Academic Research Retreat: A novel approach to maximise the research and publication efforts of medical students and junior doctors

Running Head (Short title):

Academic Research Retreat

Authors:

Ramson DM MBBS (Hons)^a, Penny-Dimri JC MBBS (Hons)^a, Perry LA MBBS (Hons)^a

Affiliations:

^aDepartment of Surgery, Monash University

Corresponding author:

Dhruvesh Ramson (dhru.ramson@gmail.com)

The Corresponding author is not a surgeon in training.

Word count: 898

Figures: 1

All authors agreement with the content of the manuscript

There are no potential conflicts of interest to declare

The manuscript has not been published previously and is not under consideration elsewhere.

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: 10.1111/ans.16898

Academic writing in pursuit of publication can be challenging due to limitation in time and support (1). Academic writing retreats have been demonstrated to be a feasible, effective strategy to improve participant publication outputs (2). Academic retreats have been recognised in the literature as an effective approach to offer dedicated writing time to medical faculty (3, 4).

Lack of support and leadership are significant barriers to junior clinician-scholar research productivity, with many of such candidates often being deficient in the expertise to ensure effective production of manuscripts (5). Previous retreat participants have reported protected time, peer mentoring, senior researcher coaching and the participation of a visiting professor as significant enhancers in the ability to apply research skills (6). While academic writing retreats have previously been described in undergraduate liberal arts, nursing and medical fields this appears to be the first time a writing retreat has been described in the surgical literature (5, 7). Academic surgical writing may be of particular interest to surgically inclined medical students due to the emphasis on publishing surgical research in many surgical training program selection criteria, both locally and internationally (8, 9).

In order to augment the organization's scholarly activity, the Trident Research Cooperative (TRC) staged a "Academic Research Intensive" with the theme 'Perioperative Medicine'. The event occurred in June 2019 over a 4-day period. The retreat occurred in an architecturally-designed mansion overlooking the Great Ocean Road in Melbourne, Australia. In order to ensure equitable opportunity, all attendees were medical students or junior doctors sponsored by a full scholarship. Attendees were selected from a pool of applicants by scoring curriculum vitae using a structured marking rubric. 5 Junior attendees were selected and paired with senior researchers prior to the retreat. Writing pairs met to determine manuscript topics and what work was necessary for manuscript preparation. Three weeks prior to the event, junior members of each pair had performed literature reviews and data analyses. The event aimed to provide participants with protected time for academic writing and a peer-supported network to assist in guiding research projects toward publication. The first evening of the event was dedicated toward team-building exercises. Subsequent days focused on manuscript formulation. A nightly team dinner provided a platform to review manuscript progress and discuss adjustments to the original model and process. On completion of the 4-day retreat, participants were expected to bring a drafted manuscript to completion, apply amendments recommended by peers and facilitators, determine the ideal journals for submission of manuscripts and to develop a plan for continued writing post retreat.

Facilitators distributed an online survey via online questionnaire two months after the retreat. The survey involved 5 positive statements rated on a 5-point Likert scale. Responders were not required to submit identifying information. The overall response rate to the survey was 80%. Figure 1 shows a chart demonstrating post retreat survey evaluations. Participants rated their experience favourably with "strongly agree" ratings averaging 80% across all five questions. The most negative rating across on any of the questions was "neutral". Whilst the survey provided coordinators with valuable data regarding participants perceptions, the greatest gauge of the retreat's success hinged on

participants continuing toward manuscript submission to peer-reviewed journals postretreat.

At the time of writing (March, 2021) all projects brought to retreat are either published (4) or undergoing peer review (2) in international journals (10-13). The time to publication of works completed at the retreat ranged from 5-18 months. The model detailed in this article establishes a basis for implementing, executing and completing writing tasks. Whilst doctors work effectively under the pressure of deadlines; untimed academic pursuits- such as completion of research manuscripts can prove problematic. Previous methodologies described to augment academic writing efforts include expectation mapping, time scheduling and team-work(14). Other approaches include writing workshops or clubs (15). Academic writing retreats as described here can may accelerate the efforts of the aforementioned methods. Our survey results compare favourably with other published academic writing retreats which used a similar survey protocol (16). The pairing of junior and senior researchers allowed for better guidance in regard to manuscript structure and fostered immediacy in editorial feedback (17). A major limitation of our work is the small number of survey responders and results from a single event. Further events with a larger number of participants, incorporating pre- and post-event surveying, and structured feedback are necessary to confirm our findings.

