

Meeting Day/Time:	Thursdays, 9:00 am – 10:30 am
Meeting Location:	<p>In Person: GB-1238, Harrison Education Commons</p> <p>WebEx: http://bit.ly/EdRes2020</p> <p>Meeting number: 929 989 208</p> <p>Meeting password: edres2020</p> <p>Audio connection: +1-415-655-0002 US Toll</p>
Fellowship Director:	A.J. Kleinheksel, PhD, CHSE: akleinheksel@augusta.edu , (706) 721-0105
Texts & Other Resources	<ul style="list-style-type: none"> • Creswell JW. <i>Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research</i> (4th Ed.). New York: Pearson, 2012. • IBM SPSS Statistics (Version 25)* • Endnote (Version X9*) <p>*Software can be found at https://www.augusta.edu/its/software/software-include.php</p>
Learning Objectives	<ol style="list-style-type: none"> 1. Access and critically read research literature in medicine, education, and other domains. 2. Understand theory and empirical findings in one's own research area. 3. Formulate a research question and for quantitative studies, operationalize variables. 4. Design a descriptive and/or explanatory study. 5. Collect and analyze data. 6. Evaluate and discuss research findings. 7. Prepare a research proposal suitable for submission to one's research area (conference or peer-reviewed journal).

Date	Topic	Readings & Assignments
Jan 9	Introduction	<p>Assignments:</p> <ul style="list-style-type: none"> • Create a Box account, if you do not already have one. • Request access to the IRBnet system, if you have not already done so: https://www.irbnet.org/release/public/register.jsp • Complete CITI Training, if you have not already done so: http://www.augusta.edu/research/explore/human-research-program/irboffice/citi.php
Jan 16	Educational Scholarship & Research	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • AAMC Annotated Bibliography of Journals for Educational Scholarship • Glassick, C.E. (2000). Boyer's expanded definitions of scholarship, the standards for assessing scholarship, and the elusiveness of the scholarship of teaching. <i>Academic Medicine</i>, 75, 877-880. • Simpson, D., Fincher, R.M.E., Hafler, J.P., Irby, D.M., Richards, B.F., Rosenfeld, G.C., & Viggiano, T.R. (2007). Advancing educators and education by defining the components and evidence associated with educational scholarship. <i>Medical Education</i>, 41, 1002-1009. • Worksheet from: Winston, Jr., R. B. (1985). A suggested procedure for determining order of authorship in research publications. <i>Journal of Counseling and Development</i>, 63, 515-518. <p>Assignments:</p> <ul style="list-style-type: none"> • Set up an appointment to meet with Gail Kouame or Kathy Davies at the Greenblatt Library (1439 Laney-Walker Boulevard) to familiarize you with how to search the health professions education literature. Bring any articles you already have so they will understand what kind of literature you are searching for. • Identify which journals are important in your field and sign up for RSS feeds so you can see the kinds of articles that are being published in these journals. • Contact mentors who can assist you throughout the research process. Choose <i>one internal and one external</i> mentor. These should be people who could serve in one or more of the following capacities: a) help you understand the current research in your area of interest, b) be willing to help you frame your research question, c) guide your thinking about the research area, d) provide resources such as data, articles, contacts, etc.

<p>Jan 23</p>	<p>The Educational Research Process</p>	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • Creswell, J. (2012) Chapter 2: Identifying a Research Problem • Beckman, T.J. & Cook, D.A. (2007). Developing scholarly projects in education: A primer for medical teachers. <i>Medical Teacher</i>, 29, 210-218. • Cook D.A., Bordage, G., & Schmidt, H.G. (2008). Description, justification, and clarification: A framework for classifying the purposes of research in medical education. <i>Medical Education</i>, 42, 128-133. • Meinema, J. G., Buwalda, N., van Etten-Jamaludin, F. S., Visser, M., & van Dijk, N. (2019). Intervention descriptions in medical education: What can be improved? A systematic review and checklist. <i>Academic Medicine</i>, 94(2), 281-90. <p>Assignments:</p> <ul style="list-style-type: none"> • Start a personal library in your Box account of two types of educational research articles: (a) well-written or well-articulated exemplars and (b) examples of research designs (e.g., survey design, program evaluation) or statistical analyses (e.g., ANOVA, paired-samples t-test).
<p>Jan 30</p>	<p>[<i>Individual Project Consultations</i>]</p>	<p>Assignments:</p> <ul style="list-style-type: none"> • Discuss your literature review to date. • Begin formulating your educational research question. <p>NOTE: <i>You will need to schedule a one-on-one meeting for individual project consultations, so please arrange a meeting time in advance if you typically have limited availability.</i></p>

