

## **Report on IUGA Observership at Pelvic Floor Research Group led by Professor John DeLancey, University of Michigan, Ann Arbor, MI, USA**

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I had the opportunity to get involved in the research group led by professor DeLancey at University of Michigan, Ann Arbor for four weeks in January and February 2011. This was funded by an IUGA Observership Grant, which I was awarded for 2011.



The purpose of this stay was to obtain new insights about the pelvic floor anatomy and get more accustomed to advance radiologic techniques like the MRI. The Pelvic Floor Research Group (PFRG) is a multidisciplinary team that focuses both on basic and applied science.

If I should point out just three best things I learned at PFRG it would be (i) the art of management of a research team, (ii) the better knowledge of pelvic floor anatomy and (iii) the imagery of pelvic floor. First, I was impressed by the speed of the preparations for my observership. Within only few hours after confirmation of the dates of stay with PRFG I was contacted by the international exchange office, offered different types of accommodation and preparations were made for my smooth arrival. It was great to know that the transport from the airport to the hotel and afterwards to the campus was arranged. A similar help was provided with the basic administrative duties and introduction to the team was great. I was allowed to participate in the current research projects of the team, granted access to probably one of the largest and most complex databases of MRIs focused exclusively on the anatomy of pelvic floor.

The communication with professor DeLancey was frequent and useful. One of the best things I would like to point out is the frequency of group sessions and meetings. Once a week the whole group met and talked about current topics and projects. But for the rest of the time, the fellows and postgraduate students had open doors to consult their progress and discuss issues of the topic. The management of the group and knowledge what everyone is doing eases rational focusing of the interest.

The research of the anatomy of the pelvic floor has made considerable progress over the last decades and the prevailing approach is not by anatomical dissections but by imagery methods like ultrasound and MRI. As ultrasound is quiet operator dependent, it is logic that for scientific purposes MRI seems the best solution. I was impressed by the resolution of the MRI and furthermore that after having the slices they can be evaluated by different open source programs like ImageJ and Slicer. ImageJ is a valuable tool for 2D evaluations; for modeling and 3D evaluations the PFRG uses Slicer which I also find quite easy to work with. During the first steps with Slicer I appreciated help from much more experienced biomechanical postgraduate students.

I also observed the urogynecological surgeries. Due to its diversity, the team performed the both methods of surgery for pelvic organ prolapse – the vaginal with use of sutures and the laparoscopic (robotic) with use of implants.

Another highlight of the stay was the PFRG Day – the annual conference day of the research group that had spread its fame to different departments and even universities and is visited on regular basis by different researchers. The PFRG Day helps to inform other groups about their current topic and this networking helps to focus on hot topics. Overall, I value the IUGA Observership as very useful and I would like to continue the collaboration with the PFRG. I would like to thank to the IUGA for providing me with financial support for this stay and to the whole Pelvic Floor Research Group, in particular to professor DeLancey and professor Johnson, for allowing me to stay with them in Ann Arbor. I would recommend this group for observership to anyone interested in the anatomy or imagery of pelvic floor.