

Council of Emergency Medicine Residency Directors

Lessons Learned in Medical Education Research

CORD Academic Assembly March 31st, 2019

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1. Have an Underlying Conceptual Framework

• An important component which provides a lens with which to view the study

2. Perform a Thorough Literature Search

- Avoid duplicating work
- Identify trends, limitations, and future directions
- Strengthens the Introduction and Discussion sections

3. Plan Your Study Before Data Collection

- Identify your study goals and target audience/journal at the onset
- Meet with your statistician <u>before</u> launching the study

4. Think Carefully About Your Outcomes

- Ensure the outcomes meet the FINER criteria
- Consider how the outcomes will influence future studies or practice

5. Obtain Buy-In

• Ensure study support from ALL of the stakeholders

6. Build Partnerships

- Think beyond the Emergency Department
- Develop and foster collaborations and multisite studies to increase external validity

7. Be Efficient with Your Time

- Write your introduction and methods sections prior to launching the study
- Set deadlines and accountability goals
- Aim for multiple scholarly products per project

8. Make Research a Priority

• Schedule dedicated and uninterrupted time for research activities

9. Recognize Your Limitations and Strategize Around Your Weaknesses

- Delegate tasks where appropriate and use this as an opportunity to mentor others
- Learn to say "No"

10. Be Willing to Fail Big

- Aim high and learn from mistakes
- Expect some journal rejections and use the comments to improve both the current paper and future research projects

Additional Resources:

- Yarris LM, Deiorio NM. Education research: A primer for educators in emergency medicine. *Acad Emerg Med*. 2011 Oct;18 Suppl 2:S27-35.
- Deiorio NM, Yarris LM, Hauswald M. Education research: Priority designs and common misperceptions. *Acad Emerg Med*. 2013 Nov;20(11):1190-3.
- Gottlieb M, Dehon E, Jordan J, Bentley S, Ranney ML, Lee S, Khandelwal S, Santen SA. Getting Published in Medical Education: Overcoming Barriers to Scholarly Production. *West J Emerg Med*. 2018 Jan;19(1):1-6.
- Gottlieb M, Chan TM, Sherbino J, Yarris L. Multiple Wins: Embracing Technology to Increase Efficiency and Maximize Efforts. *AEM Educ Train*. 2017 July;1(3):185-90.
- Yarris LM, Chan T, Gottlieb M, Juve AM. Finding Your People in the Digital Age: Virtual Communities of Practice to Promote Education Scholarship. *J Grad Med Educ*. 2019 Feb;11(1):1-5.