<p>Feb 6</p>	<p>Reviewing and Evaluating Literature</p>	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • Jack, L. (2010). Appraising quantitative research in health education: Guidelines for public health educators. <i>Health Promotion Practice, 11</i>(2), 161-165 • Lingaard, L. (2018). Writing an effective literature review. <i>Perspectives on Medical Education, 7</i>(1), 47-49. • Maggio, L. A., Sewell, J. L., & Artino Jr, A. R. (2016). The literature review: A foundation for high-quality medical education research. <i>Journal of Graduate Medical Education, 8</i>(3), 297-303. • Sewell, J. L., Maggio, L. A., & Artino Jr, A. R. (2016). Planning the literature review. <i>Academic Medicine, 91</i>(12), e18. • Wong, G. (2016). Literature reviews in the health professions: It's all about the theory. <i>Medical Education, 50</i>(4), 380-382. <p>Assignments:</p> <ul style="list-style-type: none"> • Begin writing your literature review. • Begin to familiarize yourself with the Augusta University IRB and IRBnet system: http://www.augusta.edu/research/explore/human-research-program/irboffice/irbnet.php • Review the available IRB guidance documents: http://www.augusta.edu/research/tools-for-researchers/index.php
<p>Feb 13</p>	<p>Educational Research Theory</p>	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • Bergman, E., de Feijter, J., Frambach, J., Godefrooij, M., Slootweg, I., Stalmeijer, R., & van der Zwet, J. (2012). A guide to research paradigms relevant to medical education. <i>Academic Medicine, 87</i>(4), 545. • Castillo-Page, L., Bodilly, S., & Bunton, S. A. (2012). Understanding qualitative and quantitative research paradigms in academic medicine. <i>Academic Medicine, 87</i>(3), 386. • Gibbs, T., During, S., & Van der Vleuten, C. (2011). Theories in medical education: Towards creating a union between educational practice and research traditions. <i>Medical Teacher, 33</i>, 183-187 <p>Assignments:</p> <ul style="list-style-type: none"> • Identify 1-2 educational theories that relate to your area of interest and/or project. • Continue writing your literature review.
<p>Feb 20</p>	<p>[Individual Project Consultations]</p>	<p>Let's Talk!</p>

<p>Feb 27</p>	<p>Developing a Research Question Part 1</p>	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • Bordage, G., & Dawson, B. (2003). Experimental study design and grant writing in eight steps and 28 questions. <i>Medical Education</i>, 37(4), 376-385. • Dine, C. J., Shea, J. A., & Kogan, J. R. (2016). Generating good research questions in health professions education. <i>Academic Medicine</i>, 91(12), e8. • Morrison J. (2002). Developing research questions in medical education: The science and the art. <i>Medical Education</i>, 36, 596-597. • O'Brien, B. C., Ruddick, V. J., & Young, J. Q. (2016). Generating research questions appropriate for qualitative studies in health professions education. <i>Academic Medicine</i>, 91(12), e16. <p>Assignments:</p> <ul style="list-style-type: none"> • Answer questions 1-9 of the Bordage & Dawson (2003) article with respect to your study. • Submit your literature review to fellowship director by email.
<p>Mar 5</p>	<p>Developing a Research Question Part 2</p>	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • Prideaux, D., & Bligh J. (2002). Research in medical education: Asking the right questions. <i>Medical Education</i>, 36, 1114-1115. • Ringsted, C., Hodges, B., & Scherpbier, A. (2011). 'The research compass': An introduction to research in medical education: AMEE Guide No. 56. <i>Medical Teacher</i>, 33(9), 695-709.
<p>Mar 12</p>	<p>NO CLASS</p>	<p>SGEA</p>
<p>Mar 19</p>	<p>Educational Projects Research & the IRB</p>	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • Egan-Lee, E., Freitag, S., Leblanc, V., Baker, L., & Reeves, S. (2011). Twelve tips for ethical approval for research in health professions education. <i>Medical Teacher</i>, 33, 268-272. • Johansson, A.C., Durning, S.J., Gruppen, L.D., Olson, M.E., Schwartzstein, R.M., & Higgins, P.A. (2011). Medical education research and the Institutional Review Board: Reexamining the process. <i>Academic Medicine</i>, 86, 809-817. • Keune, J.D., Brunsvold, M.E., Hohmann, E., Korndorffer, J.R., Weinstein, D.F., & Smink, D.S. (2013). The ethics of conducting graduate medical education research on residents. <i>Academic Medicine</i>, 88, 449-453. • McLachlan, J.C., & McHarg, J. (2005). Ethical permission for the publication of routinely collected data. <i>Medical Education</i>, 39, 944-948. <p>Assignments:</p> <ul style="list-style-type: none"> • Begin writing your IRB protocol.

