Nicholson fund faculty exchange visit by Dr. Heather Reese (SLU) to the Center for Earth Observation at North Carolina State University

On January 30th, 2014, I paid a return visit to Dr. Siamak Khorram and his co-workers at the Center for Earth Observation (CEO) at North Carolina State University. Dr. Khorram had visited the Section of Forest Remote Sensing at the Swedish University of Agricultural Sciences (SLU) in Umeå in October 2013 to discuss remote sensing research and to talk about exchange opportunities through the Gunnar and Lillian Nicholson Graduate Fellowship and Faculty Exchange Fund in Forestry. As I was travelling to the East Coast of the US on other business in January, I decided to apply to the Nicholson Fund for a brief visit to NC State, which was granted. Since SLU’s Section of Forest Remote Sensing is starting up a new remote sensing laboratory, it was of interest for me to see the new CEO laboratory, what equipment it had and its layout. In addition, as I am Head of the Remote Sensing section as well as Educational Coordinator, it was beneficial to see the type of research and teaching going on at NCSU, so that I could inform potential exchange participants coming from SLU.

During the day of my visit, Dr. Khorram hosted me and had set up an excellent schedule where I first met with Dr. Joe Roise (Graduate studies director) and Dr. Stacy Nelson over a nice cup of coffee in the morning to talk about the education at the Department. Dr. Barry Goldfarb and I then discussed the structure of our respective Departments, both at NCSU and SLU. Dr. Hugh Devine told me about the future plans for a PhD program in Geospatial Analytics and the wish to make a UAV (Unmanned Aerial Vehicles) lab. This was of interest as the SLU laboratory also includes provisions for student training in UAVs, including both their use and the building of them.
A tour of the CEO facilities was then given over the course of one hour by Zac Arcaro. This included student demonstrations of the GIS/Kinect “sand box” applications, the virtual reality application to indicate preferred environments, and the 3D projector and TV screen. Since my co-workers at SLU are interested in this, I documented this part of the visit with both photos and video.
After lunch the meetings continued with Dr. Ross Meentemeyer, the new director of CEO where we discussed our respective research fields and the current financing situation for research in our fields. Dr. Erin Sills and I discussed her visions for cooperation made possible by the Nicholson fund, and the hopes that the program could finance some common PhD students, as well as short-term (3-12 months) exchanges of faculty or students. Dean Mary Watzin was generously able to take time from her busy schedule to meet me and also discuss her visions for the Nicholson fund program, with hopes that a common PhD student or joint research projects could provide a bridge between NCSU and SLU. Lastly I met with Dr. Heather Cheshire to talk about her courses and teaching methods, which she demonstrated live (as she was teaching just prior to my seminar).

In the afternoon, I gave a lecture on the on-going research at the Section of Remote Sensing at SLU, focusing primarily on our 3D data research. I was happy to find that there was discussion afterwards, and that we had several common issues such as the sometimes complicated use of forest inventory data together with remote sensing data. I also learned that the Department has a PhD student working with Data Assimilation. Since we are just starting a large research project in Data Assimilation with a new Swedish PhD student, this could well be a potential area of cooperation.

Although the trip had a few complications – namely, a snowstorm that cancelled half of the flights out of Charlotte (although not mine), and a cold that threatened to make my voice disappear by the end of my seminar – however, neither of these things managed to impact the visit.

The day finished with a fine dinner together with Dr. Siamak Khorram and Dr. Joe Roice. I look forward to continued contact with NC State, the Geographic Information Science Faculty, and the Center for Earth Observation. I wish to thank everyone involved – in particular Dr. Siamak Khorram and Dr. Erin Sills – for making it a fruitful and very pleasant visit. It was a pleasure to meet everyone, and I look forward to continued exchange between our universities.

Best regards,

Dr. Heather Reese
Section of Forest Remote Sensing
Dept. of Forest Resource Management
Swedish University of Agricultural Sciences
Umeå, Sweden