CAEP Academic Symposium Papers

CAEP 2015 Academic Symposium: Recommendations for University Governance and Administration for Emergency Medicine

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ABSTRACT

Objective: 1) To identify the strengths and challenges of governance structures in academic emergency medicine (EM), and 2) to make recommendations on principles and approaches that may guide improvements.

Methods: Over the course of 9 months, eight established EM leaders met by teleconference, reviewed the literature, and discussed their findings and experiences to arrive at recommendations on governance in academic units of EM. The results and recommendations were presented at the annual Canadian Association of Emergency Physicians (CAEP) Academic Symposium, where attendees provided feedback. The updated recommendations were subsequently distributed to the CAEP Academic Section for further input, and the final recommendations were decided by consensus.

Results: The panel identified four governance areas of interest: 1) the elements of governance; 2) the relationships between emergency physicians and academic units of EM, and between the academic units of EM and faculty of medicine; 3) current status of governance in Canadian academic units of EM; and 4) essential elements of good governance. Six recommendations were developed around three themes, including 1) the importance of good governance; 2) the purposes of an academic unit of EM; and 3) essential elements for better governance for academic units of EM. Recommendations included identifying the importance of good governance, recognizing the need to adapt to the different models depending on the local environment; seeking full departmental status, provided it is mutually beneficial to EM and the faculty of medicine (and health authority); using a consultation service to learn from the experience of other academic units of EM; and establishing an annual forum for EM leaders.

Conclusion: Although governance of academic EM is complex, there are ways to iteratively improve the mission of academic units of EM: providing exceptional patient care through research and education. Although there is no one-size-fits-all guide, there are practical recommended steps for academic units of EM to consider.

RÉSUMÉ

Objectifs: 1) L'étude visait à cerner les forces et les faiblesses des structures de gouvernance dans les unités d'enseignement de la médecine d'urgence (MU) et 2) à formuler des recommandations sur les principes et les voies susceptibles de guider les améliorations.

Méthode: Sur une période de 9 mois, huit chefs de file bien établis en MU ont tenu des réunions par téléconférence, ont examiné la documentation et ont discuté des résultats de la recherche et de leurs expériences pour en arriver à l'élaboration de recommandations sur la gouvernance des unités d'enseignement de la MU. Les résultats et les recommandations ont été présentés au cours du symposium annuel sur les affaires universitaires de l'Association canadienne des médecins d'urgence (ACMU), après quoi les participants ont fait part de leurs observations. Les recommandations ont été modifiées en conséquence, puis transmises à la section des affaires universitaires de l'ACMU pour la collecte d'autres observations. Enfin, les recommandations définitives ont été le fruit d'un consensus.

Résultats: Le groupe a dégagé quatre grands champs d'intérêt relatifs à la gouvernance : 1) les éléments de la gouvernance; 2) les relations entre les médecins d'urgence et les unités d'enseignement de la MU, ainsi qu'entre ces unités et les facultés de médecine; 3) l'état actuel de la gouvernance

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des unités d'enseignement de la MU au Canada; et 4) les éléments essentiels d'une bonne gouvernance. L'exercice a donné lieu à la formulation de six recommandations articulées autour de trois thèmes, notamment : 1) l'importance d'une bonne gouvernance; 2) les buts visés par les unités d'enseignement de la MU; et 3) les éléments essentiels à une meilleure gouvernance de ces unités. Les recommandations portaient principalement sur l'importance d'une bonne gouvernance, aussi sur la nécessité d'adaptation aux différents modèles selon le milieu local; sur l'obtention du titre de département à part entière, pourvu que cette reconnaissance soit profitable aux unités d'enseignement de la MU et aux facultés de médecine (ainsi qu'aux autorités sanitaires); sur le recours à des services de consultation pour tirer des leçons de l'expérience d'autres unités d'enseignement de la MU et sur la tenue d'une rencontre annuelle des chefs de file en MU.
Conclusion: Certes, la gouvernance des unités d'enseignement de la MU est complexe, mais il est possible d'améliorer par réitération la mission de ces unités, soit la prestation de soins exceptionnels aux patients par la recherche et par la formation. Bien qu'il n'existe pas de panacée, plusieurs voies pratiques, recommandées s'offrent aux unités d'enseignement de la MU.

