Personal Information

Name and Surname	Chiara Francavilla
Date and place of birth	19/01/1980, Milan, Italy
Nationality	Italian
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Research Experience

2021 - present	Principal Investigator, Manchester Breast Centre, The University of Manchester
2016 - present	Wellcome Trust Sir Henry Dale Research Fellow, Division of Molecular & Cellular Function, School of Biological Sciences, Faculty of Biology Medicine and Health, The University of Manchester, Manchester, UK
2013 - 2016	Senior Postdoctoral Fellow, Novo Nordisk Foundation Centre for Protein Research (NNF-CPR), The University of Copenhagen, Copenhagen, Denmark (Group of Prof J.V. Olsen)
2010 - 2013	Postdoctoral Fellow (Marie Curie Intra European IEF and EMBO Long Term Postdoctoral Fellowships), NNF-CPR, University of Copenhagen, Copenhagen, Denmark (Group of Prof J.V. Olsen)
2009 - 2010	Postdoctoral fellow, FIRC Institute of Molecular Oncology (IFOM) and European Institute of Oncology (IEO), Milan, Italy (Group of Dr U. Cavallaro)

Education and Training

2005 - 2009	PhD student in Molecular Medicine, SEMM (European School of Molecular Medicine), FIRC Institute of Molecular Oncology (IFOM) and European Institute of Oncology (IEO), Milan, Italy. Title of the doctoral thesis: *The adhesion molecule NCAM is a master regulator of Fibroblast Growth Factor Receptor (FGFR) activity.* Supervisors: Dr U. Cavallaro and Prof G. Christofori (University of Basel, Switzerland)
2004 - 2005	Fellow, Centro S. Raffaele del Monte Tabor foundation, Milan, Italy (Group of Prof M.E. Bianchi).
1998 - 2004	Master's degree in industrial biotechnology, University of Milano-Bicocca, Milan, Italy. Final mark: 110/110 summa cum laude Title of the thesis: *Sic1, an inhibitor of CDK in* Saccharomyces cerevisiae*, is regulated by carbon sources in the growth medium.*

Selected Scientific Conferences and Courses – since 2019

- International Mass Spectrometry Conference, Maastricht, The Netherlands, August 2022. **Chair** of the signalling session
- Gordon Research Conference (GRC) on *Fibroblast growth factors in Development and Diseases,* Il Ciocco, Italy, May 2020. **Invited speaker. Postponed to 2022 due to COVID-19.**
- Gordon Research Seminar (GRS) on *Fibroblast growth factors in Development and Diseases,* Il Ciocco, Italy, May 2020. **Keynote speaker. Postponed to 2022 due to COVID-19.**
- Wellcome researcher meeting Molecular Mechanisms in Health and Disease, Warwick, January 2020. **Invited speaker.**
- N8 Biophysics and Biochemistry Symposium, Biochemical Society, York, January 2020. **Invited speaker.**
- Membrane Trafficking Annual Conference, BSCB, London, December 2019. **Invited speaker.**
- Seminar series, Danish Cancer Society, November 2019. **Invited speaker.**
- Annual ENBDC (European Network of Breast Development and Cancer) workshop, Weggis, Switzerland, May 2019. **Invited speaker.**
- Seminar series, Centre for Cancer Cell Reprogramming, Oslo, March 2019. **Invited speaker.**

