Stanford

# Laetitia Coassolo (Voilquin)

Senior Research Scientist - Basic Life, Pathology Sponsored Projects

## Bio

### BIO

I received my PharmD from the University of Strasbourg (France) in 2018. I completed my PhD in Oncology and Cell Biology in 2020 in Dr. Catherine Tomasetto's group in IGBMC (France) studying cell metabolism and cell signaling in breast cancer. I completed my postdoctal training in Dr. Katrin Svensson lab at Stanford University focusing on understanding the molecular mechanisms of non-classical hormones in metabolic diseases.

### CURRENT ROLE AT STANFORD

I am a Senior Research Scientist in Dr. Katrin Svensson's lab. I am interested in mapping tissue-specific peptide secretion to identify orphan peptide hormones.

### INSTITUTE AFFILIATIONS

- Member, Maternal & Child Health Research Institute (MCHRI)

### HONORS AND AWARDS

- AHA Postdoctoral Fellowship, American Heart Association (2023-2024)
- Dean's fellowship, School of Medicine, Stanford (2022)
- Ph.D research grant, allocated by the French Government after competitive exam, Doctoral School of Strasbourg (2016-2019)

### BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- member, American Heart Association (AHA) (2021 - present)
- member, Association for Women in Science (AWIS) (2022 - present)
- member, Stanford Cardiovascular Institute CVI (2022 - present)
- member, Stanford Diabetes Research Center (2021 - present)
- member, Maternal & Child Health Research Institute (MCHRI) (2021 - present)

### PROFESSIONAL EDUCATION

- PhD, Doctoral School of Strasbourg, France , Molecular and cellular biology, lipid metabolism, cancer biology (2020)
- PharmD, University of Strasbourg, France , Pharmacy (2018)

### PATENTS

- Katrin J Svensson, Laetitia Voilquin. "United States Patent S22-296 BRINP2-derived peptide compositions for treating obesity and weight management", Leland Stanford Junior University
- Katrin J Svensson, Laetitia Voilquin, Niels Banhos Danneskiold-Samsoe, Jameel Barkat Lone. "United States Patent S24-073 BRINP3-derived peptides for obesity and digestive disorders", Leland Stanford Junior University, Mar 29, 2024

- Katrin J. Svensson, Laetitia Voilquin. "United States Patent 63/226,600 Therapeutic Uses of Isthmin Protein", Leland Stanford Junior University, Jul 28, 2022

## Research & Scholarship

### LAB AFFILIATIONS

- Katrin Svensson, Svensson lab (10/1/2020)

## Publications

### PUBLICATIONS

- **A secondary β-hydroxybutyrate metabolic pathway linked to energy balance.** *bioRxiv : the preprint server for biology*
  Moya-Garzon, M. D., Wang, M., Li, V. L., Lyu, X., Wei, W., Tung, A. S., Raun, S. H., Zhao, M., Coassolo, L., Islam, H., Oliveira, B., Dai, Y., Spaas, et al
  2024

- **PTER is a N-acetyltaurine hydrolase that regulates feeding and obesity.** *Nature*
  Wei, W., Lyu, X., Markhard, A. L., Fu, S., Mardjuki, R. E., Cavanagh, P. E., Zeng, X., Rajniak, J., Lu, N., Xiao, S., Zhao, M., Moya-Garzon, M. D., Truong, et al
  2024

- **A class of secreted mammalian peptides with potential to expand cell-cell communication.** *Nature communications*
  Wiggenhorn, A. L., Abuzaid, H. Z., Coassolo, L., Li, V. L., Tanzo, J. T., Wei, W., Lyu, X., Svensson, K. J., Long, J. Z.
  2023; 14 (1): 8125

- **Rapid and accurate deorphanization of ligand-receptor pairs using AlphaFold.** *bioRxiv : the preprint server for biology*
  Danneskiold-Samsøe, N. B., Kavi, D., Jude, K. M., Nissen, S. B., Wat, L. W., Coassolo, L., Zhao, M., Santana-Oikawa, G. A., Broido, B. B., Garcia, K. C., Svensson, K. J.
  2023

- **Mapping transcriptional heterogeneity and metabolic networks in fatty livers at single-cell resolution.** *iScience*
  Coassolo, L., Liu, T., Jung, Y., Taylor, N. P., Zhao, M., Charville, G. W., Nissen, S. B., Yki-Jarvinen, H., Altman, R. B., Svensson, K. J.
  2023; 26 (1): 105802

- **STARD3: A New Biomarker in HER2-Positive Breast Cancer.** *Cancers*
  Lodi, M., Voilquin, L., Alpy, F., Moliere, S., Reix, N., Mathelin, C., Chenard, M., Tomasetto, C.
  2023; 15 (2)

- **New players of the adipose secretome: Therapeutic opportunities and challenges.** *Current opinion in pharmacology*
  Coassolo, L., Dannieskiold-Samsøe, N. B., Zhao, M., Allen, H., Svensson, K. J.
  2022; 67: 102302

- **Phosphoproteomic mapping reveals distinct signaling actions and activation of muscle protein synthesis by Isthmin-1** *eLife*
  Zhao, M., Banhos Danneskiold-Samsøe, N., Ulicna, L., Nguyen, Q., Voilquin, L., Lee, D. E., White, J. P., Jiang, Z., Cuthbert, N., Paramasivam, S., Bielczyk-Maczynska, E., van Rechem, C., Svensson, et al
  2022

- **Isthmin-1 is an adipokine that promotes glucose uptake and improves glucose tolerance and hepatic steatosis.** *Cell metabolism*
  Jiang, Z., Zhao, M., Voilquin, L., Jung, Y., Aikio, M. A., Sahai, T., Dou, F. Y., Roche, A. M., Carcamo-Orive, I., Knowles, J. W., Wabitsch, M., Appel, E. A., Maikawa, et al
  2021

- **FFAT motif phosphorylation controls formation and lipid transfer function of inter-organelle contacts** *EMBO JOURNAL*
  Di Mattia, T., Martinet, A., Ikhlef, S., McEwen, A. G., Nomine, Y., Wendling, C., Poussin-Courmontagne, P., Voilquin, L., Eberling, P., Ruffenach, F., Cavarelli, J., Slee, J., Levine, et al
  2020; 39 (23): e104369

- **Modular Conjugation of a Potent Anti-HER2 Immunotoxin Using Coassociating Peptides** *BIOCONJUGATE CHEMISTRY*

Stoessel, A., Groysbeck, N., Guyot, L., Barret, L., Nomine, Y., Nguekeu-Zebaze, L., Bender, A., Voilquin, L., Lutz, T., Pallaoro, N., Blocat, M., Deville, C., Masson, et al
2020; 31 (10): 2421-2430

- **Another hijack! Some enteroviruses co-opt the c10orf76/PI4KB complex for their own good.** *EMBO reports*
  Voilquin, L., Di Mattia, T., Alpy, F.
  2020; 21 (2): e49876

- **STARD3: A Swiss Army Knife for Intracellular Cholesterol Transport** *STARD3: A Swiss Army Knife for Intracellular Cholesterol Transport*
  Voilquin, L., Lodi, M., Di Mattia, T., Chenard, M., Mathelin, C., Alpy, F., Tomasetto, C.
  2019

- **Intracellular and Plasma Membrane Cholesterol Labeling and Quantification Using Filipin and GFP-D4** *INTRACELLULAR LIPID TRANSPORT: METHODS AND PROTOCOLS*
  Wilhelm, L. P., Voilquin, L., Kobayashi, T., Tomasetto, C., Alpy, F.
  edited by Drin, G.
  2019; 1949: 137-152