Keywords: emergency medicine administration, governance, leadership

INTRODUCTION

Along with funding and leadership, governance has an important impact on the performance of an academic department, division, or section of emergency medicine (EM). Governance structures and processes are a means to an end. They are not an end unto themselves. The purpose of an EM academic structure is to facilitate and enable excellence in the mission of academic medicine, including research, education, and, ultimately, patient care.[1] Different academic units of EM will put different emphasis on each element of the mission. (For the purposes of this article, departments, divisions, and sections of EM will be referred to collectively as *academic units* of EM.) Good governance facilitates meeting the strategic goals and fiduciary responsibilities of the academic units of EM, and creating the ability to respond to system challenges and opportunities[2] in an era of rapid change in academic medicine and health system reform.[3]

While there is an established matrix of governing bodies, institutions, and regulations with which an academic unit of EM must align and integrate, this paper will focus on two practical levels of governance: 1) the relationship between individual emergency physicians and their academic unit of EM; and 2) the relationship between the academic unit of EM and its parent faculty of medicine or academic health centre. Given that there is a significant cause-and-effect relationship between funding streams, local politics, and health systems organization, it is no surprise that there is a wide variation of governance structures in academic EM.

Table 1. Status of the 17 academic units of EM within the Canadian faculties of medicine

Academic units of EM status	*n* (%)
Full department	8 (47)
Division/section	4 (23)
Joint department with family medicine	3 (18)
No status	2 (12)

This paper aims to make sense of the strengths and challenges of the current governance structures, and make recommendations on principles and general approaches that may guide improvements in governance at both levels. Specific how-to steps will require significant context-dependent analysis, consultation, and understanding of specific university (or health authority models), and are beyond the scope of these recommendations. It is clear that no one size will fit all (Table 1).

METHODOLOGY

Expert panel and literature review on governance

Eight established medical leaders from across Canada were identified for their contributions to the EM community and were asked to form a governance panel. The panel met by teleconference four times and was supported by the Academic Section of the Canadian Association of Emergency Physicians (CAEP). All members reviewed the governance literature and discussed individual experiences to identify 1) the elements of governance; 2) the relationships between emergency physicians and academic units of EM, and between the academic unit of EM and faculty of medicine; 3) current status of governance in Canadian academic units of EM; and 4) essential elements of good governance. This discussion culminated into six

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recommendations around three themes: 1) the importance of good governance; 2) the purposes of an academic unit of EM; and 3) essential elements for better governance for academic units of EM. The panel presented the findings at the CAEP Academic Symposium[4-10] held in Edmonton, Alberta, on May 30, 2015, to about 80 attendees, who were predominately emergency physicians with interests in governance, administration, and leadership. Their feedback, as well as comments gathered subsequent to the electronic distribution of the recommendations to the CAEP Academic Section, were discussed by the panel, and the recommendations were updated by panel consensus.

What is governance? How does it relate to funding and leadership in academic EM?

As soon as there are more than two people making a decision, especially if there is money involved, then there is a governance challenge. While the Institute on Governance (http://www.iog.ca) acknowledges that the complexity of governance is difficult to capture in a simple definition, they did stipulate that "governance determines who has power, who makes decisions, how other players make their voices heard, and how account is rendered."[11] In the context of academic EM, the academic unit becomes essential in organizational decision-making and accountability. Although effective governance models contribute to organizational performance, often "we don't think about or debate governing; we just do it." [2] In its simplest concept, the purpose of governance in academic units is to facilitate engagement (in the academic mission) and trust (in the decision-making by leadership) within the faculty.

The mission of academic medicine is supported by three foundational pillars: governance, leadership, and funding. For the purpose of this analysis and accompanying recommendations, governance has been differentiated from leadership development and funding, with respect to its influence on the academic unit's performance and effectiveness. In practice, it is difficult to separate these interdependent relationships. For example, local traditional funding streams have likely had a significant impact on an academic unit's decision-making around resource allocations, while institutional leadership precedence has shaped the evolution of governance structures and processes. Nonetheless, the three elements together provide the wherewithal to optimally improve the performance of the academic unit of EM.