Significant Publications - **, corresponding author*

1. Watson J., Ferguson H.R., Brady R.M., Ferguson J., Fullwood P., Mo H., Bexley K.H., Knight D., Schwartz J-M., Smith M.P*., **Francavilla C.*** Spatially Resolved Phosphoproteomics Reveals Fibroblast Growth Factor Receptor Recycling-driven Regulation of Autophagy and Survival. (2021)https://biorxiv.org/cgi/content/short/2021.12.04.471203v1
2. Watson J., Smith M.P., **Francavilla C.***, Schwartz J-M.* SubcellulaRVis simplifies visualization of protein enrichment in subcellular compartments. (2021). https://www.biorxiv.org/content/10.1101/2021.11.18.469118v1
3. Wilcock D.J., Badrock A.P., Owen R., Guerin M., Southam A.D., Johnston H., Ogden S., Fullwood P., Watson J., Ferguson H., Ferguson J., Richardson D.A., Lloyd G.R., Jankevics A., Dunn W.B., Wellbrock C., Lorigan P., Ceol C., **Francavilla C.***, Smith M.P.*, Hurlstone A.F.L.*. DGAT1 is a lipid metabolism oncoprotein that enables cancer cells to accumulate fatty acid while avoiding lipotoxicity. (**2021**). https://www.biorxiv.org/content/10.1101/2020.06.23.166603v1
4. Smith M.P., Ferguson H.R., Ferguson J., Zindy E., Kowalczyk K.M., Kedward T., Bates C., Parsons J., Watson J., Chandler S., Fullwood P., Warwood S., Knight D., Clarke R.B., **Francavilla C.*.** Reciprocal Priming between RTKs within Recycling Endosomes Orchestrates Cellular Signaling Outputs. (**2021**). EMBO J. Jul 15;40(14):e107182. doi: 10.15252/embj.2020107182. Epub 2021 Jun 4. PMID: 34086370
   - *Ceresa B.P. Prime time for the recycling endosome. EMBO J. 2021 Jul 15;40(14):e108758. doi: 10.15252/embj.2021108758. Epub 2021 Jun 23. PMID: 34159621*
   - *Werner S. Faculty Opinions Recommendation of [Smith MP et al., EMBO J 2021 40(14):e107182]. In Faculty Opinions, 13 Oct 2021; 10.3410/f.740235523.793588813*
5. Watson J., Schwartz J-M., **Francavilla C.*.** Using Multilayer Heterogeneous Networks to Infer Functions of Phosphorylated Sites. (**2021**). J Proteome Res. Jul 2;20(7):3532-3548. doi: 10.1021/acs.jproteome.1c00150. Epub 2021 Jun 24. PMID: 34164982
6. Pedersen A. K., Pfeiffer A., Karemore G., Akimov V., Bekker-Jensen D.B., Blagoev B., **Francavilla C.*,** Olsen J.V.*. Proteomic investigation of Cbl and Cbl-b in neuroblastoma cell differentiation highlights roles for SHP-2 and CDK16. (**2021**). iScience. Mar 17;24(4):102321. doi: 10.1016/j.isci.2021.102321. eCollection 2021 Apr 23. PMID: 33889818
7. Emdal K.B., Pedersen A.K., Bekker-Jensen D.B., Lundby A., Claeys S., De Preter K., Speleman F., **Francavilla C.,*** Olsen J.V.*. Integrated proximal proteomics reveals IRS2 as a determinant of cell survival in ALK-driven neuroblastoma. (**2018**). Sci Signal. 11(557). pii: eaap9752. doi: 10.1126/scisignal.aap9752
8. Batth T.S., Papetti M., Pfeiffer A., Tollenaere M.A.X., **Francavilla C.*,** Olsen J.V.*. Large-scale phosphoproteomics reveals Shp2 phosphatase-dependent regulators of Pdgf receptor signaling. (**2018**), Cell Rep. 22(10):2784-2796.
9. **Francavilla C.*,** Lupia M., Tsafou K., Villa A., Kowalczyk K., Rakownikow Jersie-Christensen R., Bertalot G., Confalonieri S., Brunak S., Jensen L.J., Cavallaro U.*, Olsen J.V.*. Phosphoproteomics of Primary Cells Reveals Druggable Kinase Signatures in Ovarian Cancer. (**2017**). Cell Rep. Mar 28;18(13):3242-3256.
10. **Francavilla C.*,** Papetti M., Rigbolt T.G., Pedersen A-K., Sirurdson J.O., Cazzamali G., Karemore G., Blagoev B., Olsen J.V.*. Multi-layered Proteomics reveals Molecular Switches Dictating Ligand-dependent EGFR Trafficking. **(2016),** Nat. Struct. Mol. Biol. 23(6):608-18.
11. Emdal K.B., Pedersen A.K., Bekker-Jensen D.B., Tsafou K.P., Horn H., Lindner S., Schulte J.H., Eggert A., Jensen L.J., **Francavilla C.*,** Olsen J.V.*. Temporal proteomics of NGF-TrkA signaling identifies an inhibitory role for the E3 ligase Cbl-b in neuroblastoma cell differentiation. (**2015**). Science signaling. 8(374): ra40.
12. **Francavilla C.,** Rigbolt K.T., Emdal K.B., Carraro G., Vernet E., Bekker-Jensen D.B., Streicher W., Wikstrom M., Sundstrom M., Bellusci S., Cavallaro U., Blagoev B., Olsen J.V. Functional proteomics defines the molecular switch underlying FGF receptor trafficking and cellular outputs. (**2013**). Molecular cell. Sep 26, 51(6): 707-22.
    - *Highlighted in the Editors' Choice section of Science Signalling: Dictating the Route, Nancy R. Gough*
    - *Mohammadi M and Zinkle A: Faculty Opinions Recommendation of [Francavilla C et al., Mol Cell 2013 51(6):707-722]. In Faculty Opinions, 18 Jun 2018; 10.3410/f.718102225.793547223*
13. **Francavilla C.,** Cattaneo P., Berezin V., Bock E., Ami D., de Marco A., Christofori G., Cavallaro U. The binding of NCAM to FGFR1 induces a specific cellular response mediated by receptor trafficking. (**2009**). The Journal of cell biology. Dec 28, 187(7): 1101-16.
14. **Francavilla C.,** Loeffler S., Piccini D., Kren A., Christofori G., Cavallaro U. Neural cell adhesion molecule regulates the cellular response to fibroblast growth factor. (**2007**). Journal of cell science. Dec 15, 120(Pt 24): 4388-94