Publishing an Article

Alex Laslowski November 2017 National Histology Conference

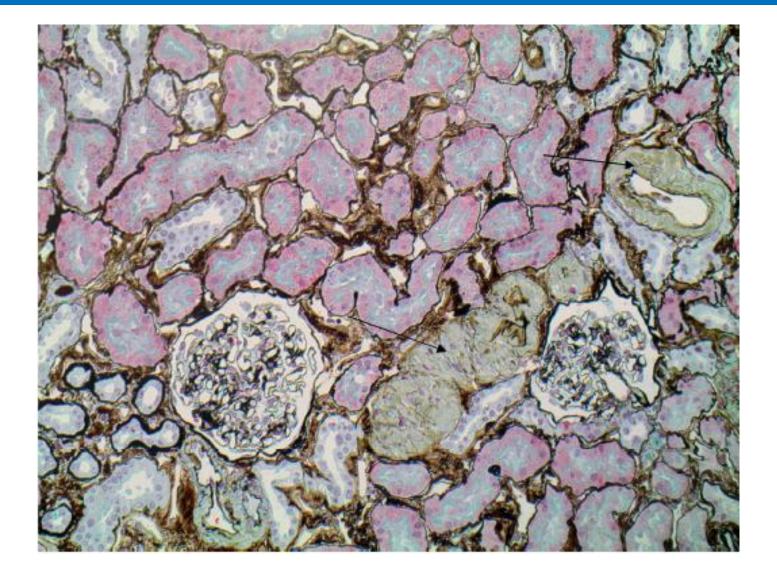


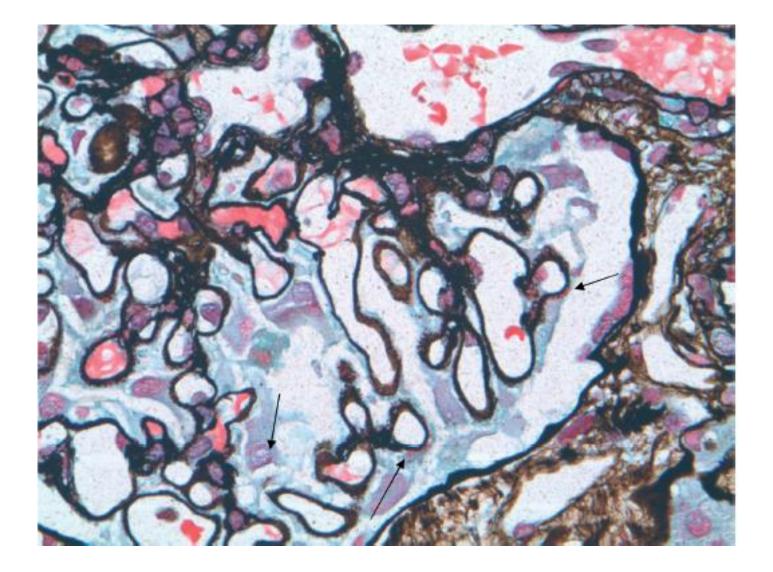
A modified silver methenamine Masson trichrome stain using methyl green for staining of renal biopsies