Two separate, but interdependent levels of governance

For these recommendations, two levels of governance were considered. The first level governs the relationship between individual physicians and the academic unit of EM. The second governs the relationship between the academic unit of EM and the faculty of medicine. It is important to recognize that good governance of internal affairs (i.e., decision-making around the academic unit structures and processes) does not require independent academic departmental status at the university level. Conversely, full academic departmental status does not guarantee good governance over the practical day-to-day performance and decision-making of the department. Excellence in academic performance may be achieved by an academic unit of EM operating from any position (Figure 1). The obstacles to achieving full independent academic departmental status may differ from those that affect internal performance regardless of the academic unit governance model.

As individual academic units of EM evaluate their own status (see Appendix 1: Self-evaluation questions) and identify in which quadrant they fit (see Appendix 2: Key aspects list for good internal governance), more customized strategies and advice can be generated to improve governance in service of academic excellence. The how-to steps from C→A will be different from D→B, which, in turn, will be different from B→A (see Figure 1).

Governance theme 1: Governance is important to the academic units of EM

Governance is important because it determines who makes what decision, and how these decisions are made.[11]

		Status of EM within the university faculty of medicine	
		Full academic department	Division, section, or other
Governance of internal affairs	Good	A	B
	Challenged	C	D

Figure 1. The levels of governance and their influence on full EM departments or divisions/sections/units of EM.

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In an effort to give governance some practical relevance, it has been reframed as an aspect of leadership.[2] This framework should be kept in mind as this question is asked: Do the structures and processes of the governance of academic EM support the ability of the academic unit of EM to make fiduciary, strategic, and generative (adaptive) decisions in the service of the academic mission?

Fiduciary decision-making is the stewardship of tangible assets in alignment with financial and legal obligations, accountability to senior organizations (i.e., payers, partners, stakeholders), and accountability to individual members and constituent interests. Strategic decision-making involves setting the academic units' course and priorities (i.e., mission, vision, values), and deploying resources appropriately. Generative (or adaptive) decision-making refers to the role of framing problems and making sense of ambiguous situations, as well as ensuring that academic units can evolve, adapt, and respond to uncertainty and changing environments.[2]

As with the codification of corporate memory, group values, and organizational culture, the governance structure and policies become the user's manual for the chair (or chief) of the academic units of EM, and its other leaders. If this user's manual is well thought out and robustly structured, this can create the conditions of trust and engagement necessary for the academic unit. If this is not the case, the chair (with or without a leadership team) must create or improve those aspects of internal governance that do not align with the mission and values.

In a recent article entitled, "Predictors of Workplace Satisfaction for U.S. Medical School Faculty in an Era of Change and Challenge,"[12] it was found that departmental (and medical school) organization, governance, and transparency were highly consistent predictors of faculty satisfaction across all surveyed schools and models. The authors suggested "that a culture characterized by open communication, consistency in decision-making, and opportunities for faculty input contributes to faculty perceptions of their worth to their institution and of institutional equity, all of which foster satisfaction."[12]

Along with leadership and funding, governance can have an important impact on the academic unit of EM policy development, decision-making, and effectiveness. Governance must not be taken for granted.

Recommendation 1: There should be a deliberate approach to defining, implementing, and reviewing governance structures, processes, and desired outcomes.

Governance theme 2: The purpose of the academic unit of EM

Because governance is a means to an end, the goals of an academic unit of EM must be defined before clear recommendations can be made around the best governance model to achieve the desired outcomes. For the sake of this discussion, the vision of the CAEP Academic Section of EM will be used to articulate that purpose. The vision of the Academic Section is to promote high-quality emergency patient care by conducting world-leading education and research in EM (caep.ca/AcademicSectionOverview). By extension and for the development of recommendations, the *raison d'être* of any given academic unit of EM is to improve patient outcomes through better education and impactful research (Figure 2). This aligns with the arguments made by the "One future, three missions" white paper on the future of Academic Health Science Networks in Canada.[1] As academic units within those academic health science networks, EM must have aligned roles and responsibilities.

