

1. Publications and other research outputs

Publication included in the thesis

1. Liver X receptor unlinks intestinal regeneration and tumorigenesis (Part of PhD thesis)

[Nature](#). 2024 PMID: 39567700

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(# equal contribution, * Corresponding author)

This is the main work involved in my PhD study and I published this work as the co-first author. In this work, I had designed, performed, analyzed and interpreted most of the experiments and written the manuscript. This work has prepared me an advanced knowledge and research experience with LXR (AIM 1), experimental and research skills for all aims.

2. The spatial transcriptomic landscape of the healing mouse intestine following damage (Part of PhD thesis)

[Nature Communication](#). 2022 PMID: 35149721

Authors list: Sara M. Parigi[#], Ludvig Larsson[#], Srustidhar Das[#], Ricardo O. Ramirez Flores, Annika Frede, Kumar P. Tripathi, Oscar E. Diaz, Katja Selin, Rodrigo A. Morales, **Xinxin Luo**, Gustavo Monasterio, Camilla Engblom, Nicola Gagliani, Julio Saez-Rodriguez, Joakim Lundeberg & Eduardo J. Villablanca^{*}
(# equal contribution, * Corresponding author)

I performed and analyzed the transcriptional validation and intestinal injury experiments and contributed to bioinformatics data interpretation in this work. This has demonstrated my ability in the research of spatial biology in the intestine and advanced my understanding of cellular interaction in the intestine, which will greatly support the success in this VR postdoc project.

3. B cell expansion hinders the stroma-epithelium regenerative cross talk during mucosal healing (Part of PhD thesis)

[Immunity](#). 2022 PMID: 36462502

Authors list: Annika Frede[#], Paulo Czarnewski[#], Gustavo Monasterio[#], Kumar P Tripathi, David A Bejarano, Ricardo O Ramirez Flores, Chiara Sorini, Ludvig Larsson, **Xinxin Luo**, Laura Geerlings, Claudio Novella-Rausell, Chiara Zagami, Raoul Kuiper, Rodrigo A Morales, Francisca Castillo, Matthew Hunt, Livia Lacerda Mariano, Yue O O Hu, Camilla Engblom, Ana-Maria Lennon-Duménil, Romy Mittenzwei, Astrid M Westendorf, Nadine Hövelmeyer, Joakim Lundeberg, Julio Saez-Rodriguez, Andreas Schlitzer, Srustidhar Das, Eduardo J Villablanca^{*}
(# equal contribution, * Corresponding author)

I performed organoid and colitis model experiments in work as one of my doctoral study project, which built a robust foundation in immunology and gut biology. The experience gained from fibroblast, B cell and organoid co-cultures in this work facilitates the establishment of mast cell-organoid co-culture in AIM 2.

2. All peer-reviewed research outputs.

Original articles

1. *Interleukin-10 regulates goblet cell numbers through Notch signaling in the developing zebrafish intestine*

[Mucosal Immunology](#). 2022 PMID:35840681

Authors list: Rodrigo A Morales, Soraya Rabahi, Oscar E Diaz, Yazan Salloum, Bianca C Kern, Mikaela Westling, **Xinxin Luo**, Sara M Parigi, Gustavo Monasterio, Srustidhar Das, Pedro P Hernández, Eduardo J Villablanca*

2. *Perfluorooctanesulfonic acid modulates barrier function and systemic T-cell homeostasis during intestinal inflammation*

[Disease models & mechanisms](#). 2021 PMID: 34792120

Authors list: Oscar E Diaz, Chiara Sorini, Rodrigo A Morales, **Xinxin Luo**, Annika Frede, Annette M Kraus, Myra N Chávez, Emma Wincent, Srustidhar Das, Eduardo J Villablanca*

3. *Retinoic acid induced cytokines are selectively modulated by liver X receptor activation in zebrafish*

[Reproductive Toxicology](#). 2020 PMID: 32109521

Authors list: Oscar E Diaz, Shuangjia Xue, **Xinxin Luo**, Joel Nava, Anders Appelblom, Rodrigo A Morales, Srustidhar Das, Eduardo J Villablanca*

4. *Huachansu suppresses TRPV1 up-regulation and spinal astrocyte activation to prevent oxaliplatin-induced peripheral neuropathic pain in rats*

[Gene](#). 2019 PMID: 30244138

Authors list: Yue Hao, **Xinxin Luo**, Xiyuan Ba, Jiali Wang, Shiyang Zhou, Shimin Yang, Changji Fang, Changyu Jiang, Wuping Sun*

5. *Cinobufacini protects against paclitaxel-induced peripheral neuropathic pain and suppresses TRPV1 up-regulation and spinal astrocyte activation in rats*

[Biomedicine & Pharmacotherapy](#). 2018 PMID: 30218861

Authors list: Xiyuan Ba, Jiali Wang, Shiyang Zhou, **Xinxin Luo**, Yun Peng, Shimin Yang, Yue Hao, Guangyi Jin*

Research review articles

1. *Type 2 immunity in intestinal homeostasis and inflammatory bowel disease*

[Biochemical Society Transactions](#). 2021 PMID: 34581755

Authors list: **Xinxin Luo**, Eduardo J Villablanca*

Conference contributions

1. *Hydra at 21, key to the door for helminth researchers*

[Trends in Parasitology](#). 2023 PMID: 37833165

My conference contribution to the Hydra Conference, entitled 'Parasitic Helminths: New Perspectives in Biology and Infection' was reported in this article. Below is the reported content quoted from this article:

“Next, **Xinxin Luo** (Karolinska Institute) investigated the role of the nuclear receptor, liver X receptor (LXR), in the sensing of oxysterols (derived from cholesterol) and shaping of host immunity. By using a diet rich in synthetic LXR agonist, she showed LXR activation to lower tuft cell frequency and IL-25 secretion, leading to scuppered ILC-2 activation. Gastrointestinal nematode infections were also shown to be involved in this pathway, suggesting a mechanism employed by parasites to stunt Type 2 immunity and potentially promote their own survival.”