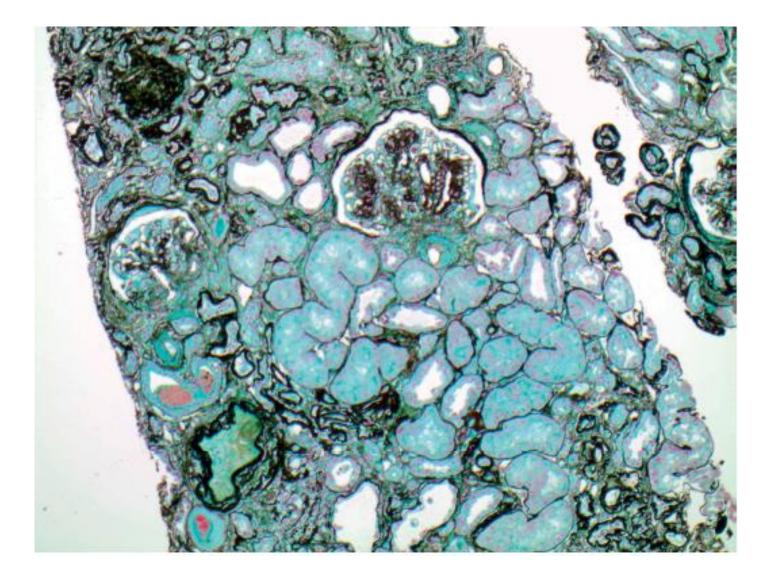
Alex Laslowski

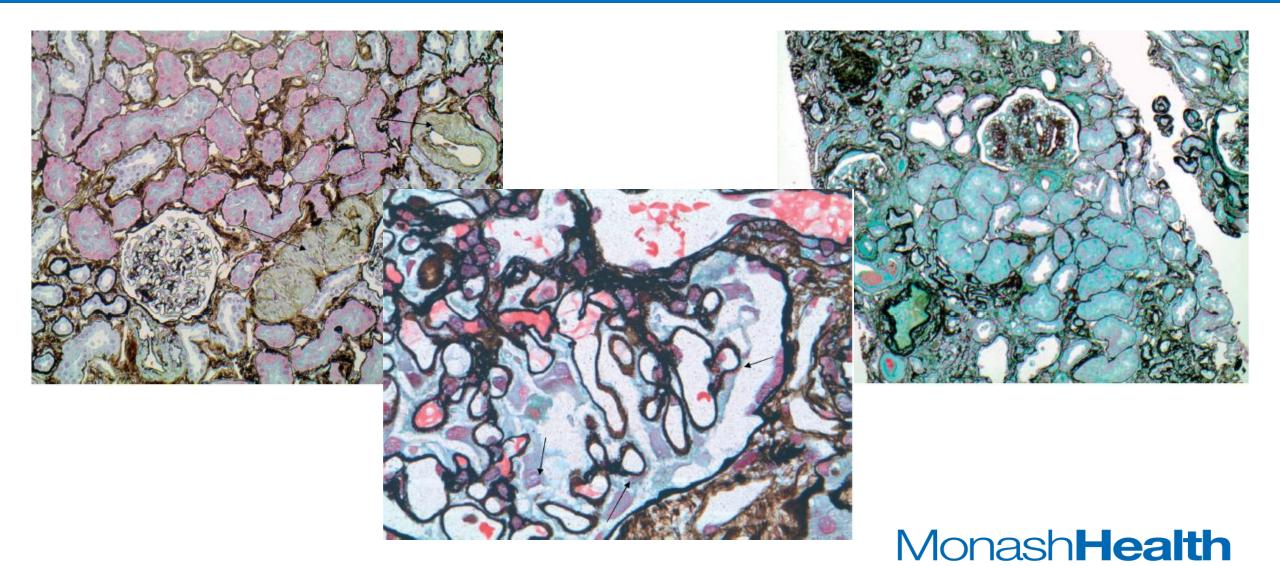
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ORIGINAL ARTICLE

A new approach to minimise the problem of patient to patient contamination in histology

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Abstract

The histology laboratory at Monash Medical Centre undertook an extensive investigation of its work practices (from specimen receipt to reporting of the cut section) with an agenda to eliminate the presence of tissue contaminants on diagnostic slides. Fragments of tissue from other patients can contaminate test slides presenting the pathologists with a diagnostic dilemma. The investigation was conducted in conjunction with senior and principal scientists in the Anatomical Pathology department and the Southern Health Network quality team. The results of the investigation revealed that what is considered normal histological practices could be dramatically improved. In response to the report a number of changes were adopted and implemented to work practices. To evaluate the effectiveness of the changes we examined a total of 200 patient cases (572 slides) for the presence of tissue contaminants on slides for cases performed both before and after the implementation of changes.