Mar 26	[Individual Project Consultations]	Let's Talk!
April 2	Navigating the IRB	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> Blanchard, R. D., DeMeo, S., & Nagler, A. (2016). Primer for submitting health professions education research to the IRB. <i>Academic Medicine</i>, 91(12), e1. Checklist for Submitting a New Project to an Internal AU IRB IRBNet New Project Submission Guide <p>Assignments:</p> <ul style="list-style-type: none"> Continue writing your IRB protocol.
April 9	NO CLASS	SPRING BREAK
April 16	IRB Protocol Peer Review	<p>Preparation:</p> <ul style="list-style-type: none"> Email IRB protocol to fellowship director and Year 1 fellows prior to session. <p>Assignments:</p> <ul style="list-style-type: none"> Revise and submit IRB Protocol Template. <ul style="list-style-type: none"> Submit IRB Core Data Form. Submit IRB Consent Form, if applicable. Submit IRB Conflict of Interest.
April 23	Quantitative Research: Experimental & Correlational Designs	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> Creswell, J. (2012) Chapter 10: Experimental Designs Creswell, J. (2012) Chapter 11: Correlational Designs
April 30	NO CLASS	EDUCATION DAY 2020!

<p>May 7</p>	<p>Quantitative Research: Survey Designs</p>	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • Creswell, J. (2012) Chapter 12: Survey Designs • Artino Jr, A. R., & Gehlbach, H. (2012). Avoiding Four Visual-Design Pitfalls in Survey Development. <i>Academic Medicine</i>, 87(10), 1452. • Artino Jr, A. R., Gehlbach, H., & Durning, S. J. (2011). Avoiding five common pitfalls of survey design. <i>Academic Medicine</i>, 86(10), 1327. • Artino, Jr, A. R., et al. (2018). Guidelines for Reporting Survey-Based Research Submitted to Academic Medicine. <i>Academic Medicine</i>, 93(3), 337-340. • Artino, Jr, A. R., et al. (2018). The Questions Shape the Answers: Assessing the Quality of Published Survey Instruments in Health Professions Education Research. <i>Academic Medicine</i>, 93(3), 456-463. • Gehlbach, H. and Artino, Jr, A. R. (2018). The Survey Checklist (Manifesto). <i>Academic Medicine</i>, 93(3), 360-366. • Gehlbach, H., Artino Jr, A. R., & Durning, S. J. (2010). Survey development guidance for medical education researchers. <i>Academic Medicine</i>, 85(5), 925. • MaGee, C. (2013). Tracing the steps in survey design: A graduate medical education research example. <i>Journal of Graduate Medical Education</i>, 5(1) 1-5.
<p>May 14</p>	<p>Introduction to Statistics (Guest: Dr. Jennifer Waller)</p>	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • Creswell, J. (2012) Chapter 6: Analyzing and Interpreting Quantitative Data <p>Assignments:</p> <ul style="list-style-type: none"> • Be prepared to discuss your research project with Dr. Waller.
<p>May 21</p>	<p>Sampling, Variables, and Measurement</p>	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • Carifio, J., & Perla, R. (2008). Resolving the 50-year debate around using and misusing Likert scales. <i>Medical Education</i>, 42, 1150-1152. • Crandall, S., Bushardt, R., & Ip, E. (2016). Key sampling issues in quantitative research in health professions education. <i>Academic Medicine</i>, 91(12), e6. • Prystowsky, J. B., & Bordage, G. (2001). An outcomes research perspective on medical education: The predominance of trainee assessment and satisfaction. <i>Medical Education</i>, 35, 331-336. • Spector, P. E., & Brannick, M. T. (2011). Methodological urban legends: The misuse of statistical control variables. <i>Organizational Research Methods</i>, 14, 287.

