

List of Publications:

1. Banushi, B., **Forneris, F.***, Straatman-Iwanowska, A., Strange, A., Lyne, A., Rogerson, C., Burden, J.J., Heywood, W.E., Hanley, J., Doykov, I., Straatman, K.R., Smith, H., Bem, D., Kriston-Vizi, J., Ariceta, G., Risteli, M., Wang, C., Ardill, R.E., Zaniew, M., Latka-Grot, J., Waddington, S.N., Howe, S.J., Ferraro, F., Gjinovci, A., Lawrence, S., Marsh, M., Girolami, M., Bozec, L., Mills, K., Gissen, P.* (2016) Regulation of post-Golgi LH3 trafficking is essential for collagen homeostasis, *Nat. Comms.*, in press. ***Corresponding Authors**
2. Spadaro, F., Scoffone, V.C., Chiarelli, L.R.*, Fumagalli, M., Buroni, S., Riccardi, G., **Forneris, F.*** (2016) The crystal structure of Burkholderia cenocepacia DfsA provides insights into substrate recognition and BDSF quorum sensing fatty acid biosynthesis, *Biochemistry*, in press. ***Corresponding Authors**
3. **Forneris, F.**, Wu, J., Xue, X., Ricklin, D., Lin, Z., Sfyroera, G., Tzekou, A., Volokhina, E., Granneman, J.C.M., Hauhart, R., Bertram, P., Liszewski, M.K., Atkinson, J.P., Lambris, J.D., Gros, P. (2016) Regulators of complement activity mediate inhibitory mechanisms through a common C3b-binding mode, *EMBO J.*, in press.
4. Savino, S., Ferrandi, E., **Forneris, F.**, Rovida, S., Riva, S., Monti, D., Mattevi, A. (2016) Structural and biochemical insights into 7 α -hydroxysteroid dehydrogenase stereoselectivity, *Proteins*, **84**, 859-865.
5. Dzurova, L., **Forneris, F.***, Savino, S., Galuszka, P., Vrabka, J., Frébort, I.* (2015) The three-dimensional Structure of “Lonely Guy” from *Claviceps purpurea* provides insights into the phosphoribohydrolase function of Rossmann fold-containing lysine decarboxylase-like proteins, *Proteins*, **83**, 1539–1546. ***Corresponding Authors**
6. Pilotto, S., Speranzini, V., Tortorici, M., Durand, D., Fish, A., Valente, S., **Forneris, F.**, Mai, A., Sixma, T.K., Vachette, P., Mattevi, A. (2015) Interplay between nucleosomal DNA, histone tails and CoREST underlies LSD1-mediated H3 demethylation, *Proc. Natl. Acad. Sci. U.S.A.*, **112**, 2752-2757.
7. **Forneris, F.**, Burnley, B.T., Gros, P. (2014) Conformational Flexibility of complement Factor D shown by ensemble refinement of crystal structures, *Acta Cryst. D Biol. Cryst.*, **D70**, 733-743.
8. Peng, W.C., de Lau, W., Madoori, P.K., **Forneris, F.**, Granneman, J.C.M., Clevers, H., Gros, P. (2013) Structures of Wnt-antagonist ZNRF3 and its complex with R-spondin 1 and implications for signaling, *PLOS One*, **8**, e83110.
9. Minde, D.P., Radli, M., **Forneris, F.**, Maurice, M.M., Rüdiger, S.G.D. (2013) Large extent of disorder in Adenomatous Polyposis Coli offers a strategy to guard Wnt signalling against point mutations, *PLOS One*, **8**, e77257.
10. Peng, W.C., de Lau, W., **Forneris, F.**, Granneman, J.C.M., Huch, M., Clevers, H., Gros, P. (2013) Structure of stem-cell growth factor R-spondin 1 in complex with the ecto-domain of its receptor LGR5., *Cell Reports*, **3**, 1885-1892.
11. Hadders, M.A., Bubeck, D., Roversi, P., Hakobyan, S., **Forneris, F.**, Morgan, B.P., Pangburn, M.K., Llorca, O., Lea, S.M., Gros, P. (2012) Assembly and regulation of the Membrane Attack Complex based on Structures of C5b6 and sC5b9., *Cell Reports*, **1**, 200-207.
12. **Forneris, F.**, Wu, J., Gros, P. (2012) The Modular Serine Proteases of the Complement System. *Curr. Op. Struct. Biol.*, **22**, 333-341.
13. **Forneris, F.**, Ricklin, D., Wu, J., Tzekou, A., Wallace, R.S., Lambris, J.D., Gros, P. (2010) Structures of C3b in complex with factors B and D give insight into complement convertase formation. *Science*, **330**, 1816-1820.
14. Binda, C., Valente, S., Romanenghi, M., Pilotto, S., Cirilli, R., Karytinou, A., Ciossani, G., Botrugno, O.A., **Forneris, F.**, Tardugno, M., Edmondson, D.E., Minucci, S., Mattevi, A., Mai, A. (2010) Biochemical, Structural, and Biological Evaluation of Tranylcypromine Derivatives as Inhibitors of Histone Demethylases LSD1 and LSD2. *J. Am. Chem. Soc.*, **132**, 6827-6833.
15. Zibetti, C., Adamo, A., Binda, C., **Forneris, F.**, Verpelli, C., Ginelli, E., Mattevi, A., Sala, C., Battaglioli, E. (2009) Neurospecific histone demethylase LSD1/KDM1 isoforms generated by alternative splicing modulate neurite morphogenesis in the mammalian nervous system. *J. Neurosci.* **30**, 2521-2532.

