ACS

Surgical Education Scholarship

Rhea Liang, Gold Coast, Australia

20 OCTOBER- 16 NOVEMBER, 2018

ACS Clinical Congress, Boston, MA

Northwestern University/Feinberg School of Medicine/SOQIC, Chicago, IL

University of Wisconsin/WiSOR, Madison, WI

CPPS, Brigham and Women's Hospital, Boston, MA

University of Pennsylvania/Perelman School of Medicine, Philadelphia, PA

CPPA, Vanderbilt Hospitals, Nashville, TN

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Goals and learning objectives

There were four goals for the visit.

To facilitate my personal development as a surgical educator

This goal was partially achieved. The education program provided at the Clinical Congress is an introductory course targeted at surgeons without a specialist education interest. However, there was more substantial development in the site visits, particularly in the areas of diversity, disruptive physician behavior, and simulation.

To advance surgical education scholarship in Australia

This goal will undoubtedly be achieved through the contacts made during the site visits. In particular, the reframing of my 'Women in Surgery' doctoral thesis proposal into an 'Intersectionality in Surgery' proposal was prompted by the Presidential speech of Dr Ronald Maier and subsequent discussions with the Diversity Deans at the University of Wisconsin and the University of Pennsylvania.

To influence emerging gender and professionalism programs within RACS (Royal Australasian College of Surgeons)

Again, this goal will undoubtedly be achieved, particularly through contacts made during the site visits with the gender-progressive units at University of Wisconsin and University of Pennsylvania, and the professionalism units at Brigham and Women's Hospital and Vanderbilt Hospitals

To strengthen professional networks between RACS and ACS

This goal was achieved. It was my very great pleasure to return visits made previously to Australia by each of my hosts (see Appendix 1), and to visit the ACS offices in Chicago to personally thank Kate Early and Melissa Gesbeck for their support of my scholarship. It was also a privilege to attend a meeting, as the first Australasian recipient of this scholarship, with Dr Ajit Sachdeva, Director of the ACS Division of Education.

The ACS Clinical Congress

The Clinical Congress is an enormous undertaking for the ACS, and I would like to express my thanks for the organisation required to get the International Scholars through a complex and busy program, as well as the generous hospitality provided everywhere.

The number of simultaneous sessions was overwhelming. Within the limited timeframe and the busy Scholars schedule, it was only possible to attend sessions

selectively. Consideration should be given to granting Scholars free access to the webcasts of other sessions in order to optimise learning opportunities.

The large proportion of sessions were didactic, but there were some innovative teaching methods such as ‘Story Slam’ (constructivist, informal community-of-practice narrative learning) and the Negotiation workshop (simulation-based small group learning).

The evening social programme was excellent, highlights being the Gala Ball and the Taste of the City.

The course “Surgical Education: Principles and Practice”

This is an introductory course for surgeons without a specialist interest in education. The audience comprised both surgeons and residents, although the material seemed predominantly targeted at surgeons. The presence of the residents was a limiting factor when discussing resident underperformance, as the residents were rendered ‘invisible’ in discussions led by surgeons, and the surgeons were rendered ‘mute’ in discussions led by residents. I love networking with residents, who have been key participants in my education research, but I think limiting the target audience of this course will help to avoid unintended barriers to communication.

The role of the education scholar within the course should be better defined. It is reasonable to expect that the Education Scholar has a specialist interest in education and will find the course material rather basic as a participant. A needs assessment of the Education Scholar will help to direct them to appropriate sessions. which may include this course. I would have loved to have attended the Women in Surgery sessions which ran concurrently with this course. They contained a huge amount of educational content, specific to my aims, which I accessed via Twitter during the breaks in the Education course.

The presenters at the course were clearly experienced. Perhaps due to long familiarity with the material, they tended to answer their own questions, such as in the management of feedback difficulties. This was a missed opportunity to demonstrate constructivist learning techniques and to draw out the significant experience in the room for the benefit of all participants (the three Australians present included two Professors, an Associate Professor, two doctorates and three Masters in Surgical Education). There was also a tendency to present large sections didactically- including the section on ‘newer’ instructional techniques. These mismatches between the message and the mode of delivery led to a hidden curriculum that confused some of the less experienced participants in the room.