May 28	Qualitative Research (Guest: Dr. Tasha Wyatt)	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> Bunton, S. A. (2016). Using qualitative research as a means to an effective survey instrument. <i>Academic Medicine</i>, 91(8), 1183. Chen, H. C., & Teherani, A. (2016). Common qualitative methodologies and research designs in health professions education. <i>Academic Medicine</i>, 91(12), e5. Frambach, J. M., van der Vleuten, C. P., & Durning, S. J. (2013). Quality Criteria in Qualitative and Quantitative Research. <i>Academic Medicine</i>, 88(4), 552. Paradis, E. (2016). The tools of the qualitative research trade. <i>Academic Medicine</i>, 91(12), e17.
June 4	Qualitative Research: Content Analysis	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> Kleinheksel, A. J., Rockich-Winston, N., Tawfik, H., & Wyatt, T. R. (In Press). Demystifying content analysis. <i>American Journal of Pharmaceutical Education</i>, [Special Thematic Issue: Qualitative Research].
June 11	Research Designs: Mixed Methods & Action Research	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> Creswell, J. (2012) Chapters 16: Mixed Method Designs Creswell, J. (2012) Chapters 17: Action Research Designs Sunderji, N. and Waddell, A. E. (2018). Mixed Methods Convergent Study Designs in Health Professions Education Research: Toward Meaningful Integration of Qualitative and Quantitative Data. <i>Academic Medicine</i>, 93(7), 1093
June 18 June 25 July 2 July 9 July 16 July 23 July 30 Aug 6	NO CLASS - SUMMER BREAK	Individual Project Consultations by Request

Aug 13	Validity and Reliability	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • Artino Jr, A. R., Durning, S. J., & Creel, A. H. (2010). Reliability and validity in educational measurement. <i>Academic Medicine</i>, 85(9), 1545. • Downing, S. M. (2003). Validity: On the meaningful interpretation of assessment data. <i>Medical Education</i>, 37, 830-837. • Downing, S. M., & Haladyna, T. M. (2004). Validity threats: Overcoming interference with proposed interpretations of assessment data. <i>Medical Education</i>, 38, 327-333.
Aug 20	Choosing between Statistical Analyses	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • Study Design and Choosing a Statistical Test: http://www.bmj.com/about-bmj/resources-readers/publications/statistics-square-one/13-study-design-and-choosing-statisti • The Statistics Tutor's Quick Guide to Commonly Used Statistical Tests: http://www.statstutor.ac.uk/resources/uploaded/tutorsquickguidetostatistics.pdf
Aug 27	[Individual Project Consultations]	Let's Talk!
Sept 3	Overview of Learning Theories	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • Kaufman, D. M., & Mann, K. V. Teaching and learning in medical education: How theory can inform practice. In: Swanwick T (ed.). <i>Understanding Medical Education: Evidence, Theory, and Practice</i>. Hoboken, NJ: Wiley-Blackwell, 2010: 16-36. • Kay, D. & Kibble, J. Learning theories 101: Application to everyday teaching and scholarship. <i>Advances in Physiology Education</i>. 40(1), 17-25. • Torre, D. (2006). Overview of current learning theories for medical educators. <i>AMP Perspectives</i>, 119(10), 903-907. <p>Assignments:</p> <ul style="list-style-type: none"> • Select one or more learning theory that has relevance for your educational research to discuss next week.
Sept 10	Application of Learning Theories in the Construction of a Framework	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • Bordage, G. (2009). Conceptual frameworks to illuminate and magnify. <i>Medical Education</i>, 43(4), 312-319. • Cianciolo, A. T., & Regehr, G. (2019). Learning Theory and Educational Intervention: Producing Meaningful Evidence of Impact Through Layered Analysis. <i>Academic Medicine</i>, 94(6), 789-794.
Sept 17	[Individual Project Consultations]	Let's Talk!

