



Sebastiano Pasqualato, PhD

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Work Experience

07/2021 – present

Senior Biophysics Manager - Fondazione Human Technopole – Milano (IT)

01/2011 – 06/2021

Coordinator of the Biochemistry & Structural Biology Unit - IEO Milano (IT)

Coordinator of the Crystallography Unit - CoGenTech - Milano (IT)

01/2003 – 12/2010

Post-doctoral fellow - Dept. of Experimental Oncology - IEO Milano (IT)

09/1998 – 12/2002

Ph.D. Student - LEBS - CNRS Gif-sur-Yvette (FR)

07/1997 – 07/1998

Graduation Internship - Università degli Studi di Padova (IT)

Education

12/2002

Doctorat en Science (cristallographie biologique) - Mention très honorable
Université Paris XI Orsay (France)

07/1998

Laurea in Chimica - 110/110

Facoltà di Scienze MM.FF.NN. Università degli Studi di Padova (Italia)

Awards and honors

2006-2008

Recipient of FIRC (Fondazione Italiana per la Ricerca sul Cancro) fellowship

2004-2005

Recipient of EMBO Long Term fellowship

Scientific Production

Contributed to the publication of 40 scientific papers in peer reviewed journals and one book chapter (selected publications in the next page). Co-inventor of two patents.

Google Scholar H-index: 27.

Teaching

2012-present

Lecturer for the European School of Molecular Medicine Ph.D. program

Selected Publications

Angioni R, Bonfanti M, Caporale N, Sánchez-Rodríguez R, Munari F, Savino A, **Pasqualato S**, Buratto D, Pagani I, Bertoldi N, Zanon C, Ferrari P, Ricciardelli E, Putaggio C, Ghezzi S, Elli F, Rotta L, Scardua A, Weber J, Cecatiello V, Iorio F, Zonta F, Cattelan AM, Vicenzi E, Vannini A, Molon B, Villa CE, Viola A, Testa G. (2023) 'RAGE engagement by SARS-CoV-2 enables monocyte infection and underlies COVID-19 severity', *Cell Rep Med*, 4(11):101266.

Renna, C., Rizzelli, F., Carminati, M., Gaddoni, C., Pirovano, L., Cecatiello, V., **Pasqualato, S.** and Mapelli, M. (2020) 'Organizational Principles of the NuMA-Dynein Interaction Interface and Implications for Mitotic Spindle Functions', *Structure*, 28(7), pp. 820-829.e6.

Pirovano, L., Culurgioni, S., Carminati, M., Alfieri, A., Monzani, S., Cecatiello, V., Gaddoni, C., Rizzelli, F., Foadi, J., **Pasqualato, S.** and Mapelli, M. (2019) 'Hexameric NuMA:LGN structures promote multivalent interactions required for planar epithelial divisions', *Nat Commun*, 10(1), pp. 2208.

Vianello, P., Sartori, L., Amigoni, F., Cappa, A., Fagá, G., Fattori, R., Legnaghi, E., Ciossani, G., Mattevi, A., Meroni, G., Moretti, L., Cecatiello, V., **Pasqualato, S.**, Romussi, A., Thaler, F., Trifiró, P., Villa, M., Botrugno, O. A., Dessanti, P., Minucci, S., Vultaggio, S., Zagarrí, E., Varasi, M. and Mercurio, C. (2017) 'Thieno[3,2-b]pyrrole-5carboxamides as New Reversible Inhibitors of Histone Lysine Demethylase KDM1A/LSD1. Part 2: StructureBased Drug Design and Structure-Activity Relationship', *J Med Chem*, 60(5), pp. 1693-1715.

Weinert, T., Olieric, V., Waltersperger, S., Panepucci, E., Chen, L., Zhang, H., Zhou, D., Rose, J., Ebihara, A., Kuramitsu, S., Li, D., Howe, N., Schnapp, G., Pautsch, A., Bargsten, K., Prota, A. E., Surana, P., Kottur, J., Nair, D. T., Basilico, F., Cecatiello, V., **Pasqualato, S.**, Boland, A., Weichenrieder, O., Wang, B. C., Steinmetz, M. O., Caffrey, M. and Wang, M. (2015) 'Fast native-SAD phasing for routine macromolecular structure determination' *Nat Methods* 12(2) pp. 131-3.

Basilico, F., Maffini, S., Weir, J. R., Prumbaum, D., Rojas, A. M., Zimniak, T., De Antoni, A., Jeganathan, S., Voss, B., van Gerwen, S., Krenn, V., Massimiliano, L., Valencia, A., Vetter, I. R., Herzog, F., Raunser, S., **Pasqualato, S.** and Musacchio, A. (2014) 'The pseudo GTPase CENP-M drives human kinetochore assembly', *Elife*, 3, pp. e02978.

Petrovic, A., Mosalaganti, S., Keller, J., Mattiuzzo, M., Overlack, K., Krenn, V., De Antoni, A., Wohlgemuth, S., Cecatiello, V., **Pasqualato, S.**, Raunser, S. and Musacchio, A. (2014) 'Modular assembly of RWD domains on the Mis12 complex underlies outer kinetochore organization', *Mol Cell*, 53(4), pp. 591-605.

Maspero, E., Valentini, E., Mari, S., Cecatiello, V., Soffientini, P., **Pasqualato, S.**[#] and Polo, S.[#] (2013) 'Structure of a ubiquitin-loaded HECT ligase reveals the molecular basis for catalytic priming' *Nat Struct Mol Biol*, 20(6) pp. 696-701

Maspero, E., Mari, S., Valentini, E., Musacchio, A., Fish, A., **Pasqualato, S.**[#] and Polo, S.[#] (2011) 'Structure of the HECT:ubiquitin complex and its role in ubiquitin chain elongation', *EMBO Rep*, 12(4), pp. 342-9.

Petrovic, A.*, **Pasqualato, S.***, Dube, P., Krenn, V., Santaguida, S., Cittaro, D., Monzani, S., Massimiliano, L., Keller, J., Tarricone, A., Maiolica, A., Stark, H. and Musacchio, A. (2010) 'The MIS12 complex is a protein interaction hub for outer kinetochore assembly', *J Cell Biol*, 190(5), pp. 835-52.

Alushin, G. M., Ramey, V. H., **Pasqualato, S.**, Ball, D. A., Grigorieff, N., Musacchio, A. and Nogales, E. (2010) 'The Ndc80 kinetochore complex forms oligomeric arrays along microtubules', *Nature*, 467(7317), pp. 805-10.

Ciferri, C.*, **Pasqualato, S.***, Screpanti, E., Varetto, G., Santaguida, S., Dos Reis, G., Maiolica, A., Polka, J., De Luca, J. G., De Wulf, P., Salek, M., Rappsilber, J., Moores, C. A., Salmon, E. D. and Musacchio, A. (2008) 'Implications for kinetochore-microtubule attachment from the structure of an engineered Ndc80 complex', *Cell*, 133(3), pp. 427-39.

Pasqualato, S. and Cherfils, J. (2005) 'Crystallographic evidence for substrate-assisted GTP hydrolysis by a small GTP binding protein', *Structure*, 13(4), pp. 533-40.

Pasqualato, S., Ménétrey, J., Franco, M. and Cherfils, J. (2001) 'The structural GDP/GTP cycle of human Arf6', *EMBO Rep*, 2(3), pp. 234-8.

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