The afternoon session started late due to the lack of catering within the venue, but was the best session of the day in terms of content, teaching method, and pace. This should be kept largely unchanged while the morning sessions are redeveloped to include more interactive and diverse teaching techniques.

The site visits

Please see Appendix 1 for a list of site visit meetings. The main lessons learned were:-

There are more similarities than differences between the USA and Australasia

There are clearly differences in scale, as the USA has approximately ten times the population of Australasia, and there are some distinct educational issues such the different structures of surgical training in each country. However, the needs, problems, and solutions of surgical educators are very similar. The following lessons highlight both differences and similarities, but it is worth stating in advance that the site visits included a great deal of common ground which resulted in productive, synergistic discussions.

Diversity and inclusion

I was struck by the structural measures in the USA to ensure diversity and inclusion, such as diversity deans. I am not aware of any similar positions in Australasia. The ability to focus on policies and protocols to prevent discrimination in broad arenas such as entire medical schools or hospital systems has clear merit.

However, the experience of racism in the USA seems to be more pervasive, despite the reverse perception in the USA that Australia is racist. Being told by a black surgical resident that riding the subway to work is less convenient than driving, but safer, because it avoids being stopped by police who assume he is driving a stolen car, is an experience almost unthinkable in Australia, and certainly less potentially fatal considering the much lower rate of gun violence.

Non-technical competency education

The move towards competency-based education globally has renewed the focus on non-technical competencies such as educational theory and expertise, business management and financial planning, communication, resilience, leadership, and professionalism. The traditional apprenticeship model of surgical training achieved a high rate of technical expertise, but expected non-technical skills to be absorbed through observation and imitation, including behaviours now considered unacceptable or disruptive.

I was heartened to see in the USA that non-technical skills are increasingly addressed through a multitude of ad hoc courses, and also through self-directed learning by residents who are keenly aware of the changing expectations of a ‘complete’ surgeon. The preference of attendings to both teach and assess technical skills over non-technical skills represents a generational gap that is being bridged by systems approaches, such as the resident assessment app at University of Wisconsin, which prompts non-technical assessments and provides feedback to assessors about the number and range of competencies they have assessed.

Disruptive behaviour

I attended a large departmental meeting in a lecture theatre where a surgical resident presented a complex research topic. A surgeon in the audience asked a respectful question to clarify a point, and the supervising attending (seated in the audience) commented 'I think Dr X is just total slow'. A few people laughed, but there was no doubting the disrespect in the comment. The atmosphere in the room was intensely awkward.

As the Acting Chair of the Operating With Respect committee for RACS, I can assure my USA colleagues that this sort of experience also occurs in Australasia. My visits to CPPA (Centre for Patient and Professional Advocacy, Vanderbilt Hospitals, Nashville) and CPPS (Centre for Professionalism and Peer Support, Boston) provided data to show that disrespectful behaviours correlate with poor results across a range of quality markers and surgical outcomes.

In Australasia, the RACS combines the functions of the ACS, American Board of Surgery, and ACGME. This has enabled rapid progress in the Operating With Respect programme, such as completion since 2016 of the online education module by >95% of surgeons and trainees in Australia and New Zealand, and >66% completion since 2017 of the face-to-face advanced training workshop by the leadership group (~600 surgeons). It would be difficult to achieve the same coverage in the USA due to the size of the surgeon group and the different regulatory bodies. Nevertheless, in every site visit it was clear that there was an awareness of the importance of this issue, with actions underway to gradually make this traditional but unsavoury aspect of surgical culture increasingly untenable.

How lessons learned will be implemented in Australasia

The professional links that have been forged in this scholarship will broaden the network of USA speakers, instructors and participants available to Australasian educational activities. I also intend to foster links between the USA surgical residents (RASACS) and the RACS trainee association (RACSTA). Given their existing activity on social media, I expect this will become self-sustaining.

The education and educational research programmes of the RACS are of equal quality to those in the USA, but not as well disseminated. Much of it is in the 'grey literature' (policies, corporate reports etc.) Publications in the journal literature will be prioritised to address this.