Sept 24	How to Create a Research Agenda	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • Planning your Research Agenda (UMass, Dartmouth): http://www.umassd.edu/nfi/planningfortenure/planningyourresearchagenda/ • Carney, P., et al. (2016). Building and executing a research agenda toward conducting implementation science in medical education. <i>Medical Education Online</i>, 21, 1–8. <p>Assignments:</p> <ul style="list-style-type: none"> • Complete the Research Agenda Worksheet (located in Box)
Oct 1	Understanding the Writing Process	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • Elbow, P. (1973). <i>Writing Without Teachers</i>. Oxford University Press, NY, pp. 1-37. • Jalongo, M. (2014). <i>Writing for Publication: A Presentation for UIP Teachers/Scholars</i>. • The Writing Process: https://www.dailywritingtips.com/the-writing-process/ • 8 Great Writing Tools to Keep You Motivated to Write: http://www.livewritethrive.com/2014/05/26/8-great-writing-tools-to-keep-you-motivated-to-write/
Oct 8	Submitting a Manuscript	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • Atluru, A., et al. (2015). <i>Research in Medical Education</i>. ORS Medical Education Committee, pp 1- 15. • Cook, D. (2016). Twelve tips for getting your manuscript published. <i>Medical Teacher</i>, 38(1), 41-50. • Cook, D. & Bordage, G. (2016). Twelve tips on writing abstracts and titles: How to get people to use and cite your work. <i>Medical Teacher</i>, 38(11), 1100-1104. • Lingard, L. (2016) Bonfire red titles. <i>Perspectives on Medical Education</i>, 23, 1-3. • Sullivan, G. (2012) Writing Education Studies for Publication. <i>Journal of Graduate Medical Education</i>. 4(2), 133-137.
Oct 15	[Individual Project Consultations]	Let's Talk!
Oct 22	Program Evaluations	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • The New World Kirkpatrick Model: http://www.kirkpatrickpartners.com/Our-Philosophy/The-New-World-Kirkpatrick-Model • Holton, E. (1996). The flawed four-level evaluation model. <i>Human Resource Development Quarterly</i>, 7 (1), 5– 21.
Oct 29	[Individual Project Consultations]	Let's Talk!



Nov 5	Different Models of Writing Group	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • How to Peer Review: Easy Guide • Pages 5 – 11 in Belcher, W. (2009). Writing a Journal Article in 12 Weeks. Sage Publications Inc. Thousand Oaks, CA. • Shut Up and Write: https://www.insidehighered.com/advice/2010/06/14/shut-and-write • Writing Group Starter Kit: http://writingcenter.unc.edu/handouts/writing-groups/writing-group-starter-kit/
NOV 12	NO CLASS	AAMC 2020
Nov 19	Submitting to MedEdPORTAL	<p>In Class Activity:</p> <ul style="list-style-type: none"> • MedEdPORTAL Activity (located in Box)
Nov 26	NO CLASS	THANKSGIVING BREAK
Dec 3	Revise and Resubmit: Addressing Reviewers' Comments	<p>Readings & Preparation:</p> <ul style="list-style-type: none"> • Liu, L. (2014). Addressing reviewer comments as an integrative negotiation. <i>Management and Organizational Review</i>, 10 (2), 183-190. • Three top tips for responding to reviewer comments on your manuscript: https://www.elsevier.com/authors-update/story/publishing-tips/3-top-tips-for-responding-to-reviewer-comments-on-your-manuscript
Dec 10	End of Year 1 Celebration!	PARTY TIME!