Keywords: contaminant, decontamination, H&E

Introduction

Standard work practices in most histology laboratories

also been many papers since which have tried to provide techniques such as polymerase chain reaction as ways of

Laboratory QA

A Proposed Set of Metrics to Reduce Patient Safety Risk From Within the Anatomic Pathology Laboratory

Peter Banks, MD,¹ Richard Brown, MD,² Alex Laslowski, MS,³ Yvonne Daniels, MS,⁴ Phil Branton, MD,⁵ John Carpenter, MD,⁶ Richard Zarbo, MD,⁷ Ramses Forsyth, MD, PhD,⁸ Yan-hui Liu, MD,⁹ Shane Kohl, MD,¹⁰ Joachim Diebold, MD,¹¹ Shinobu Masuda, MD,¹² Tim Plummer, MS,¹³ Eslie Dennis, MD¹*

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ABSTRACT

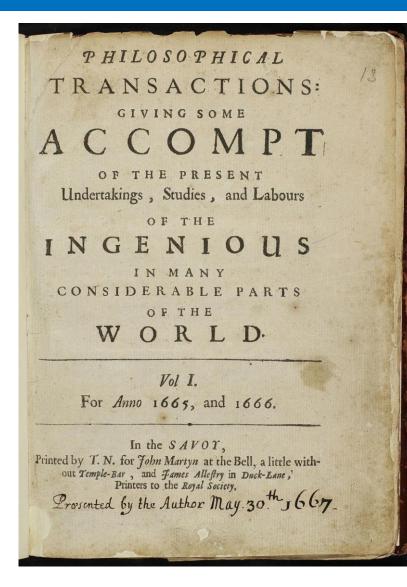
Background: Anatomic pathology laboratory workflow consists of 3 major specimen handing processes. Among the workflow are preanalytic, analytic, and postanalytic phases that contain multiletips subprocesses with great impact on patient care. A worldwide representation of experts came together to create a system of metrics, as a basis for laboratories worldwide, to help them evaluate and improve specimen handing to reduce patient safety risk.

Method: Members of the Initialive for Anatomic Pathology Laboratory Patient Safety (IAPLPS) pooled their extensive expertise to generate a list of metrics highlighting processes with high and low risk for adverse patient outcomes.

Results: Our group developed a universal, comprehensive list of 47 metrics for patient specimen handling in the anatomic pathology laboratory. Steps within the specimen workflow sequence are categorized as high or low risk. In general, steps associated with the potential for specimen misidentification correspond to the high-risk grouping and merit greater focus within quality maragement systems. Primarily workflow measures related to operational efficiency can be considered low risk.

Conclusion: Our group intends to advance the widespread use of these metrics in anatomic pathology laboratories to reduce patient safety risk and improve patient care with development of best practices and interlaboratory error reporting programs.

Keywords: anatomic pathology, patient safety, best practices, workflow metrics



Philosophical Transactions

- First scientific journal ever published in March 1665
- Produced by the Royal Society which was formed in London
- Prior to publication scientists of the time would correspond discoveries via mail or in a book format.

Henry Oldenburg

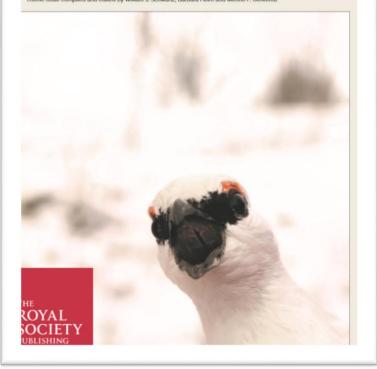


- Born in Germany
- Appointed secretary of the Royal Society in 1663
- Served as a conduit of correspondence between scientists in England and Europe
- Privately published a printed version of letters read and the Royal Society Meetings
- Articles in the first edition included
 - Making of optical glass
 - Whale watching in the Bermuda's
 - Performance of a pendulum watch at sea

PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY B

BIOLOGICAL SCIENCES

Wild clocks: integrating chronobiology and ecology to understand timekeeping in free-living animals Theme issue compiled and edited by William J. Schwartz, Barbara Helm and Menno P. Gerkema



- There are currently more than 30,000 peer reviewed journals in publication.
- More than two million articles are published each year.

