

## Ethicon Grant/Fellowship Report Form

Grant Holder Name	Eimear Conroy
Brief biography, including qualification and year of graduation (no more than 100 words)	Qualified from UCD in 2000, completed internship and senior house officer years in Mater Misericordiae. In 2004/2005 spent one year in full time research for the award of Masters in Surgery. Completed. Masters in applied Biomechanics in 2010. Was awarded FRCSI (Tr & Orth) 2012. Travelled to Auckland New Zealand in 2013 to complete a one year fellowship in Hand and Wrist Surgey followed by fellowships in Auckland City Hospital in Arthroplasty and Trauma.
Title of Project/Fellowship	One year Hand and wrist fellowship in Middlemore Hospital, Auckland, New Zealand.
Year of Award: Commencement Date: Conclusion Date:	Award year 2013 Commencement Date: July 1st 2013 Conclusion date June 30 2014

## Summary (no more than 250 words)

The Middlemore Hand fellowship is located in South Auckland and is the main tertiary referral centre for Auckland and the majority of the North Island.

The Hand department is part of the plastic surgery department and has 8 hand surgeons, 4 plastic and 4 orthopaedic surgeons.

The trauma workload was split between orthopaedic and plastics. I was involved in the management of complex fractures about the hand and wrist. Everyday cases included tendon injuries, nerve injuries requiring repair and grafting and vascular injury. Complex wrist reconstruction following radiocarpal and perilunate dislocation as well as distal radius fracture reduction and internal fixation were commonplace.

The elective days allowed me to develop my skills of wrist arthroscopy and triangular fibroartilage assessment and repair. I also spent one month with a surgeon in the private sector whose specialist interest is ulnar sided wrist pain. We performed a number of diagnostic arthroscopies and salvage procedures for distal radio ulnar joint pathology. This is a very difficult area to treat and our knowledge on the biomechanics of this joint is evolving every year.

I completed a clinical study looking at patient satisfaction and outcomes following trapeziectomy of first carpometacarpal athritis. That was a prospective study using data that is routinely collected on all patients pre and post operatively. The unit has a fantastic research department with a eseqrch coordinator and access to statisticians. This research was subsequently presented at the New Zealand hand society in April 2014.

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

The Middlemore Hand fellowship is affiliated with the Plastic Surgery Department and the staff include four full time Orthopaedic Hand and Wrist Surgeons and four full time Plastic surgeons who are subspecialised in Hand Surgery.

I participated in a one in ten call roster and was available for interesting out of hours cases including replantation. One week was spent in trauma theatre and one week spent on the elective side. During the elective week there were opportunities for clinic duties on Tuesday's.

The trauma week allowed exposure to a large variety of interesting cases. I was exposed to a large number of flexor tendon repairs and techniques of repair and rehabilitation. We dealt with a number of complex fracture configurations and management challenges associated with them. Trauma cases included hemi-hamate reconstruction of pilon fractures of the proximal interphalangeal joint. A devastating injury with limited return to function of the affected joint this is an extremely useful salvage.

I became very proficient in use of the microscope for repair of nerve injuries, nerve grafts for nerve loss in the arm and hand and artery repair.

With the orthopaedic surgeons we were involved in the repair and reconstruction of peri lunate wrist dislocations, scapholunate dissociation and complex distal radial fractures.

During the elective week had a number of cases that form the basis for every hand practice-carpal tunnel release, dupuytrens, ganglion removal volar and dorsal, flexor digitorum superficialis excision for triggering fingers, mucous cyst excision, arthritis of first carpometacarpal joint - I completed a clinical research project looking at outcomes post surgery for CMC arthritis and presented at New Zealand Hand society. There was a small rheumatoid practice as medications have revolutionised outcomes and the severe joint destruction is not commonplace. I was involved in a number of cases of MCP joint replacement and realignment procedures of the wrist and carpal bones.

The health care system in New Zealand has an insurance system pain into by employers and car owners. This insurance company provided for patients who need surgery non acutely as the result of an injury can have their insurance in the private sector. I was able to attend these private institutions to participate in these surgeries. Many of the wrist salvage procedures were performed in this setting- four corner fusions, radio scapholunate fusions, wrist fusions. I also had the opportunity to perform wrist arthroscopies and specially focus on ulnar sided wrist pain. Triangular fibrocartilage injuries and repair of these I had never encountered in my training. This is something of a special interest of mine and I would hope to develop and build on these skills when back in Ireland. Distal radioulnar joint injuries are difficult to deal with and salvage procedures are unsatisfactory. We performed a number of distal radio ulnar joint replacements during my fellowship as well as proximal interphalangeal joint replacements and total wrist replacement.

Key to success of all procedures is good rehabilitation and physiotherapy. Without these success of any surgery will be limited.

Objectives of Project/Fellowship:

To further my experience in the management and decision making involved in complex hand and wrist pathology. To improve my operative skills in dealing with all hand wrist surgery both acute and elective. To further develop skills in the management of ulnar sided wrist pain.

Did you achieve these objectives? Yes I did through exposure in both private and public health care systems.

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

(a) Yourself

Increased my confidence in my own ability to manage hand and wrist pathologies. Improved my skill as an arthroscopist for wrist and distal radio ulnar joint pathology.

(b) The institution in which you worked

I was able to complete operative lists unsupervised. My experience from the irish health care system enabled me to be a competent surgeon and I was allowed independent operating at every opportunity.

(c) In the future for Irish patients

I have improved my expertise in the management and surgical car of all hand and wrist pathologies. I have also gained new expertise in the management of ulnar sided wrist pain and wrist arthroscopies.