

RenalToolBox – Project Description

ESR Number:	ESR2	Host:	Cyanagen
Project Title:	Development of dyes/tracers for analysis of renal function.		
Research Field:	Chemistry		
Contact Person:	Dr. R. Perciaccante		
Academic Supervisor(s):	Dr. R. Perciaccante Prof. Dr. Norbert Gretz		
Research Group / Department:	Cyanagen s.r.l.		
Group's website:	www.cyanagen.com		
Full Address:	Cyanagen s.r.l. Via degli Stradelli Guelfi 40/C 40138 Bologna ITALY		
Expected Start Date:	01 April 2019 or earlier		
Description:			
<p>The RenalToolBox is an EU-funded ITN that aims to develop novel tools and technologies to assess the safety and efficacy of cell-based regenerative medicine therapies for kidney disease. You will join a team of 15 Early Career Researchers (ESR) working across 10 different institutions towards this goal.</p> <p>The fellow will be performing her/his PhD thesis work at Cyanagen Srl at Bologna, Italy, under the supervision of Dr. Rossana Perciaccante and at the Medical Research Center of the University of Heidelberg, Germany, under the supervision of Professor Gretz.</p> <p>The research project will consist in the development of a novel transcutaneous device with light emitting diodes (LEDs) and optical sensors to permit the detection of NIR tracers for measuring different aspects of renal function (GFR, tubular secretion and re-absorption). Your role in this project will be the design and synthesis of NIR tracers for measuring renal function. More specifically you will:</p> <ul style="list-style-type: none"> -design, synthesize and characterize NIR dyes. -assess their ability to monitor renal function, specifically glomerular filtration, proximal tubule cell (PTC) secretion and re-absorption. -develop NIR tracers with characteristics for highly specific interaction with PTC and their assessment in uninjured control mice. <p>The post holder will be employed on a fixed term (36-month contract) and enrolled as a PhD student at the University of Heidelberg. The candidate will be expected to spend periods of time with other partners in the consortium.</p> <p>More information about this consortium and the project can be found in www.renaltoolbox.org.</p>			

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Required Skills / Qualifications:

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- completed their M.Sc. in Organic Chemistry or equivalent and have not acquired, since, more than 4 years (full-time equivalent) research experience
- passed a course in advanced synthetic organic chemistry (or equivalent)
- passed a course in advanced practical organic chemistry (or equivalent)
- excellent knowledge of the English language (spoken and written / proficiency level)
- practical experience of synthetic organic chemistry including laboratory purification techniques
- practical experience in analytical techniques such as HPLC, NMR, Mass analysis, Spectrophotometry etc.

Essential:

- Excellent oral and written communication skills with well-developed interpersonal skills.
- Ability to work effectively and collaboratively within a multidisciplinary team.
- Enthusiastic, self-motivated individual, willing to take part in personal skills training, international travel and public outreach activities.
- Demonstrated commitment to high-quality research.

The candidate is also required to fulfil the research experience and transnational mobility requirements outlined in <https://renaltoolbox.org/job-positions/>

Other requirements:

N/A