



# 2019/20 CAEP Grant Competition Junior Investigator & EMAF Scoring Matrix

## **Question 1. Relevance to emergency medicine**

- 1 Unacceptable: Condition never seen or treated in the ED
- 2 Poor: Less common/benign condition treated by consultants in the ED
- 3 Good: Common/severe condition treated by consultants in the ED
- 4 Very Good: Less common/benign condition treated by emergency physicians in the ED
- 5 Excellent: Common/severe condition treated by emergency physicians in the ED

## **Question 2. Originality of study**

- 1 Unacceptable: Study question has already been definitively answered with no new information
- 2 Poor: Has often been described before using similar population or environment
- 3 Good: Has often been described before but in a new population or environment
- 4 Very Good: Has been described before but rarely in the ED or given patient population
- 5 Excellent: Very novel, has never been reported before, new approach

## **Question 3. Importance of study**

- 1 Unacceptable: Unethical question or question already definitely answered by existing guidelines
- 2 Poor: Many existing well-designed studies already answering this question
- 3 Good: Known knowledge gap with growing number of publications
- 4 Very Good: Clear knowledge gap with limited previous EM publications
- 5 Excellent: Clear knowledge gap that has never been filled before

## **Question 4. Methodologically appropriate**

- 1 Unacceptable: Chosen design cannot answer the question posed
- 2 Poor: Chosen design may possibly lead to biased results
- 3 Good: Pragmatic design for study that would benefit from a superior design
- 4 Very Good: Chosen design is best to answer question
- 5 Excellent: Chosen design is best to answer question AND superior

## **Question 5. Methods**

- 1 Unacceptable: Elements are missing such that reviewers cannot determine method appropriateness
- 2 Poor: Some key elements are missing, poorly organized
- 3 Good: All elements are described and organized but missing key information to reproduce
- 4 Very Good: All elements are described, organized, with some elements missing for reproduction
- 5 Excellent: All elements are described, organized, and reproducible

## **Question 6. Statistical Issues**

- 1 Unacceptable: Sample size too small and/or usage of wrong analytic plan
- 2 Poor: Smaller sample size and common analytical plan (descriptive statistics only)
- 3 Good: Adequate sample size and common analytical plan (e.g. Chi-square, t-test)
- 4 Very Good: Moderate-smaller sample size and sophisticated analytic plan
- 5 Excellent: Large sample size and highly sophisticated analytic plan (e.g. GLM, regression analyses)

**Question 7. Feasibility**

- 1 Unacceptable: Proposal very unlikely to successfully be completed on time
- 2 Poor: Implementation timelines missing many important milestones
- 3 Good: Well-detailed implementation timelines
- 4 Very Good: Demonstration of probable recruitment rate/plan addressing possible limitations
- 5 Excellent: Demonstrated evidence using pilot implementation of proposed research methodology

**Question 8. Resource allocation**

- 1 Unacceptable: CAEP funding used to acquire capital equipment or provide unethical incentives, or to leverage additional external funds required to complete project
- 2 Poor: Project will likely be completed successfully with or without the CAEP grant award
- 3 Good: Project is highly dependent on CAEP grant alone and probably feasible with that amount
- 4 Very Good: Project is highly dependent on CAEP grant alone and likely feasible with that amount
- 5 Excellent: Project is highly dependent on CAEP grant alone and highly feasible with that amount

**Question 9. Quality of submission**

- 1 Unacceptable: No knowledge gap, unclear or no objectives, wrong method, no perceived impact
- 2 Poor: Unclear knowledge gap and objectives, poor method description, unclear impact
- 3 Good: Unclear knowledge gap and or objectives, acceptable method, could change practice
- 4 Very Good: Clear knowledge gap, mostly clear objectives, appropriate method, could change practice
- 5 Excellent: Clear knowledge gap and objectives, best appropriate method, will clearly change practice

**Question 10. Tools and resources**

- 1 Unacceptable: Research team has no prior research experience, and no access to any support
- 2 Poor: Research team has no formal research training and little experience in research
- 3 Good: Research team has no formal research training, but group has good research track record
- 4 Very Good: PI or supervisor is not formally research trained, but team includes trained methodologist
- 5 Excellent: PI or supervisor is research trained (MSc or PhD) and has established research team