

Partner Name	Partner Type	Supervisor	Country	Project Role Description – PhD 7
Fresenius Kabi I&D Center EnzyPep BV	Industry  *ESR Host Location	<a href="#">Ana Toplak</a>	Netherlands	<p><b>Enzyme development for sustainable production of pharmaceutical ingredients.</b> The University of Groningen (UG) group will identify and redesign amide-bond formation enzymes using in-house developed computational design protocols. Designs are produced by recombinant methods and tested in collaboration with FK/EnzyPep. The project should lead to a biocatalyst that is applicable in green synthetic routes for peptide API production from renewables, including the renewable production of the biocatalyst itself.</p> <p>Using tools such as molecular modelling, computational design, docking and molecular dynamics simulations the most promising template enzymes will be optimized towards better production of peptide API. Protein crystallography will be used to solve structures of the selected templates and tailored variants. Key performance parameters will be quantified, incl. enzyme stability, resistance to cosolvents, and kinetic properties. The best enzymes will be shared for application tests.</p> <p>The ESR will perform experimental and computational work at the University of Groningen. In addition, the ESR will spend time at EnzyPep, location in Geleen (NL), to work on enzyme fermentation (6 mo) and eventually prepare the process for scale-up in the pilot facilities.</p>
Groningen	Academic	<a href="#">Marco Fraaije</a>	Netherlands	

The ESR will be employed and hosted by EnzyPep BV. Any queries on this post please contact [Talent4BBI@biorbic.com](mailto:Talent4BBI@biorbic.com)

ESR's Recruitment Timeline Process										
M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13
Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22
Recruitment Call Open and Applications Assessed					Interviews	ESR's hired, move to hosts. Fellowships commence				
Month 13 - Month 60 - Fellowship Implementation										