That is not to say that all academic units of EM across the country will, or should, put equal emphasis on the three missions (see Figure 2). In some medical schools, the chair of the academic unit of EM is separated from any direct patient care oversight or

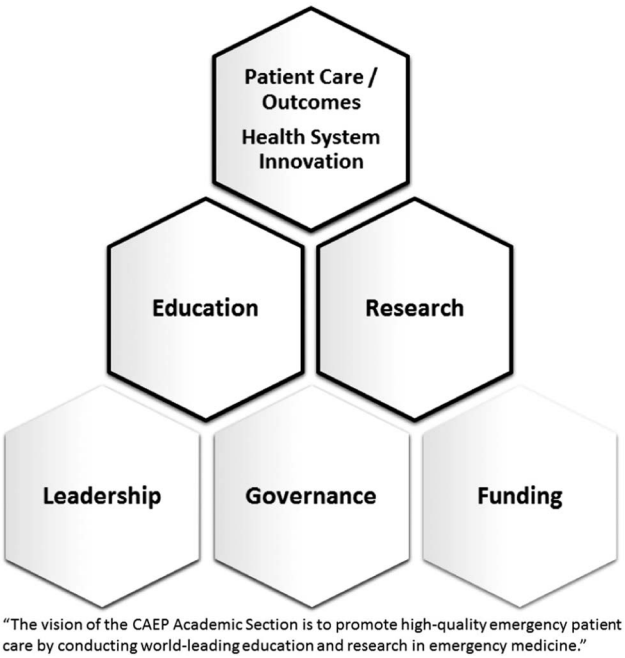

Figure 2. The relationship between the tripartite mission of academic medicine (outlined in *black*) and its leadership, governance, and funding.

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responsibility, whereas, in others, the health authority (or university by-laws) has intentionally combined the roles in a joint appointment, albeit with site chief positions responsible for day-to-day clinical operations. Even in settings focused solely on academic leadership, the ultimate goal will always be to improve patient care. It is understood that different universities will put more or less emphasis on the elements of the academic mission and have different governing by-laws. There is no standard formula for governance structures in academic EM. This limits the ability to make specific recommendations about what governance structure will work best for academic EM.

Further preventing such recommendations is that academic units of EM are evolving in an era of accelerating change in academic medicine and health care reform.[3,13-17] The expectations of an academic unit of EM now exceed the traditional scholarship of education and research roles.[18] This is having a significant effect on the imperative to acquire novel leadership skills and must be considered when designing resilient and adaptive governance models.[19-23] Elner et al. in a recent article entitled, "Health Systems Innovations at Academic Centers: Leading in a New Era of Health Care Delivery," argued that with the increasing imperative to improve patient experience, population outcomes, and reduce or stabilize system costs, academic health care centres have an opportunity "to create new approaches to service delivery and to nurture leaders of transformation." They argued that an increasingly important role of academic medicine is to foster health systems innovation (as distinguished from biomedical research and continuous quality improvement), and that this should be recognized through more inclusive promotions criteria, valued through more robust funding opportunities, and embedded in new curricula for trainees.[14]

The implications of this are twofold: 1) Because EM is now seen as an active partner and positive catalyst for change, a strong and mature voice at the decision-making and problem-solving tables will be required, and 2) the traditional differentiation between the strategic priorities of the clinical department and the academic department will require more integrated and synergistic governance structures.

The current calls for leadership and structures to support the new opportunities for academic medicine[24] were entirely predicted (and likely influenced) by Boyer's report on "Scholarship Reconsidered."[18] In many ways, academic EM has been a leader in moving towards these more integrative and less traditional forms of scholarship. Boyer defined scholarship as more than just-publish-or-perish research, and more than just teaching and curriculum development for education. He emphasized the importance of the scholarship of integration (i.e., giving meaning to isolated facts, putting them in perspective, making connections across disciplines, placing the specialties in a larger context, illuminating data in a revealing way) and the scholarship of application (i.e., applying knowledge to consequential problems to help individuals and institutions, problems themselves become the scholarly agenda).[18]

Given the previous, the academic unit may not be easily separated in purpose (and therefore governance structure) from the clinical unit. Whether the health authority and university by-laws formally recognize this, the practical implications that this will have on the future academic unit of EM organization and decision-making must be considered.