The TRC academic research retreat offered cooperative members dedicated time and resources to write and gain feedback on their academic manuscripts. Crucially, the format provided a peer support network allowing for collaborative enterprise. Attendees survey responses indicated a clear interest in staging future retreats and emphasised the events ability to overcome barriers to academic writing. The design of the event proved cost effective, scalable and readily adaptable as a conference offering. Organisers hope to employ online workspaces for future events in order to supplement members post-retreat progress. Further research is necessary to confirm the usefulness of dedicated writing retreats in providing the skills necessary for participants to improve throughput and timeliness of manuscript publication. A larger study of participant evaluations and results may be applicable to surgical trainees and surgical academics in the future. Grants secured from Monash University, Department of Surgery will allow the next event to accommodate a larger number of participants, again cost-free for participants due to full scholarship, with analysis of the results of the evaluation, manuscript production and publications planned.

Author Contributions

Dhruvesh M Ramson MBBS (Hons)

- Writing original draft
- Data curation
- Conceptualization

Jahan C Penny-Dimri MBBS (Hons)

Conceptualization

Luke A Perry MBBS (Hons)

• Supervision

References

- 1. MacLeod I, Steckley L, Murray R. Time is not enough: promoting strategic engagement with writing for publication. Studies in Higher Education. 2012;37(6):641-54.
- 2. Kornhaber R, Cross M, Betihavas V, Bridgman H. The benefits and challenges of academic writing retreats: an integrative review. Higher Education Research & Development. 2016;35(6):1210-27.
- 3. Grzybowski SC, Bates J, Calam B, Alred J, Martin RE, Andrew R, et al. A physician peer support writing group. Fam Med. 2003;35(3):195-201.
- 4. Steinert Y, McLeod PJ, Liben S, Snell L, Steinert Y, McLeod PJ, et al. Writing for publication in medical education: The benefits of a faculty development workshop and peer writing group. Medical Teacher. 2008;30(8):e280-e5.
- 5. Cable CT, Boyer D, Colbert CY, Boyer EW. The writing retreat: a high-yield clinical faculty development opportunity in academic writing. J Grad Med Educ. 2013;5(2):299-302.
- 6. Reader S, Fornari A, Simon S, Townsend J. Promoting Faculty Scholarship An evaluation of a program for busy clinician-educators. Can Med Educ J. 2015;6(1):e43-e60.
- 7. Moore S. Writers' retreats for academics: exploring and increasing the motivation to write. Journal of Further and Higher Education. 2003;27(3):333-42.
- 8. Melendez MM, Xu X, Sexton TR, Shapiro MJ, Mohan EP. The importance of basic science and clinical research as a selection criterion for general surgery residency programs. J Surg Educ. 2008;65(2):151-4.
- 9. Oldfield Z. Making the cut: an evaluation of selection into the Royal Australasian College of Surgeons' surgical training program: Victoria University; 2018.
- 10. Borg Caruana C, Jackson SM, Ngyuen Khuong J, Campbell R, Liu Z, Ramson DM, et al. Systematic review and meta-analysis of postoperative troponin as a predictor of mortality and major adverse cardiac events after vascular surgery. J Vasc Surg. 2020;72(3):1132-43.e1.
- 11. Caruana CB, Jackson SM, Khuong JN, Campbell R, Liu Z, Ramson DM, et al. Systematic review and meta-analysis of post-operative troponin as a predictor of mortality and major adverse cardiac events after vascular surgery. Journal of Vascular Surgery. 2020.
- 12. Jackson SM, Perry LA, Borg C, Ramson DM, Campbell R, Liu Z, et al. Prognostic Significance of Preoperative Neutrophil-Lymphocyte Ratio in Vascular Surgery: Systematic Review and Meta-Analysis. Vascular and Endovascular Surgery. 2020;54(8):697-706.
- 13. Ramson DM, Gao H, Penny-Dimri JC, Liu Z, Khong JN, Caruana CB, et al. Duration of post-operative antibiotic treatment in acute complicated appendicitis: systematic review and meta-analysis. ANZ J Surg. 2021.
- 14. Neuhauser D, McEachern E, Zyzanski S, Flocke S, Williams RL. Continuous quality improvement and the process of writing for academic publication. Qual Manag Health Care. 2000;8(3):65-73.
- 15. Pololi L, Knight S, Dunn K. Facilitating scholarly writing in academic medicine. J Gen Intern Med. 2004;19(1):64-8.
- 16. Bullion JW, Brower SM. Enhancing the research and publication efforts of health sciences librarians via an academic writing retreat. J Med Libr Assoc. 2017;105(4):394-9.
- 17. Shah J, Shah A, Pietrobon R. Scientific writing of novice researchers: what difficulties and encouragements do they encounter? Acad Med. 2009;84(4):511-6.

Figure Legends

Figure 1

Survey responses from 4 participants post-retreat evaluation. Attendees were asked to evaluate each statement using a scale of 1 (strongly disagree) to 5 (strongly agree).