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Why Write An Article?

- Science is an ever developing field.
 - Technology
 - Methodologies
- Two ways of conveying information.
 - Conferences
 - Scientific journals
- Journals in Australia are desperate for articles.
- Anybody can write an article.



Structured Writing

- The easiest way to write an article is to follow the IMRaD formulae.
 - Introduction
 - <u>M</u>ethod
 - <u>Results and Discussion</u>
- IMRaD format has only been popular since the last half of the twentieth century.
- What about the Abstract and Conclusion?

Introduction

- Explain to your readers the context and background of your study.
 - <u>What</u> is the nature of the problem and <u>why</u> is it important?
- Discuss the current state of the research in your field.
 - Novel idea
 - Improving on a current method
- Brief statement on what the paper will cover including a quick explanation on the type of tests used to generate the results.
- Length of introduction is typically for an article which is five pages should be about half a page.

Method

- Methods are usually written in the past tense with lots of headings and sub-headings.
- The method described how the results were generated
 - Includes the materials used to generate your results
 - Development of the experiment or theory
- It should be sufficiently detailed to allow the reader to reproduce your experiment or validate your findings.
 - Include information such as type of slide, antibody clone, equipment
- There is no standard length one to ten pages.

Results and Discussion

- This is where you provide your results and findings in a logical sequence.
 - Findings of your study
 - Tables/Graphs Introduce into the narrative of your results so that the reader can make sense of the information.
 - Specify the main and any other findings.
 - Evaluate your findings, what do they mean?
 - Compare your results to other articles
 - Included Acceptance/Exclusion criteria e.g. age/sex/medications
 - Indicate the impact of your article for future studies
 - **<u>Need</u>** to show if the results answered the question posed in your introduction.

- Conclusion
 - This should be a short section consisting of no more than two paragraphs which draws the findings and observations together into a concise statement.



- Abstract
 - Should have a word count limit of 150-200 words.
 - Think of some common search phrases or keywords which people may use for a search and make sure they are included.
 - The abstract is often the only portion of the article indexed in electronic databases (and thus the only portion readers may see) it is important that it accurately reflects the content of the article.



- Abstract
 - Motivation Why do we care about this issue? What makes it important?
 - Problem statement What problem are you trying to solve? What are you attempting to prove?
 - Approach What was the extent of your work? How did you go about solving this issue?
 - Results Use a broad statement to encompass the results you obtained.
 - Conclusion What is the significance of your findings?

Only include 1-2 sentences per heading

• Title

- Remember the functions of a Title
 - It predicts content.
 - It catches the reader attention.
 - It contains keywords which will make it more searchable by computer programs.



Authorship

- Order of the authors
 - First the person who made the most contribution to the article
 - Last generally the most senior person
 - Must adhere to the International Committee of Medical Journal Editors (ICMJE) criteria
- Gift and Ghost authors
- The highest academic degree of each author should be listed.
- The name of the department where the work is to be attributed.
- Acknowledgements
 - Contributed to the article but do not warrant authorship

Authorship

- The ICMJE recommends that authorship be based on the following 4 criteria:
 - Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; AND
 - Drafting the work or revising it critically for important intellectual content; AND
 - Final approval of the version to be published; AND
 - Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Authorship

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Referencing your article

- Authors should provide direct reference to original sources whenever possible.
- Some but not all journals check the accuracy of references.
- Number references consecutively from the order in which they are mentioned in the text.
- The title of journals should be abbreviated using the style used on MEDLINE.
- Self referencing is acceptable if it relates to the article.

