

Personal Data

Title	Dr.
First name	Gabriele
Name	Zaffagnini
Current position	CECAD Research Group Leader, temporary (12/2029)
Current institution(s)/site(s), country	from 01/2025 on: Institute for Genetics/CECAD, Faculty of Mathematics and Natural Sciences, University of Cologne, Germany
ORCID	0000-0002-6554-7352

Qualifications and Career

Qualification Stages	Periods and Details
Doctorate	2012–2016, Prof. Sascha Mertens, Max F. Perutz Labs, Vienna, Austria
Master	Molecular and Industrial Biotechnology, 2010–2012, University of Bologna, Italy
Bachelor	Biotechnology, 2006–2009, University of Bologna, Italy

Stages of Academic/Professional Career

Research Group Leader	2025–present, Institute for Genetics/CECAD, University of Cologne, Germany
Adjunct Professor	2023–2024, Universitat Pompeu Fabra, Barcelona, Spain
Senior Postdoctoral Fellow	2018–2024, Dr. Elvan Böke, Centre for Genomic Regulation (CRG), Barcelona, Spain
Postdoctoral Fellow	2016–2018, Prof. Sascha Martens, Max F. Perutz Labs, Vienna, Austria

Activities in the Research System

Service to the Scientific Community (selected)

2024–present	Curator, “Cell Biology of Oocytes” (cebooc) list at Biomed News
2023–2024	Co-Organizer, Barcelona Membrane Biology Club (BMBC) Seminar Series
2022	Reviewer, Cell Death and Disease

Scientific Results

Category A

Zaffagnini, G., Cheng, S., Salzer, M., Pernaute, B., Duran, J.M., Irimia, M., Schuh, M., and Böke, E. (2024). Mouse oocytes sequester aggregated proteins in degradative super-organelles. *Cell* 187:1109–1126. doi: 10.1016/j.cell.2024.01.031. (open access)

Dhandapani, L., Salzer, M.C., Duran, J.M., **Zaffagnini, G.**, De Guirior, C., Martínez-Zamora, M.A., and Böke, E. (2022). Comparative analysis of vertebrates reveals that mouse primordial oocytes do not contain a Balbiani body. *J Cell Sci* 135:jcs259394. doi: 10.1242/jcs.259394.

Delacour, J., Doumic, M., Martens, S., Schmeiser, C., and **Zaffagnini, G.** (2021). A mathematical model of p62-ubiquitin aggregates in autophagy. **J Math Biol** 84:3. doi: 10.1007/s00285-021-01659-2. (open access)

Turco, E., Witt, M., Abert, C., Bock-Bierbaum, T., Su, M.Y., Trapannone, R., Sztacho, M., Danieli, A., Shi, X., **Zaffagnini, G.**, Gamper, A., Schuschnig, M., Fracchiolla, D., Bernklau, D., Romanov, J., Hartl, M., Hurley, J.H., Daumke, O., and Martens, S. (2019). FIP200 claw domain binding to p62 promotes autophagosome formation at ubiquitin condensates. **Mol Cell** 74:330–346.e11. doi: 10.1016/j.molcel.2019.01.035. (open access)

Zaffagnini, G., Savova, A., Danieli, A., Romanov, J., Tremel, S., Ebner, M., Peterbauer, T., Sztacho, M., Trapannone, R., Tarafder, A.K., Sachse, C., and Martens, S. (2018). Phasing out the bad - How SQSTM1/p62 sequesters ubiquitinated proteins for degradation by autophagy. **Autophagy** 14:1280–1282. doi: 10.1080/15548627.2018.1462079. (open access)

Zaffagnini, G., Savova, A., Danieli, A., Romanov, J., Tremel, S., Ebner, M., Peterbauer, T., Sztacho, M., Trapannone, R., Tarafder, A.K., Sachse, C., and Martens, S. (2018). p62 filaments capture and present ubiquitinated cargos for autophagy. **EMBO J** 37:e98308. doi: 10.15252/embj.201798308. (open access)

Fracchiolla, D., Sawa-Makarska, J., Zens, B., Ruitter, A., **Zaffagnini, G.**, Brezovich, A., Romanov, J., Runggatscher, K., Kraft, C., Zagrovic, B., and Martens, S. (2016). Mechanism of cargo-directed Atg8 conjugation during selective autophagy. **Elife** 23:5:e18544. doi: 10.7554/eLife.18544. (open access)

Richter, B., Sliter, D.A., Herhaus, L., Stolz, A., Wang, C., Beli, P., **Zaffagnini, G.**, Wild, P., Martens, S., Wagner, S.A., Youle, R.J., and Dikic, I. (2016). Phosphorylation of OPTN by TBK1 enhances its binding to Ub chains and promotes selective autophagy of damaged mitochondria. **PNAS USA** 113:4039–44. doi: 10.1073/pnas.1523926113.

Zaffagnini, G., and Martens, S. (2016) Mechanisms of selective autophagy. **Mol Biol** 428(9 Pt A):1714–24. doi: 10.1016/j.jmb.2016.02.004. (open access)

Wurzer, B.*, **Zaffagnini, G.***, Fracchiolla, D., Turco, E., Abert, C., Romanov, J., and Martens, S. (2015). Oligomerization of p62 allows for selection of ubiquitinated cargo and isolation membrane during selective autophagy. **Elife** 28:4:e08941. doi: 10.7554/eLife.08941. (open access)

* shared first authorship, # shared corresponding authorship

Category B

Preprints, Reviews, and Commentaries (Non-peer-reviewed, selected)

Klionsky DJ, [...], **Zaffagnini G**, et al. (2021). Guidelines for the use and interpretation of assays for monitoring autophagy (4th edition). **Autophagy** 17:1–382. doi: 10.1080/15548627.2020.1797280.

Public Outreach Activities (selected)

2023	Speaker, #100tífiques, Catalan Foundation for Research and Innovation, Outreach Initiative to Promote the Visibility of Women in STEM, Barcelona, Spain,
2018	Speaker, CRG/PRBB Open Day, Barcelona, Spain
2016	Speaker, 3 rd Töne und Moleküle Soirée, Vienna, Austria

Academic Distinctions

2024	Ramón y Cajal Investigator Scholarship, National Agency for the Research, Spain (declined)
2023	2 nd Postdoctoral Grant, Centre for Genomic Regulation, Barcelona, Spain
2023	Best Talk Prize, 34 th Developmental Biology Meeting, Societat Catalana de Biologia, Barcelona
2018–2021	Marie Curie COFUND Fellowship, Centre for Genomic Regulation, Spain

2013–2016

Uni:docs Fellowship for PhD students, University of Vienna, Austria

2006–2012

Scholarship for University Studies, Collegio Superiore, University of
Bologna, Italy



UNIVERSITY
OF COLOGNE

