

Date

Deadline

CONTACT

Organisation	Ghent University	Department	Pathobiology, Pharmacology and Zoological Medicine
Contact person	Prof. Siska Croubels	Email	siska.croubels@ugent.be
City	Faculty of Veterinary Medicine 9820 Merelbeke	Website	Faculty departments — Faculty of Veterinary Medicine — Ghent University (ugent.be)
Country	Belgium		

Organisation type

Research organisation type	<input type="checkbox"/> Research Organisation	Is your company a Small and Medium Sized Enterprise (SME*)?	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
	<input checked="" type="checkbox"/> University			
	<input type="checkbox"/> Company	Number of employees:		
	<input type="checkbox"/> Other			

Your enterprise is an SME if:

- it is engaged in **economic activity**
- it has **less than 250 employees**
- it has either an **annual turnover not exceeding €50M, or an balance sheet total not exceeding €43M**
- it is **autonomous**

For the definition of SMEs, look at: http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en

Short introduction of key areas of institute's research:

The Faculty of Veterinary Medicine of Ghent University puts the health and welfare of animals, humans and ecosystems at the heart of everything it does. Ghent University has been ranked the n° 1 position for its Veterinary Sciences since 2017, according to the Shanghai Global Ranking on Academic Subjects. The faculty's expertise in Pharmacology and Toxicology deals with the bio-analysis and metabolomics, ADME processes and pharmaco- and toxicokinetic modelling of drugs and (myco)toxins, their pharmacodynamic properties and safety profiling, and the development of animal models for preclinical PK/PD and safety research, including pig(let)s as model for humans ([SafePedrug, the next step in ethical pediatric drug research](#)).

Within the field of mycotoxicology, also the interactions with major pathogens in animals, and the development of *in vitro* and *in vivo* models for efficacy and safety testing of mycotoxin detoxifiers are studied. The group is member of the research platforms MYTOX ([Mytox – Mycotoxins and Toxicogenic Moulds | UGENT](#)) and MYTOX-SOUTH (mytoxsouth.org), dealing with the effects of mycotoxins on human and animal health in the North and South.

Former participation in an FP European project?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Project title / Acronym:	MYCOKEY PARTNER (INTEGRATED AND INNOVATIVE KEY ACTIONS FOR MYCOTOXIN MANAGEMENT IN THE FOOD AND FEED CHAIN)
Activities performed:	Development of juvenile pig models as paediatric translational animal models to unravel the toxicokinetics of modified forms of the mycotoxins deoxynivalenol, zearalenone and aflatoxins that can help EU food safety regulators and support industry in adapting their food processes. The pig models were also used to test the efficacy and safety of new candidate mycotoxin detoxifiers as feed additives. (https://cordis.europa.eu/project/id/678781) MYCOSAFE-SOUTH COORDINATOR (EUROPEAN-AFRICAN PARTNERSHIP FOR SAFE AND EFFICIENT USE OF MYCOTOXIN-MITIGATION STRATEGIES IN SUB-SAHARAN AFRICA). The project identified safe and efficient post-harvest mitigation strategies to reduce aflatoxins and fumonisins contamination of food and feed in sub-Saharan Africa. (https://cordis.europa.eu/project/id/727715)

Expertise / Commitment offered

Description of your expertise:	<p>1. (mini)pigs as translational animal model (juvenile and adult), expertise with animal housing, surgery, imaging, microsampling, GLP compliant bioanalysis, ADME, PK, PD, PK/PD and popPK modelling, both healthy and disease models</p> <p>2. metabolomics and mass spectrometry of small exogenous and endogenous molecules, and member of the Ghent University Centre of Expertise MSsmall (advanced mass spectrometry for small organic molecules, MSsmall Expertise Centre — Ghent University (ugent.be)).</p> <p>3. university-based GLP-compliant laboratory in Belgium (GLP compliant since 2001), with expertise in non-clinical bioanalysis, PK modelling, bioavailability, bioequivalence and residue studies in several animal species (List of GLP-compliant Test Facilities sciensano.be).</p>
Keywords specifying your expertise:	pharmacology, toxicology, pig models, mass spectrometry, small molecules, biomarkers, ADME, PK, PD, PK/PD, popPK, modelling, safety, GLP

Commitment offered:	<input checked="" type="checkbox"/> Research <input checked="" type="checkbox"/> Demonstration <input checked="" type="checkbox"/> Training <input checked="" type="checkbox"/> Technology <input checked="" type="checkbox"/> Dissemination <input type="checkbox"/> Other:
----------------------------	---

Interested in participation in project types:	<input checked="" type="checkbox"/> Research & Innovation Action <input checked="" type="checkbox"/> Innovation Action <input type="checkbox"/> EIC Pathfinder
--	--

Work Programme research areas: indicate your interest

1. **(Mini)pig imaging.** The Faculty of Veterinary Medicine offers extensive imaging possibilities such as CT, MRI and PET ([ORSAMI | Orsami: Medische beeldvorming Universiteit Gent](#)).
2. **Minipig multi-omics, bioanalysis and validation of reagents/assays.** The Faculty of Veterinary Medicine is member of the Ghent University Centre of Expertise MSsmall (advanced mass spectrometry for small organic molecules, [MSsmall Expertise Centre — Ghent University \(ugent.be\)](#)), and offers expertise in metabolomics of small exogenous and endogenous molecules (e.g. stress markers to monitor animal welfare). The Laboratory of Pharmacology and Toxicology is the only university-based GLP laboratory in Flanders (GLP compliant since 2001), and has expertise in non-clinical bioanalysis, PK modelling, bioavailability, bioequivalence and residue studies in several animal species ([List of GLP-compliant Test Facilities | sciensano.be](#)).
3. **iPig.** The Faculty of Veterinary Medicine offers testing of sensors and wearables in animals.

Call topic(s): HORIZON-JU-IHI-2023-04-01-two-stage

Do you have other partners for this topic (which partners/country)?

Prof. Steven Van Cruchten at University of Antwerp (Belgium)

Profile of partner sought

Role	<input type="checkbox"/> technologydevelopment	<input type="checkbox"/> research	<input type="checkbox"/> training
	<input type="checkbox"/> dissemination	<input type="checkbox"/> demonstration	<input type="checkbox"/> other _____
Country /region	<input type="checkbox"/>		
Expertise required			

I agree with the publication of my contact data: YES NO