

# Trends in medical student research and publishing

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I read with interest the findings of Al-Busaidi and Al-Shaqsi on the contribution of medical students to the *NZMJ*. It is sobering to see such encouraging trend of high-quality medical student-led research in New Zealand. From as far back as the mid-1600s,<sup>1</sup> medical students have significantly contributed to scientific and medical research. The *NZMJ* is a respected journal that has evidently fostered a healthy and supportive publishing environment for medical students, not only in New Zealand, but also internationally.

However, the trend worldwide, unfortunately, has not been as encouraging. Examining the published literature reveals two alarming trends. First, there is a gradual decrease in the number of physician-scientists (a term that refers to medical students intercalating a research-based degree, such as a PhD or, less often, MPH or BMedSci).<sup>2,3</sup> Building a solid research foundation early in the student's career allows for a continued path in that trajectory as a young physician.<sup>4</sup> Thankfully, in New Zealand the number of intercalating students (ie, mainly MBChB/BMedSc(Hons)) has been on the rise over the past 15 years.<sup>5</sup>

The second trend is that even though the number of student-authored articles

has slightly increased, the ratio of student authors per publication to the total number of authors has, in fact, decreased.<sup>6</sup> That is, more 'senior' authors were being added to published articles while the number of medical student authors remained static. Whether this is due to more collaborative research or, more worryingly, to senior authors being included as 'honorary authors' remains to be elucidated. With this in mind, it would be interesting to re-examine this study's data to explore our student-author to senior-author ratio.

One final point deserves to be mentioned. The observed seasonal variation in publishing student research is intriguing, but not unheard of. Such 'temporal bias' has been studied in other journals, and while some journals exhibit such variation,<sup>7,8</sup> others do not.<sup>7,9,10</sup> For Northern Hemisphere journals that have shown month-to-month variation, summer months (especially July) seemed to have a higher acceptance rate. As Al-Busaidi et al have alluded to in the article, seasonal variation may be due to the nature of academic schedules, the effect of which extends to both authors (ie, submission rates) and *NZMJ* editors (ie, acceptance rates).

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## REFERENCES:

1. Karamitsos DT. The story of insulin discovery. *Diabetes Res Clin Pract.* 2011 Aug;93(Suppl 1):S2-8.
2. Gordon R. The vanishing physician scientist: a critical review and analysis. *Account Res.* 2012;19(2):89-113.
3. Kosik RO, Tran DT, Fan AP, Mandell GA, Tarng DC, Hsu HS, et al. Physician Scientist Training in the United States: A Survey of the Current Literature. *Eval Health Prof.* 2014;31:31.
4. Solomon SS, Tom SC, Pichert J, Wasserman D, Powers AC. Impact of medical student research in the development of physician-scientists. *J Investig Med.* 2003 May;51(3):149-56.
5. Al-Shaqsi S. To intercalate or not to intercalate. *NZMSJ.* 2010 (11):29-30.
6. Wickramasinghe DP, Perera CS, Senarathna S, Samarasekera DN. Patterns and trends of medical student research. *BMC Med Educ.* 2013 Dec 28;13(175).
7. Shalvi S, Baas M, Handgraaf MJJ, De Dreu CKW. Write when hot-submit when not: seasonal bias in peer review or acceptance? *Learned Publishing.* 2010;23:117-23.
8. Schreiber M. Seasonal bias in editorial decisions for a physics journal: you should write when you like, but submit in July. *Learned Publishing.* 2012;25:145-51.
9. Bornmann L, Daniel HD. Seasonal bias in editorial decisions? A study using data from chemistry. *Learned Publishing.* 2011;24:325-8.
10. Hartley L. Write when you can and submit when you are ready! *Learned Publishing.* 2011;24:29-31.