Lessons learned about diversity and inclusion, non-technical skills education, and disruptive behaviours, will be incorporated into existing RACS programmes. An example is the idea from Dr Eve Higginbotham, Vice-Dean for Inclusion and Diversity, Perelman School of Medicine, that inclusion should precede diversity. Even though the common phrase is 'diversity and inclusion', having diversity before

inclusion results in a lack of ‘pipeline’ to significant roles. The current lack of diversity in RACS Fellows is going to persist for some time despite best efforts (gender balance, for example, is improving every year, but due to starting from a low baseline, and against the long working careers of existing surgeons, is currently tracking to achieve parity only by 2053). The notion that inclusion precedes and enables diversity is somewhat comforting because it provides assurance that working towards inclusion will be eventually fruitful, even if the quantitative measures of diversity are moving only slowly.

What could be done differently

Guidance for scholars

Kate Early initiates contact with the desired site visit hosts. The scholar should provide one or two more than required, in case of host unavailability.

Scholars should begin the organisation of the scholarship as early as possible. Time is required for the dialogue between scholar and host to enable a productive itinerary.

Scholars must reply to all correspondence promptly. A regular email to Kate, Melissa, and all the hosts is also useful, to keep everyone ‘in the loop’. Being able to see what other sites are providing can help each host avoid overlap and suggest new ideas for people to meet or activities to participate in. It also allows Kate and Melissa to troubleshoot and contact new potential hosts as required.

Allow a little space in the itinerary for serendipity- a day or half day between site visits allows time to appreciate the local culture, which provides context to what is being learnt. It also acts as a buffer should a new meeting or activity become available that can be added to the itinerary.

Small gifts for hosts, from the scholar’s home nation, are always appreciated.

Guidance for hosting organisations

A contact person at each site is very helpful for assistance with local accommodation and transport, development of an itinerary, and navigation on the day.

Developing an itinerary as early as possible allows the scholar to research the work of the person hosting each meeting. This will optimise the outcomes of each meeting for both scholar and host.

Scholars are also clinician researchers. A small office or hot desk is appreciated; somewhere for the scholar to leave personal belongings while in meetings, and to work when not in meetings. Scholars will also appreciate an ‘administration gap’ in the itinerary at the start of the working day in the home country (taking time zone into

account) to manage their home team. Hosts will similarly appreciate that this gap reduces the scholar being interrupted in meetings through the remainder of the day.

Guidance for the ACS

The volume of emails from ACS staff, Congress staff and congress-related activities is enormous. Many emails are received about single items or are duplicated across multiple contact persons. Efforts should be made to streamline communication, especially for scholars from non-English speaking backgrounds, whose delayed replies to group emails seemed to relate to the cognitive load of reading and prioritising them. The most helpful emails were those summarising multiple other emails, such as the aggregated congress itinerary sent by Kate Early.

An international scholars group email/WhatsApp developed naturally as the Congress approached, and saved the ACS staff from numerous minor questions such as 'how do you get to the hotel from the airport?' Consideration should be given to formally connecting the international scholars at an earlier stage, which would particularly assist non-English speaking scholars or those coming from very different cultural backgrounds. (This WhatsApp group has not only continued but is growing, linking surgeons from countries spread across the world. This is an unintended but very positive by-product of the ACS International Scholars programme).

A 'welcome' email was received from the international scholar's mentor but there was no further contact through the Congress. The role of the mentor should be better defined, or replaced by the group email/WhatsApp mentioned.

The timing and format of the International Scholar's session at Congress should be reviewed. Many contributions were worthy of longer presentations and better attendance. Consideration should be given to embedding them into specialty-specific sessions in the general programme, holding the session in a more appropriately sized room, or dividing the session into two to allow longer presentations.

Consideration should be given to a formal meeting with the reciprocal scholars (those from the USA who visited other countries). There were some incidental encounters, but much could be gained by sharing notes and establishing bi-directional connections between scholars who have visited each other's countries.

How the Division of Education could support my future goals

The ACS International Scholars programme is a landmark in the ACS, and the greatest support would be to ensure that the programme continues and grows. It was a privilege to celebrate 50 years of the programme, and I look forward to the same continued involvement and enrichment as the past scholars that I met.

