RCSI

ROYAL COLLEGE OF SURGEONS IN IRELAND

COLÁISTE RÍOGA NA MÁINLEÁ IN ÉIRINN

Ethicon Grant/Fellowship Report Form

Grant Holder Name	Joseph Baker
Brief biography, including qualification and year of graduation (no more than 100 words)	Specialist Registrar in Trauma and Orthopaedics. BA (Otago 1999), MBCHB (Otago 2003), MCh (UCD 2010), FRCSI (2013).
Title of Project/Fellowship	Trauma Observership at R Adams Cowley Shock Trauma Center, Baltimore, Maryland, USA
Year of Award: **Commencement Date:** **Conclusion Date:**	2013 16/12/13 20/12/13

Summary (no more than 250 words)

I spent one week at the R Adams Cowley Shock Trauma Center, Baltimore, Maryland, USA (STC) in mid-December observing the early management of trauma patients in what is one of the leading trauma facilities in the world. It has been designated as a Primary Adult Resource Center (PARC), meaning they have all surgical specialties available on-site 24 hours a day, 365 days a year - this makes it a more dedicated trauma centre than a Level 1.

I spent time predominantly in the Trauma Resuscitation Unit (TRU), a department dedicated to the trauma patient only, observing how the Trauma Team worked together and managed patients acutely. I also spent time observing in-patient care to see how this is co-ordinated and managed. Rapid access, both physically and chronologically, to radiographic investigation and specialist assessment facilitated quick decision making. The role of the Nurse Practitioner and the existence of both electronic medical records and an instant messaging service contributed to effective discharge of duties.

While there are a number of components from the STC system that could be integrated into trauma-care in Ireland, this would ultimately require a consolidation of trauma services first to centralise the volume of major cases.

Grant Report (in the region of but no more than 500 words)

Objectives of Project/Fellowship:

(1) Observe management of the trauma patient from start-to-finish with emphasis on Early investigation and subsequent triage to either damage control or definitive care.

(2) Observe the co-ordination and management at Emergency Department level of major trauma with emphasis on 'Trauma Team' involvement and transfer to the in-house specialty and determine how the co-ordination of such can be realised in Ireland

(3) Understand the role of the paramedical supports available to the orthopaedic trauma team and define which of these could be used in Ireland

(4) Understand the role that trauma protocols and pathways play in R Adams Cowley Shock Trauma Center and how these could be applied in Ireland

Did you achieve these objectives?

I had the opportunity to observe triage, assessment, referral and, in some cases definitive treatment, of a number of trauma cases. The Trauma Resuscitation Unit (TRU), with 12 resuscitation bays and a maximum capacity of 24 patients, is designed specifically for the assessment of trauma cases – it is essentially an Emergency Department for trauma with all non-trauma related presentations attending a different department within the hospital. I had the opportunity to see and discuss the early management of polytrauma cases by the orthopaedic service.

The in-house Trauma Teams consist of a number of residents and nurse-practitioners headed by an attending who is a general trauma surgeon. They attend the trauma cases as they arrive in the department (STC can accommodate four helicopters at any one time) then have almost immediate access to radiologic facilities as there are two CT scanners and an angiographic suite based within the TRU. The Operating Rooms (OR) are also found immediately adjacent to the TRU. The Trauma Team continue in-patient care for a majority of trauma cases and only occasionally is inpatient care headed by a subspecialty service. This patient-flow allows continuity of care through the hospital stay.

The nurse-practitioners are key players in the Trauma Team responsible for a lot of the discharge co-ordinating as well as ordering and following up on phlebotomy and radiologic investigations. The Trauma Team concept is perhaps the most valuable finding from my visit but to realise its creation would require firstly a concentration of trauma cases to one or perhaps two units nationally.

The use of the 'Shan Scan', a CT-screening scan if you like from the vertex to the pubis appears the most useful and transferrable part of the trauma pathway from STC. This can be used in part or in its entirety for a rapid detailed assessment of a trauma patient and has largely replaced the use of plain radiographs and more detailed CT scans.

Joseph Baker, FRCSI, Specialist Registrar in Trauma and Orthopaedics

In your opinion, what is the value of your award to:

(a) **Yourself** – I enjoyed my week in Shock Trauma Center (STC). I had the opportunity to work with a group of highly motivated individuals and see how a world-class trauma system works. This has only strengthened my belief that we can treat trauma better in Ireland.

(b) **The institution in which you worked** – Most of my interactions were with the resident staff on the Trauma Team. We had time to exchange ideas and also discuss the differences in the training systems on each side of the Atlantic. The issue of the EWTD was an eye-opener for the US-based residents and needless to say they shared their concerns that craft-based specialty trainees would likely suffer in the long-term.

(c) **In the future for Irish patients** – I hope that Irish patients will get some benefit from this trip. I plan to discuss my experience with my current orthopaedic team and see what, if any, concepts we can realistically introduce to the system we currently work within. Going forward I think I will have a more critical eye in assessing how trauma is treated in the various institutions I will ultimately pass through as I complete my Higher Surgical Training.

Acknowledgements
I wish to acknowledge the supervision and assistance given to me during my visit to STC by Susan Leone and Doctors Narayan, Tesoriero and Bradley.

Joseph Baker, FRCSI, Specialist Registrar in Trauma and Orthopaedics