## Report of short exchange at the Karolinska University Hospital, host Prof. I. Lundberg, 29<sup>th</sup>-31<sup>st</sup> of October 2012

## Purpose of the visit

The department of rheumatology at the university hospital of Zurich is a tertiary referral center with special focus on (early) rheumatoid arthritis and connective tissue diseases. During the recent years, we have become an expert center for systemic sclerosis (headed by Dr. O. Distler) including clinical studies but also translational research at our Center of Experimental Rheumatology (run by Prof. Steffen Gay). Currently, we are aiming to additionally set up a center for idiopathic inflammatory myopathies. Besides daily clinical care, we would also like to engage in both clinical and translational research, especially since we already closely collaborate with the accredited institute of neuromuscular diseases at our university hospital.

The aim of the short visit (3 days) was to

- gain insights into high-standard daily care of patients with inflammatory myopathies
- become familiar with the standardized assessment of myositis patients and the data recording for the Euromyositis registry
- discuss possibilities of collaboration with respect to future clinical and translational research projects.

## Description of the work carried out during the visit and description of main results obtained

Attended consultations of Prof. Lundberg in her outpatient department

- Gained insights in the standardized clinical assessment and re-assessment of patients with myositis including required functional tests and lab tests
- Got familiar with data recording for the Euromyositis registry
- Was shown how muscle biopsies are performed at the Karolinska hospital and was told how biopsies should be processed

Meetings with the physiotherapists and occupational therapists

- Discussed the correct performance and interpretation of the MMT8 und FI-2 to report back to our physiotherapists at Zurich and to instruct them
- Discussed the Myositis Activity Profile as potential part of the assessment besides HAQ und SF-36 to report back to our physiotherapists at Zurich

- Discussed potential types of home-exercise training that could be adopted for our department in Zurich
- Discussed guidelines for supervised training that could be adopted for our department in Zurich
- Attended a physiotherapy class of myositis patients in the gym to observe the respective exercises to report back to our physiotherapists at Zurich
- Discussed exercises options in the gym to report back to our physiotherapists at Zurich
- Developed a "standardized" diagnostic inpatient assessment for patients in whom myositis is suspected; 4 days; interdisciplinary discussion (physicians, physiotherapists, health care professionals, occupational therapists) of obtained results at the end of the stay to decide on drug therapy and physiotherapy; start December 2012
- Re-Assessments at 3, 6 months and annually (physician, physiotherapist) will follow in the outpatient department
- > Findings will be transferred to the Euromyositis registry
- Developed a table as a training guide for myositis patients to be handed out to their respective physiotherapist outside the hospital

Meetings with different members of Prof. Lundgren's research group

- Presented some data on previous research projects with potential interest for myositis research myself as base for future collaborations
- Was presented data of ongoing research projects and discussed findings and potential future experiments
- Was shown the Swedish registry for myositis patients
- I am currently discussing the possibility to set up a national database for myositis patients in Switzerland with the respective authorities

## Future collaboration with host institution

Envisioned potential projects for collaboration in clinical research

- Study on nailfold capillaroscopy in patients with myositis
- Study on pathologic muscle biopsy findings of patients with antisynthetase syndrome (together with Department of Neuropathology of the University Hospital in Zurich)

• Study on the efficiency of home exercise programs for myositis patients using i-Pads for distribution and supervision by a physiotherapist (together with Swiss Federal Institute at Zurich)

Envisioned potential projects for collaboration in translational research

- Investigation of the Fra-2 transgenic mouse model (part of my previous research) as potential animal model of myositis
- Evaluation of the role of Fra-2 expression in muscle biopsies of myositis patients/established animal models of myositis
- Performance of functional experiments to address the role of Fra-2 in muscle biology and pathology
- Study the role of hypoxia/microangiopathy in the pathogenesis of myositis

Projected publications or articles resulting or to result from your grant As outlined in the collaboration projects above

Zurich, 21<sup>st</sup> of November 2012

Britta Maurer

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