 1. Section Titles, Paper title, separator lines are all RGB 152,41,34. Main section titles are bold

1.1 Hint

For sub-sections do not indent. Leave a space before the subsection title. Subsection title is bold for level 1, normal for level 2 and italic for level 3. Do not go beyond level 3 – try not to go beyond level 2.

*1.1.1 A further hint*

Level 3 do not indent

Normal section titles are

**1. Introduction**

**2.Materials and Methods (adjust title as necessary to suit the study)**

**3. Presentation and discussion of results**

**4. Conclusions**

**References**

**Notation**

**Acknowledgements**

1.2 Figures and tables

Figures and tables may span the whole page if required. Ensure all figures have a figure number and a title in the format

Figure here

Fig. X – title here

This goes below the figure and centralised with the figure.

All tables have a table number and title in the form

Table X – Title goes here

|  |  |  |
| --- | --- | --- |
| Col 1 | Col 2 | Col 3 |
| XX | XX | XX |

Table titles go above the table and left justified.

Figures and tables may span a whole page if required. Try to avoid large tables that need to be presented landscape.

1.3 Notation and equations

All symbols used in equations should be described in the notation section with associated units in parentheses. The hierarchy should be

 Roman character symbols

 Greek character symbols

In standard alphabetical order. For example

**F** Force vector (N)

*m* static friction coefficient (dimensionless)

Do not include symbol definitions in the body text unless not to do so would cause confusion.

We do not accept derivations in the text. If a derivation is important, please put this in an appendix. Appendices are included in the maximum page count.

All equations must use **bold symbols** for vectors and *italicised symbols* for scalars.

Every equation must have an equation number.

Any equations for which the author(s) is not the origin should include a citation and associated reference. For example

In scalar form, Newton’s 2nd law states1 that

 *F = ma* (1)

If possible all equation numbers should be vertically aligned.

1.4 Page numbers

We will advise you of your page numbers on acceptance. Please include this in a footer in your paper in the following format

*Jrnl. Adv. Orth. & Biomech. #*

*Font calibri size 10, italicised and right justified RGB 152,41,34 . As in footer of this guide.*

1.5 Headers

Title page header is as illustrated on title page. Subsequent pages header is left justified as in header of this page

*Journal of Advances in Orthopaedics in Biomechanics*

Calibri 9pt Italicised RGB 152,41,34

1.6 References

All references in Harvard format. Any papers cited from this journal should have the title in bold.

References should match citation number and be presented in numerical order in order of appearance. For example:

1. Ogrodnik, P.J. and Thomas, P.B., 2023. **Another practical, quantitative, fracture healing endpoint assessment criterion.** *Journal of Advances in Orthopaedics and Biomechanics*, *1*(1), pp.1-3.

1.7 Acknowledgements

Acknowledgements are permitted. Any grants associated with the paper should carry the appropriate acknowledgement as agreed with the funder. A long list of students, technicians, registrars, etc. is not allowed: please keep this brief. Acknowledgements to family members is not permitted.

**2. Submission**

Please submit your paper on the journal website. You will need to complete the form before submission is allowed.

Only PDF documents are permitted. This is to ensure the copy you send us is exactly how it should appear in the journal itself. We do not do any typesetting and post-production editing is limited.

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