



Ethicon Grant/Fellowship Report Form (Please complete in type print)

Grant Holder Name	Damian McCartan
Brief biography, including qualification and year of graduation (no more than 100 words)	I graduated from Medicine in Trinity in 2004 with an honours degree. I progressed through basic surgical training and became especially interested in the area of surgical oncology. I undertook a three year period of full time research in the molecular biology of breast cancer and won two national research prizes at Irish surgical meetings, culminating in the award of a PhD from RCSI for my completed thesis in 2011. In the same year, I achieved a place on RCSI's competitive Higher Surgical Training Programme and have thrived in this intensive work, education and research environment.
Title of Project/Fellowship	Short term visit to the Division of Breast Surgery, European Institute of Oncology, Milan, Italy.
Year of Award: Commencement Date: Conclusion Date:	2014 Monday 26 th to Friday 30 th May 2014

Summary (no more than 250 words)

The European Institute of Oncology in Milan is one of the foremost, pioneering centres in the world for the management of breast cancer. In 2012, over 2400 surgical procedures for breast cancer were performed, the same number as in Ireland as a whole. The centre, led by Professor Umberto Veronesi, continues to run an active research department advancing the locoregional management of breast cancer. Thanks to the support of Dr Nickolas Peradze, an Italian Breast Surgeon with whom I had worked while he was on fellowship at St Vincent's Hospital in Dublin, I was able to negotiate minor language difficulties and integrate into the division of breast surgery in the short time period. This enabled me access to cases of interest and to observe the surgical practice of a range of both breast and reconstructive plastic surgeons.

The unit is a modern example of a true multi-disciplinary team focused on the management of breast cancer. This was my first opportunity to observe the practice of intra-operative radiotherapy following breast conserving surgery performed at the centre behind one of the largest clinical trials (the ELIOT Trial) to examine outcomes associated with its use. While the technique remains under scientific evaluation, it is likely to enter clinical practice in certain cohorts of patients in the near future. The other main benefit was to observe cases of nipple sparing mastectomy and immediate breast reconstruction which is becoming the standard of care in BRCA gene carriers who opt for risk reducing mastectomy.

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

Objectives of Project/Fellowship:

The main objectives of the short term visit was to observe aspects of the surgical management of breast cancer that have yet to become routine in Ireland, namely:

- Oncoplastic breast conserving surgery
- The use of intraoperative radiotherapy following breast conserving surgery
- Nipple sparing mastectomy and immediate breast reconstruction

Did you achieve these objectives?

I was very fortunate in that I had a well-established contact within the Department, Dr Nickolas Peradze, an Italian Breast Surgeon with whom I had worked while he was on fellowship at St Vincent's Hospital in Dublin. His knowledge of the department enabled me to get the most from the short period there and with him I was able to identify cases of interest on a daily basis. As such I was able to observe at least two different chief surgeons operating each day and meet with other key members of the multidisciplinary team. One of the main benefits was being able to observe at close quarters, the use of intra-operative radiotherapy following breast conserving surgery and the important elements of the surgical technique that allows for its successful delivery. During the week, I was able to observe a total of 5 cases of nipple sparing mastectomy and immediate reconstruction performed by two surgeons who outlined their tips for avoiding nipple necrosis following the procedure.

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

(a) Yourself

It was a fantastic experience to be immersed in a unit fully dedicated to the management of breast cancer. In addition to the technical aspects outlined above and below, my visit coincided with the 20th anniversary of the opening of the Institute and I was able to witness the great degree of institutional pride inspired by the founder, Professor Umberto Veronesi.

(b) The institution in which you worked

The European Institute of Oncology has a long standing link with Ireland with exchange of fellows in both directions. This reciprocal exchange of trainees benefits both countries. My experience was such that the surgeons in Italy enjoyed exchanging views and opinions with other European surgeons as our practice still differs from that in North America.

(c) In the future for Irish patients

I have outlined some of the techniques that are employed as routine practice in

Milan to which I was introduced. In addition to this there were innumerable smaller tips and techniques that could be easily incorporated into clinical practice. For example, the unit runs a dedicated post-operative wound review clinic and the residents are trained in the use of bedside ultrasound for the evaluation of post-operative seromas.

My exposure to the technique of intra-operative radiotherapy should hopefully be of benefit in the not too distant future as my current hospital has secured funding for an intraoperative radiotherapy machine and is likely to be the first in Ireland to use the technique.

I would hope that my now established link with the Institute may in the future allow me to engage in multicentre clinical trials for advancing the loco-regional management of breast cancer that the Institute has become famous for. For example the unit is currently recruiting at multiple European centres for the SOUND trial (Sentinel node vs Observation after axillary UltraSouND).