Access to the Surgeons as Educators course would be most helpful in my personal development as a surgical educator. It would also be timely, as I am currently involved in a significant redevelopment of the RACS educational programmes.

I hope to continue working in partnership with the ACS on a range of issues such as educational theory, inclusion and diversity, non-technical skills education, and disruptive surgeon behaviour. Given the difference in size (and budget) between ACS and RACS, a very practical support would be travel expense support for USA speakers to contribute to courses and conferences in Australasia.

Conclusion

The ACS Surgical Education Scholarship has been an extremely worthwhile and rewarding experience. I am certain that I will look back fondly on this scholarship, and its contribution to my personal development, research output, international networks, and the educational programmes of the RACS.

Appendix 1

List of site visits

<table>
<tr><td colspan="2">Northwestern University/Feinberg School of Medicine, Chicago, IL</td></tr>
<tr><td colspan="2">Host- Prof Julie Johnson</td></tr>
<tr><td>Karl Bilimoria
Yue-Yung Hu
Amy Halverson
Tony Yang
Cary Schlick
Tarik Yuce
Ryan Ellis</td><td>SOQIC</td></tr>
<tr><td>Nora Hansen
Kevin Bethke</td><td>Feinberg School of Medicine</td></tr>
<tr><td>Roger Hurst</td><td>University of Chicago</td></tr>
<tr><td colspan="2">University of Wisconsin/WiSOR, Madison, WI</td></tr>
<tr><td colspan="2">Host- Prof Caprice Greenberg</td></tr>
<tr><td>Rebecca Minter
Sarah Sullivan
Scott Chaiet
Rebecca Sippel
Eugene (Chip) Foley
Jake Greenberg
Lee Wilke
Ann O'Rourke</td><td>University of Wisconsin Department of Surgery</td></tr>
<tr><td>Brian Gittens</td><td>University of Wisconsin School of Medicine</td></tr>
<tr><td>Krystle Campbell</td><td>University of Wisconsin Simulation Centre</td></tr>
<tr><td colspan="2">CPPS, Brigham and Women's Hospital, Boston, MA</td></tr>
<tr><td colspan="2">Host- Prof Jo Shapiro</td></tr>
<tr><td>Pamela Galowitz</td><td>CPPS</td></tr>
<tr><td>Paul Lesage</td><td>Consultant, Just Culture</td></tr>
<tr><td colspan="2">Remainder of meetings redacted for privacy (peer support/performance management/disclosure coaching)</td></tr>
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<table>
<tr><td colspan="2">University of Pennsylvania/Perelman School of Medicine, Philadelphia, PA</td></tr>
<tr><td colspan="2">Host- Prof Rachel Kelz</td></tr>
<tr><td>Jeff Berns
Jon Morris
Ari Brooks
Eve Higginbotham
Suzi Rose</td><td>Perelman School of Medicine</td></tr>
<tr><td>Geoff Garrett</td><td>Dean, Wharton School of Business</td></tr>
<tr><td>Robert Caskey
Robert Swendiman
David Sigmon
Kristoffel Simon</td><td>SIM Centre</td></tr>
<tr><td>Phillip Dowzicky
Jennifer Fieber
Lauren Krumeich</td><td>UPenn Surgery</td></tr>
<tr><td>Heather Wachtel
Nicole Saur</td><td>UPenn Women in Surgery</td></tr>
<tr><td colspan="2">CPPA, Vanderbilt Hospitals, Nashville, TN</td></tr>
<tr><td colspan="2">Host- Prof Gerald Hickson</td></tr>
<tr><td>Jenny Slayton</td><td>Vanderbilt Centre for Clinical Improvement</td></tr>
<tr><td>Tom Talbot</td><td>Chief Hospital Epidemiologist</td></tr>
<tr><td>William Cooper
James Pichert
Heather Davidson
Ilene Moore
Marbie Sebes
Carol Smith
Amy Brown
Morgan Detrick</td><td>CPPA</td></tr>
<tr><td>Oscar Guillemondegui
Carmen Solorzano</td><td>Vanderbilt Section of Surgical Sciences</td></tr>
<tr><td>Marilyn Dubree</td><td>Executive Chief Nursing Officer</td></tr>
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