JMT's Research Concepts Section: a 5-Year Evaluation

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The *Journal of Medical Toxicology* launched the Research Concepts section in 2010 to allow investigators to advance their research more quickly [1]. The goals of this section are threefold: (1) to provide a forum for rapid publication of peer-reviewed research; (2) to obtain high-level critical reviews from established funded investigators; and (3) to support future grant applications for extramural funding. To meet these goals, this section was open to pilot data as well as novel study concepts to give investigators an opportunity to reach a larger audience with high-risk ideas that had the potential for high impact if carried through to the next step.

Not surprisingly, recruiting submissions was initially slower than for our other sections, but eventually those authors who published their work in Research Concepts were enthusiastic and recommended it to others. Anecdotally, authors who published here attributed subsequent grant funding and collaboration to this publication. Others who did not publish in Research Concepts reported uncertainty as to whether the section could provide the desired advancement.

As we think about how to improve *JMT* and serve our readers and authors better, we thought this would be the right time to evaluate the *JMT* Research Concepts section. We systematically reviewed all submissions to the Research Concepts section during the five-year period from 2014 through 2018 to determine if any extramural funding followed publication. In addition to reviewing all relevant manuscript data included in our electronic editorial manager system, first

authors were contacted to determine if there was an association between publication and subsequent grant funding. We specifically inquired about any reference to the manuscript in the grant submission. We considered all forms of extramural funding in our analysis.

From 2014 through 2018, the *JMT* Research Concepts section published eight articles: each was reviewed by a minimum of two previously funded peer reviewers. Time from submission to first decision averaged 14.1 days; 6 manuscripts required one revision and 2 required multiple revisions before publication [2–9]. Institutional affiliation for the first author included 5 manuscripts for the University of Massachusetts, 2 manuscripts for the University of Pennsylvania, and one manuscript for Iowa State University. Five papers focused on the integration of technology and toxicology, while three papers focused on basic science research. Multiple grants were funded related to the accepted manuscripts, including three National Institutes of Health (NIH) career development awards (K08 and K23), acceptance into an institutional KL2 program, and an NIH R21 CounterACT grant.

Although 8 manuscripts over 5 years does not seem to be a large number, it is important to remember that *JMT* is only a quarterly journal and the number of active medical toxicology investigators remains quite small. Although *JMT* prides itself on a rapid decision to authors, it is a point of pride to see the time to first decision for the Research Concepts section is faster than the average for all submitted manuscripts. This is particularly striking considering these manuscripts require peer review by at least two funded investigators, a level of expertise that is much higher and more difficult to recruit than for our other manuscript submissions. Supporting this “forum for rapid peer review and publication” meets the first goal mentioned by Steve Bird in the inaugural editorial that explained the purpose of this section [1]. Second, learning from the first authors about the many different extramural grants that were awarded to them following their publication in *JMT* meets the greater NIH benefit mentioned in that same editorial. As scientists we need to acknowledge that causation should not be claimed: we cannot say these authors would not

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have been successfully funded without publishing in *JMT*, but it is fair to suggest that the opportunity provided by this section for preliminary work was helpful.

The majority of medical toxicologists today are primarily trained in Emergency Medicine, a larger and more organized specialty than Medical Toxicology. While continuously improving, Emergency Medicine still lags behind other primary care specialties, such as Pediatrics and Neurology, in funded research [10, 11]. One criterion for successful extramural funding is having publications that demonstrate preliminary data, feasibility, and collaboration [12, 13]. We remain convinced the Research Concepts section is vital to the research enterprise of Medical Toxicology. It serves as a forum to publish novel methodologies and obtain rapid peer review from established funded investigators. The time to online publication for all articles in *JMT* averages only 20 days, an impressive number when compared with many biomedical journals publishing today. This is critical, as early online access will become available to the reviewers of extramural funding agencies such as the NIH. The Research Concepts section can play a crucial role for early-stage investigators to launch a successful research career leveraging this unique forum available to the *Journal of Medical Toxicology*, and we strongly encourage all scholars to take advantage of this opportunity [14].

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Compliance with Ethical Standards

Conflicts of Interest None.

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