16. Villa, F., Capasso, P., Tortorici, M., **Forneris, F.**, de Marco, A., Mattevi, A., Musacchio, A. (2009) Crystal structure of the catalytic domain of Haspin, an atypical kinase implicated in chromatin organization. *Proc. Natl. Acad. Sci. U.S.A.* **106**, 20204-20209.
17. **Forneris, F.**, Battaglioli, E., Mattevi, A., Binda, C. (2009) New roles of flavoproteins in molecular cell biology: Histone demethylase LSD1 and chromatin. *FEBS J.* **276**, 4304-4312.
18. Baron, R., Ryley, C., Chenprakhon, P., Thotsaporn, K., Winter, R., Alfieri, A., **Forneris, F.**, van Berkel, W., Chaiyen, P., Fraaije, M.W., Mattevi, A., McCammon, J.A. (2009) Multiple pathways guide oxygen diffusion into flavoenzyme active sites. *Proc. Natl. Acad. Sci. U.S.A.* **106**, 10603-10608.
19. **Forneris, F.**, Orru, R., Bonivento, D., Chiarelli, L.R., Mattevi, A. (2009) ThermoFAD, a ThermoFluor[®]-adapted flavin *ad hoc* detection system for protein folding and ligand binding. *FEBS J.* **276**, 2833-2840.
20. Karytinou, A., **Forneris, F.**, Profumo, A., Ciossani, G., Battaglioli, E., Binda, C., Mattevi, A. (2009) A novel mammalian flavin-dependent histone demethylase. *J. Biol. Chem.* **284**, 17775-17782.
21. **Forneris, F.**, Mattevi, A. (2008) Enzymes without borders: Mobilizing substrates, Delivering products. *Science* **321**, 213-216.
22. **Forneris, F.**, Binda, C., Battaglioli, E., Mattevi, A. (2008) LSD1: oxidative chemistry for multifaceted functions in chromatin regulation. *Trends Biochem. Sci.* **33**, 181-189.
23. **Forneris, F.**, Heuts, D.P., Delvecchio, M., Rovida, S., Fraaije, M.W., Mattevi, A. (2008). Structural analysis of the catalytic mechanism and stereoselectivity in *Streptomyces coelicolor* alditol oxidase. *Biochemistry* **47**, 978-985.
24. **Forneris, F.**, Binda, C., Adamo, A., Battaglioli, E., Mattevi, A. (2007) Structural basis of LSD1-CoREST selectivity in histone H3 recognition. *J. Biol. Chem.* **282**, 20070-20074.
25. **Forneris, F.**, Rovida, S., Heuts, D.P.H.M., Fraaije, M.W., Mattevi, A. (2006) Crystallization and preliminary X-ray analysis of an alditol oxidase from *Streptomyces coelicolor* A3(2). *Acta Crystallograph Sect F Struct Biol Cryst Commun.* **62**, 1298-1300.
26. **Forneris, F.**, Binda, C., Dall'Aglio, A., Fraaije, M.W., Battaglioli, E., Mattevi, A. (2006) A highly specific mechanism of histone H3-K4 reconnection by histone demethylase LSD1. *J. Biol. Chem.* **281**, 35289-35295.
27. **Forneris, F.**, Binda, C., Vanoni, M.A., Battaglioli, E., Mattevi, A. (2005). Human histone demethylase LSD1 reads the histone code. *J. Biol. Chem.* **280**, 41360-41365.
28. **Forneris, F.**, Binda, C., Vanoni, M.A., Mattevi, A., Battaglioli, E. (2005) Histone Demethylation Catalysed by LSD1 is a Flavin-dependent Oxidative Process. *FEBS Lett.* **579**, 2203-2207.
29. Di Costanzo, L., **Forneris, F.**, Geremia, S., Randaccio, L., (2003) Phasing protein structures using the group-subgroup relation, *Acta Cryst. D Biol. Cryst.*, **59**, 1435-1439.

Contributions to book chapters

1. **Forneris, F.**, Binda, C., Vanoni, M.A., Mattevi, A., Battaglioli, E. (2006) Demethylation pathways for histone methyllysine residues. Chapter 8 in "The Enzymes", vol. 26 (Elsevier/ Academic Press).
2. **Forneris, F.**, Gros, P. (2011) Complement Factor D. Chapter 662 in "Handbook of Proteolytic Enzymes, 3rd Ed." (Elsevier/ Academic Press).
3. Gros, P., **Forneris, F.** (2013) Proteolysis, Complex Formation and Conformational Changes Drive the Complement Pathways. Chapter 25 in "Advancing Methods for Biomolecular Crystallography", NATO science for peace and security series, sect. A, chemistry and biology (Springer Science&Business).