ERA Operative Headquarters
Strada dei Mercati 16/A
43126 Parma, Italy
Tel: +39 0521 989078
fellowships@era-online.org
www.era-online.org

ERA Long-Term Research Fellowship Project

IWG

Project's key info

Title of the project	CRESCENDO: A registry focusing on patients with crescentic glomerulonephritis
Working Group involved in the project	Immunonephrology Working Group (IWG)
Principal Investigator(s) of the project	Annette Bruchfeld (Sweden)
Duration	12 months
Fellowship Grant	35.275,00 €
Start of the fellowship	Within 6 months after notification of the grant award to the fellow.

Receiving Institute

Name of receiving institute	Linköping University, Linköping, Sweden
Supervisor's name	Annette Bruchfeld (Sweden)
Supervisor's e-mail address	annette.bruchfeld@liu.se

Project's detailed description

Project description
There is an ongoing interest in understanding histopathological or clinical factors predicting the outcome of diverse GN (glomerulonephritis) forms. One of the shortcomings thereof is the lack of synthesis of laboratory data with histological data. The aim of CRESCENDO is the establishment of an *international* registry focusing on the collection of data related to patient characteristics, histological data (a "Glomerulonephritis Scoring Form" has been developed) and exact treatment modalities used to manage crescentic GN, and provide a synthesis of these results. The recruitment target of CRESCENDO is ≥ 2000 entries from at least 5 continents with complete datasets. The group has previously established two registries without (COV-GN (11) and RITERM) and collected data on over 400 adult patients receiving rituximab for nephrotic syndrome forms in RITERM (analysis ongoing), the largest collection in the field so far. International collaborations are established via the former registries but also through the eventual outreach via the European Renal Association (ERA) (especially the Immunonephrology Working Group (IWG) and the International Society of Glomerular Diseases (ISGD)). Dissemination should increase the outreach, to collect data on > 2000 patients with crescentic GN, including collaborations with centres in Asia, Australia/New Zealand, Latin America, North America, and Europe.
Goals of the project
CRESCENDO will be the first international registry specifically focusing on patients presenting with crescentic GN, and thus will allow several analyses pertinent to presentation forms, outcome after initiation of specific therapies and overall and renal outcome. A specific and relevant focus of the CRESCENDO registry will be the comparison of different immunosuppressive/-modulatory

strategies used to manage crescentic GN, and will allow conclusions about future directions of drug developments in some diseases. Notably, data retrieved from a retrospective study have contributed as a comparator group for the GOOD-Ides01 trial, a Phase IIa trial investigating the role of imlifidase in treating patients with anti-GBM disease (14). This underlines that relevant data in rare disease research is difficult to collect and provides a strong argument that a registry such as CRESCENDO is needed. CRESCENDO will be set up in close collaboration with members of the ERA-IWG, and will allow for the addition of several subprojects of interest, i.e. establishment of an artificial intelligence sub-study to analyze whether or not cellular crescents as observed in different entities (i.e. IgAN versus anti-GBM disease) can be identified by machine learning approaches. The registry will also collect data on complications and co-morbidities and will also intensify the research interests of the research group to study infectious complications in greater detail. Balancing the risks of immunosuppression against its potential benefits is of utmost importance. The group is currently working on research defining the "immunocompetence" of individuals with glomerulonephritis forms, that is defined as finding the above-mentioned balance between infections and relapse risk. CRESCENDO will not only bring together an international group of researchers but can also be seen as a major initiative as previously implemented by the working group over a decade ago (the VALIGA cohort). The research fellow employed either at Linköping University will be responsible for successful implementation of this registry (as an eCRF, REDCap-based) and data curation during the year of employment but will also need to work on this registry after completion of the year. The ultimate goal of this project is to generate a few high-quality publications which can be published in the ERA journals or other major journals in the field of nephrology.

Qualifications and/or expertise required to the fellow

The fellow must have:
- Expertise in the management of patients with renal diseases, and be particularly experienced in immunology (either transplant immunology or with a background in immune-mediated kidney diseases);
- A particular research interest is required and should ideally have a track record with at least 5 peer-reviewed publications in scientific journals;
- Expertise in statistical analyses is desirable, and eventually expertise in artificial intelligence and the creation of risk models to predict certain outcomes of therapies and diseases;
- An interest in working with IWG beyond her/his research fellowship, and will have the responsibility for creating at least one publication out of the CRESCENDO registry.