Recommendation 2: No two academic units of EM are the same. The ideal governance structure for any given academic unit of EM should be aligned with the local institutional by-laws, organizational cultures, and relative emphasis that the academic unit of EM puts on the interdependent missions of academic EM (patient care/health system innovation, research, and education).

Current governance models in Canadian academic units of EM

During 2014 and 2015, a survey of the chairs of EM in the 17 medical schools was conducted. A structured 84-question survey was followed up by clarifying questions and probes to determine various aspects of each academic unit of EM's governance status and management structure. A full report on the results of this survey is being prepared[25] and forms the background context of these recommendations. The data were informative with respect to administrative structures (e.g., program leadership positions and funding) to describe how various academic units of EM are organized across the country. As the academic chairs/heads evolve their collaboration in the near future, there may be more opportunities to share and publish information about how each academic unit of EM determines who has power, who makes what decisions,

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Table 2. Number of education and research directors at 17 academic units of EM across Canada

Director	Funded, *n* (%)	Unfunded, *n* (%)
Education		
EM education	4 (24)	1 (6)
EM scholarship	4 (24)	
Continuing professional development	8 (47)	1 (6)
Research and support		
Research	14 (82)	
Resident research facilitator	13 (76)	

Table 3. The affiliations for the divisions and sections of EM (*n* = 4) (X having multiple affiliations)

Division/section affiliation	*n* (%)
Medicine	3 (75)
Pediatrics	2 (50)
Family medicine	2 (50)
Surgery	0
Not specified	1 (25)

how other players make their voice heard, and how account is rendered.[11] Along with Figure 1, other highlights about Canadian academic units of EM from the CAEP environmental scan include the number of directors in education and research (Table 2) and the listing of division and selection affiliations (Table 3).

The three pathways to credentialing in the discipline of EM (FRCP, CCFP[EM], and FRCP PedsEM) must be considered as EM academics move towards better governance models. These distinct pathways have contributed to some of the fragmentation of the academic mission in EM at various medical schools. They have also contributed to the complicated matrix of reporting to parent departments that some academic units of EM are still navigating (see Table 3). As EM works towards better clinical care, innovative systems of EM, and better research and education, the governance model of academic EM can be used as a catalyst to integrate the academic mission, vision, and values of EM under one umbrella. Ideally, this would not be seen as a threat to any one group, but rather as an opportunity for integration and collaboration.

Governance theme 3: Essential elements of good governance

In general, there are five elements of good governance (legitimacy and voice, strategic direction, performance, equity and fairness, transparency and accountability),[26] which can be adapted to the academic unit of EM. Appendix 1 illustrates practical examples of these five principles and what they might mean at the two levels of academic unit of EM governance (with a sixth category of general [and other] questions of governance to consider).

Better governance at both levels for academic units of EM

Revisiting Figure 1, it is important for academic units of EM leadership and faculty to reflect upon where they may sit in the 2×2 table in order to best improve their governance. With regards to internal governance, consideration should be given to the key aspects list of governance principles that may come into play at this level (see Appendix 2).

Recommendation 3: Internal governance structures govern the relationship between the academic unit of EM and the constituent academic programs, and the individual physicians. The academic unit of EM should consider implementing the key aspects of good internal governance in their design (while modifying to local contexts).

When it comes to the question of whether a division or section of EM should become a full academic department (see Appendix 3), there are several considerations.[27] The overarching prerequisite is knowledge of the local context and culture of the university and faculty of medicine. Several questions[27] must be asked:

1) Would the academic unit of EM have advantages as a full department? Is the performance of research and education, as well as the likelihood of future academic opportunities, likely to improve by establishing this formal structure?
2) How effective are current resources and influence with parent departments(s)? Will they be improved as a department, or is there too much political or fiscal risk?
3) Is the current unit sufficiently mature to meet the criteria for a department? Does the academic unit of EM have a good track record? Does the academic unit of EM's research and education output need to improve first? Would the current chief qualify as a chair or would a new search and survey be required?

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4) Is the internal governance organization optimized to ensure academic excellence with the current funding streams and leadership?
5) Is now a good time, or are there political or fiscal realities that make this a risk or too large of an endeavor (at this time)? If not now, when?