Reviewing your article

- Have a colleague or friend proof read your paper.
- Listen to your reviewers.
- If you make changes or corrections make sure you choose another person to review the paper.
 - First impressions on how an article reads can only be achieved once

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• Use your proof readers sparingly.

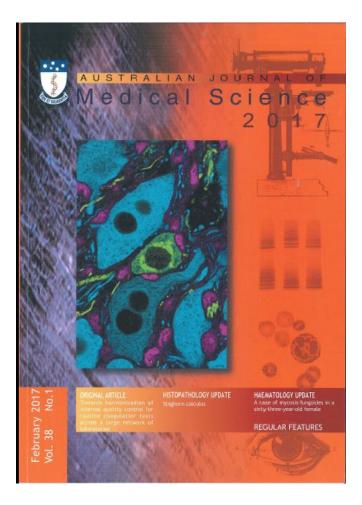
What do journals look for in articles

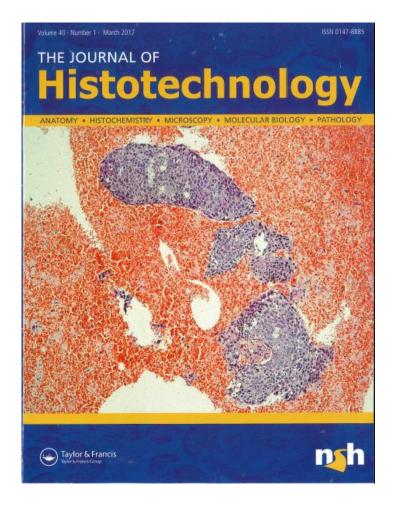
- Scope
 - The content of the paper must match the scope of the journal
- Quality
 - The quality of the paper must be sufficiently high
- Novelty
 - The paper must present novel ideas with the exception of method improvement articles
- Significance
 - The results must be significant enough to be worth reading

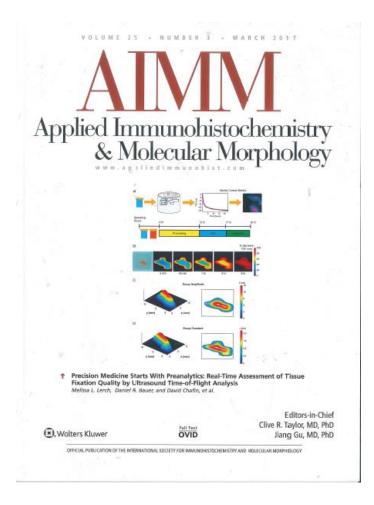
Submission

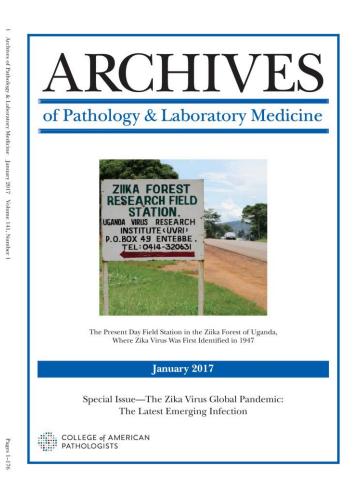
- Which Journal?
 - Impact level or prestige factor
 - Easy submission Hard submission
- Process
 - Electronic submission
 - Cover letter
 - Approval process
 - Submission
 - •Review
 - Acceptance/Rejection
 - How long to get published?

✓ Scope
✓ Quality
✓ Novelty
✓ Significance











Take Home Message

- Anyone can write a scientific article!
 - If you have an idea try to put it onto paper
 - Use of the structured writing style can help
- Journals are always looking for content which is either novel or an improvement on methodology.
- What you do in your laboratory on a daily basis can be of great interest to others.



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Blood Falls Antarctica

