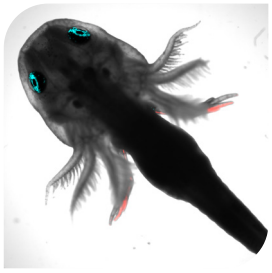
The newly established Otsuki group at the Hubrecht Institute, the Netherlands seeks a

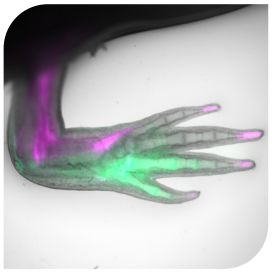
PhD student in Regeneration Biology

Apply by: 15 September 2025 | **Start:** Spring 2026 (flexible) | **Duration:** 4 years (fully funded)

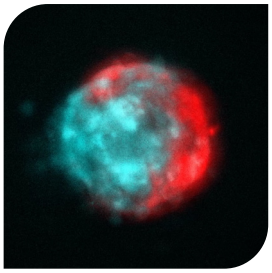


Discover principles of tissue-building by establishing a 3D culture model from regenerative axolotl cells

We study the axolotl, a highly regenerative salamander that can regrow entire limbs after injury. The axolotl is an inspiration for how other animals (like ourselves) might regenerate complex body parts. Yet, many questions remain difficult to address *in vivo* (e.g., how many cells, which combinations of cells, and which signals are sufficient for patterning?).



Purifying axolotl cells into 3D culture allows us to zoom in on their tissue-building potential. We purify different combinations of limb cells by using fluorescent genetic reporters. We found that some axolotl cells have a GPS-like property allowing them to self-organise and adopt their correct spatial positions in 3D - even when scrambled in cell culture. We will identify the mechanistic basis for these, and other, properties relevant for regeneration through live imaging and molecular perturbations.



Candidate profile

You have a life sciences background, experience with model organisms and/or cell culture and are excited to connect fundamental developmental biology with bioengineering. Experience with FACS, live imaging or molecular profiling is advantageous. The project will span *in vivo* and *in vitro* biology, including live imaging, molecular profiling and computational analyses.

Training and environment

The Otsuki group values curiosity and scientific excellence, and strives for a kind and inclusive environment that stimulates personal growth. The position is supported by the newly established Hubrecht International PhD Program and DRIVE-RM Regenerative Medicine Consortium.

For further details, and to apply, see the following page.

Further reading

Otsuki group page: https://www.hubrecht.eu/research-groups/otsuki-group/

PDFs of publications relevant for the project are freely available on this page.

About

The **Hubrecht Institute** is located in Utrecht, the Netherlands, part of the European Union (EU). The working language is English. Carrying out a PhD here means you are immersed in an international community with over 20 research groups and 35 nationalities united by molecular and developmental biology. The institute has deep partnerships with Utrecht University, UMC Utrecht and EMBL, among others.
https://www.hubrecht.eu/about-us/working-at-the-hubrecht-institute/

The newly established **Hubrecht International PhD Program** offers access to career development workshops and public engagement opportunities, as well as financial support for attending international conferences.
https://www.hubrecht.eu/hipp/

The **DRIVE-RM - Driving Regenerative Medicine consortium** unites biologists, medics and engineers, providing further opportunities for collaboration and professional development through a nationwide network.
https://drive-rm.nl

Contact

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Interested?

Apply by 15 September 2025 through the Hubrecht International PhD Program:
https://www.hubrecht.eu/hipp/

Applications are open to students from any country without restriction. The primary criteria for selection are scientific excellence and future potential.

We look forward to your application!