If the reasons to become a department (see Appendix 3) are felt to be compelling,[27,28] and the initial questions do not dissuade, then the hard work starts. There is no algorithm for how to become a full academic department, but there are some strategies[27] to create the conditions for the emergence of an EM department.

1) Build the respect for, and reputation of EM over time, especially in research and education, but also in clinical care, one patient at a time.
2) Articulate a vision of improved patient care, population outcomes, and innovative system design fostered by excellence in EM education and research.
3) Become a student of the culture at the university faculty of medicine and health science centre.
4) Know the criteria and process of your application to the university.
5) Understand the priorities and values of the dean and the CEO of the health science centre(s), and frame the prospective department's priorities with these.
6) Build coalitions (especially with the chairs of surgery, medicine, family medicine, and pediatrics) that emphasize mutual advantages of departmental status.

Recommendation 4: Divisions and sections of EM should seek to become academic departments as a means to develop, sustain, and grow strong academic programs (provided that careful analysis supports mutual benefits to EM and the mission of the faculty of medicine and health sciences centre).

Recommendation 5: The CAEP Academic Section should organize and support a consultation service to provide experience, analysis, and advice to chairs, because there is no established blueprint for an academic unit of EM to construct, implement, and improve their governance.

Recommendation 6: Many of the leadership, governance, and funding issues as well as challenges facing academic emergency medicine have similar patterns and drivers (even if contexts and details may differ between universities). The academic chair should establish a formal and regular forum for meeting and sharing experiences and approaches to common issues.

NEXT STEPS

The governance of academic EM is relatively complex, although the goal of good governance is straight forward: constantly improving academic performance. It is essential that governance structures and processes (along with leadership and funding) are iteratively improved over time in service of the education and research mission of academic EM, better patient care, and optimal population health outcomes. Given the significant variation in starting points and contexts across the country, there is no simple guide that all academic units of EM can use. These recommendations on the governance of the academic units of EM aim to support the evolution of academic EM and complement the recommendations provided by the funding and leadership panels.[29,30] The Leadership Working Group of the CAEP Academic Section will be addressing each recommendation and will present an update at its next Academic Leadership Symposium to be held in 2018.

SUPPLEMENTARY MATERIAL

To view supplementary material for this article, please visit http://dx.doi.org/10.1017/cem.2016.22

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REFERENCES

1. Brimacombe GG, Association of Canadian Academic Healthcare Organizations & Academic Health Sciences Centres National Task Force (Canada). *Three missions, one future: optimizing the performance of Canada's academic health sciences centres*. Ottawa: Association of Canadian Academic Healthcare Organizations; 2010.
2. Chalt RP, Ryan WP, Taylor BE. Governance as leadership: bringing new governing mindsets to old challenges. *Governance Magazine*, *BoardSource* 2004;13(4):8-10.
3. Daschle TA. Academic medicine in a transformational time. *Acad Med* 2015;90(1):11-3.

