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Editorial

The Journal of Pathology 2008 Jeremy Jass Prize for Research Excellence in Pathology

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Abstract

The first Jass Prize for Research Excellence has been awarded to a group from Hannover in Germany. These authors discovered the epigenetic inactivation of microRNA gene *hsa-mir-9-1* in human breast cancer and characterized its biological and clinical relevance. This frequent epigenetic silencing was found to occur early in the development of breast cancer, and illustrates another mechanism by which tumour development is influenced by genes that operate without expression as proteins.
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The first issue of *The Journal of Pathology* appeared in 1892 and contained articles by Metchnikoff and Virchow, among others. Since then, the Journal has had a major place in the pathological, clinical, and scientific literature, and many important papers have appeared in its pages [1]. The entire backfile archive can be accessed from the Journal website, including the articles by Metchnikoff and Virchow [2,3]. In the winter of 2009, the Editorial team of *The Journal of Pathology*, together with the Officers of the Pathological Society, announced the institution of an annual prize to be awarded to the authors of the research paper published in *The Journal of Pathology* adjudged by the Editorial team to be the best published in a calendar year. The judgement would be based on scientific excellence, novelty, and importance, with the award being made annually one year in arrears, with the first award being made in January 2010 for a paper that had been published in the calendar year 2008. The decision to name this award after the late Jeremy Jass was made with the permission of Johanna Jass (Jeremy's widow), Joanna and Simon (his children), Leon (his father), and other members of the family. It was anticipated that this new award would recognize and commemorate the enormous contribution that Jeremy Jass made to pathological research [4]. The decision to work a year in arrears was predicated on the view that by looking at work published in the recent past (as opposed to the immediate past), one could perhaps have a more objective view of the impact and importance of work, and also employ surrogate measures such as downloads and citation to gauge material that is truly having some influence on the research community.

To undertake any such analysis of 'quality' is fraught with danger and potential pitfalls. By definition, all the material published has been through a full peer review process and is thus deemed to be of high quality. Judging 'worth' is dangerous since some observations and discoveries do not appear to be important in a broad context until long after their initial report. Take, for example, the near simultaneous reports in 1979 of what we now call p53 [5–10]. At the time, these reports appeared to be a relatively arcane set of observations and the enormous impact of this discovery was not apparent for more than a decade [11,12]. Considering the work of Jeremy Jass, his provocative thesis that metaplastic (hyperplastic) polyps were not as innocent as many (if not all) thought [13] was barely considered for nearly two decades, yet the idea of serrated pathways to colorectal cancer are now well accepted [14]. Other pieces of work are published

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Figure 1. The authors of the Jass Prize award winning paper. From left to right, Hans Kreipe, Florian Länger, Ulrich Lehmann, Matthias Christgen, and Britta Hasemeier. Top inset: Mirco Müller; bottom inset: Daniel Römermann

with great fanfare, with press releases and claims of breakthrough, yet subsequently turn out to be of more modest import, or even of no significance in the greater scheme of scientific endeavour. Surely, then, to attempt to identify real quality from the highlights of a single year might be considered a risky business. Certainly there are measures one could use: citations and downloads are easily measured and one could use such simple devices to identify the best. But, of course, such metrics have many limitations. A paper might be downloaded frequently because it lies in an area with a large number of workers (the p53 field suffers this problem, for example). Other work may be of major importance but the field in which it lies might be relatively small: it could never compete! Citation indices suffer from similar problems. The views of a number of external reviewers could be used, but again personal foible and unwitting bias could come into play. Notwithstanding the many limitations of ***any*** such analysis of the nearly 200 papers published by the Journal in any calendar year, it was hoped that this award would help to recognize the many gifted and talented scientists who contribute to the pages of *The Journal of Pathology*.

The approach that the Editorial team finally settled on for identifying the annual winner of the Jass Award for Research Excellence in Pathology was a mixture of methods and included human factors. The Managing Editor and her colleagues produced a table listing all research articles published in a calendar year and annotated this with citations and downloads. The file was reviewed by all Editors and Associate Editors, and from this and their own review of the papers in the year in question, they drew up a short list of 'their personal highlight papers' in a ranked order using the criteria of 'scientific excellence, novelty, and importance' and the award is therefore influenced by what excited each of us individually. From the data of the Deputy Editor and all Associate Editors, the Editor-in-Chief (who did not make an assessment at this stage) collated the information and identified papers that were recognized by more than one 'reviewer'. A simple scoring system then allowed the identification of the paper to be awarded the Jass Prize for Research Excellence. The role of the Editor-in-Chief was to manage the process and to cast a deciding vote in the case of a tie. In this first award cycle, the Deputy and Associate Editors identified and nominated ten papers whose diversity reflects the spectrum of research fields covered by pathological science [15–24], with one being nominated by a majority [24] and thus being declared the first winner of the Jass Prize for Research Excellence (Figure 1).

The winning paper looked at the regulation of expression of microRNAs in breast cancer. Until maybe 10 years ago, most studies of RNA would not have been able to recognize alterations in the expression of these short regulatory RNA species. They do not encode a protein, yet may influence the expression of large sets of genes and thereby affect tumour behaviour (reviewed in ref 25). Lehmann *et al* [24] demonstrated that certain microRNAs can have their expression suppressed not by mutation (as has been described for some microRNAs) but by an epigenetic mechanism — promoter methylation. Importantly, this was found to occur early and often in the development of breast cancer, and so this work illustrates another mechanism by which tumour development is influenced by genes that operate without expression as proteins.

The entire Editorial team congratulates the authors of this excellent work. The corresponding author will be presented with a medal and certificates for the co-authors at the Winter Meeting of the Pathological Society on 7 January 2010 at Imperial College, London.

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