4. Sherbino J, Van Melle E, Bandiera G, et al. Education scholarship in emergency medicine part 1: innovating and improving teaching and learning. *CJEM* 2014;16(Suppl 1): S1-5.
5. Bandiera G, LeBlanc C, Regehr G, et al. Education scholarship in emergency medicine part 2: supporting and developing scholars. *CJEM* 2014;16(Suppl 1):S6-12.
6. Bhanji F, Cheng A, Frank JR, et al. Education scholarship in emergency medicine part 3: a "how-to" guide. *CJEM* 2014;16(Suppl 1):S13-8.
7. Stiell IG, Artz JD, Perry J, et al. Executive summary of the CAEP 2014 Academic Symposium: How to make research succeed in your department. *CJEM* 2015;17(3):328-33.
8. Calder LA, Abu-Laban RB, Artz JD, et al. CAEP 2014 Academic Symposium: "How to make research succeed in your department: Promoting excellence in Canadian emergency medicine resident research". *CJEM* 2015;17(5):591-9.
9. Perry JJ, Snider CE, Artz JD, et al. CAEP 2014 Academic Symposium: "How to make research succeed in your emergency department: How to develop and train career researchers in emergency medicine". *CJEM* 2015;17(3): 334-43.
10. Vaillancourt C, Rowe BH, Artz JD, et al. CAEP 2014 Academic Symposium: "How to make research succeed in your department: How to fund your research program". *CJEM* 2015;17(4):453-61.
11. Institute on Governance. Defining governance: what is governance. Available at: http://iog.ca/defining-governance/.
12. Bunton SA, Corrice AM, Pollart SM, et al. Predictors of workplace satisfaction for U.S. medical school faculty in an era of change and challenge. *Acad Med J Assoc Am Med Coll* 2012;87(5):574-81.
13. Borden WB, Mushlin AI, Gordon JE, et al. A new conceptual framework for academic health centers. *Acad Med J Assoc Am Med Coll* 2015;90(5):569-73.
14. Ellner AL, et al. Health systems innovation at academic health centers: leading in a new era of health care delivery. *Acad Med* 2015;90(7):872-80.
15. Krupat E, Pololi L, Schnell ER, et al. Changing the culture of academic medicine: the C-change learning action network and its impact at participating medical schools. *Acad Med* 2013;88(9):1252-8.
16. Pati S, Reum J, Conant E, et al. Tradition meets innovation: transforming academic medical culture at the University of Pennsylvania's Perelman School of Medicine. *Acad Med J Assoc Am Med Coll* 2013;88(4):461-4.
17. Ferris L, Singer P, Naylor C. Better governance in academic health sciences centres: moving beyond the Olivieri/Apotex Affair in Toronto. *J Med Ethics* 2004;30(1):25-9.
18. Boyer EL. *Scholarship reconsidered: priorities of the professoriate*. Princeton: Carnegie Foundation for the Advancement of Teaching; 1997.
19. Kastor JA. Chair of a department of medicine: now a different job. *Acad Med J Assoc Am Med Coll* 2013;88(7): 912-3.
20. Heitz C, Hamilton GC. The academic chair in emergency medicine: current demographics and survey results identifying the skills and characteristics desired for the role. *Acad Emerg Med Off J Soc Acad Emerg Med* 2011;18(9):981-7.
21. Sheldon GF. Embrace the challenge: advice for current and prospective department chairs. *Acad Med J Assoc Am Med Coll* 2013;88(7):914-5.
22. Lieff S, Banack JG, Baker L, et al. Understanding the needs of department chairs in academic medicine. *Acad Med* 2013;88(7):960-6.
23. Thoma B, Poitras J, Penciner R, et al. Administration and leadership competencies: establishment of a national consensus for emergency medicine. *CJEM* 2015;17(2):107-14.
24. Wartman SA. The academic health center in a disrupted world. *Pharos Alpha Omega Alpha-Honor Med Soc Alpha Omega Alpha* 2015;78(2):2-9.
25. Stiell IG, Artz JD, Lang ES, et al. CAEP 2015 Academic Symposium: An Environmental Scan of Academic Emergency Medicine at the 17 Canadian Medical Schools: Why Does this Matter to Emergency Physicians? *CJEM* 2016; forthcoming.
26. Sheng YK. What is good governance? United Nations Economic and Social Commission for Asia and the Pacific. Available at: http://www.unescap.org/sites/default/files/good-governance.pdf.
27. Hamilton GC, Nelson BK, Scalea TM, et al. Establishing the Academic Department of Emergency Medicine: commentary on five phases of development. Association of Academic Chairs in Emergency Medicine; 1999. Available at: http://elearning.saem.org/sites/default/files/Establishing%20the%20Academic%20Department%20of%20Emergency%20Medicine.pdf.
28. Derlet RW. Organization of emergency medicine at medical schools: compelling reasons for departmental status. *Acad Emerg Med Off J Soc Acad Emerg Med* 2000;7(10):1145-6.
29. Lang E, Artz JD, Wilkie RD, et al. CAEP 2015 Academic Symposium: Current state and recommendations for improvement for funding emergency medicine academic units. *CJEM* 2016; epub, doi: 10.1017/cem.2016.16.
30. Sinclair D, Worthington JR, Joubert G, et al. CAEP 2015 Academic Symposium: Leadership within the EM academic community and beyond. *CJEM* 2016; epub, doi: 10.1017/cem.2016.9.

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