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# Stefan Wuchty - Publications

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## 2018

- M. Babu, C. Bundalovic-Torma, C. Calmettes, S. Phanse, Y. Jiang, V. Deineko, J. Mehla, A. Vastermark, O. Kagan, O. Pogoutse, A. Gagarinova, A. Kumar, H. Guo, Z. Minic, H. Aoki, E. Holtzapfle, Z. Zhang, Y. Pandya, C.C. Lai, E. Leung, M. El Bakkouri, Y. Hooda, M. Shah, J. Vlasblom, J.F. Greenblatt, S.V. Rajagopala, S. Wuchty, W. Houry, M. Saier, P. Uetz, T. Moraes, J. Parkinson and A. Emili, '*Global Landscape of Membrane Protein Complexes in Escherichia coli*', Nature Biotechn., 36, 103–112 (2018)
- H. Feng, L. Wang, S. Wuchty and A.C.C. Wilson, '*microRNA regulation in an ancient obligate endosymbiosis*', Mol. Ecol., accepted (2018)
- S. Wuchty, S.A. Mueller, J.H. Caufield, R. Häuser, S.F. Lichtenthaler, M. von Bergen, P. Aloy, S. Kalkhof and P. Uetz, '*Proteome data improves protein function prediction in the interactome of H. pylori*', Mol. Cell. Prot., accepted (2018)
- R. Mariano and S. Wuchty, '*Structure-based prediction of host-pathogen protein interactions*', Curr. Op. Struct. Biol, 44, 119-124 (2017)
- J.H. Caufield, C. Wimple, M. Abreu, S. Shary, S. Wuchty and P. Uetz, '*Bacterial protein meta-interaction networks reveal consistencies among interactomes*', BMC Bioinf., 18, 171 (2017)
- S. Wuchty, T. Boltz and H. Küçük-McGinty, '*Links between critical proteins drive the controllability of protein interaction networks*' Proteomics, 17,10, 1700056 (2017)
- S. Wuchty, S.V. Rajagopala, S.M. Blazie, J.R. Parrish, S. Khuri, R.L. Finley Jr. and P. Uetz, '*Predicting genome-wide gene functions of S. pneumoniae with a bacterial meta-interactome*', mSystems, 2 (3), e00019-17 (2017)

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- P. Manrique, J. Horgan, P. Gill, H. Qi, D. Johnson, S. Wuchty, C. Song and N. Johnson, 'Women's connectivity in extreme networks', *Sci. Adv.* 2 (6), e1501742, (2016)
- N.F. Johnson, M. Zheng, Y. Vorobyeva, A. Gabriel, H. Qi, N. Velasquez, P. Manrique, D. Johnson, E. Restrepo, C. Song and S. Wuchty, 'New Online Ecology of Adversarial Aggregates: ISIS and beyond', *Science*, 352, 1459-1463 (2016) (**in Science News**)
- R. Mariano, S. Khuri, P. Uetz and S. Wuchty, 'Local action with global impact: Infection patterns of human viruses and bacteriophages are highly similar', *mSystems*, 1(2):e00030-15 (2016) (**editor's pick**)
- R. Mariano, S. Wuchty, M. Vizoso-Pinto, R. Haeuser and P. Uetz, 'The interactome of *S. pneumoniae* and its bacteriophages show highly specific patterns of interactions among bacteria and their phages', *Nature Sci. Rep.*, 6, 24597 (2016) (**F1000 recommended**)
- S. L. Keasey, M. Natesan, C. Pugh, T. Kamata, and R.G. Ulrich, 'Networks of binary protein interactions from the plague bacterium *Yersinia pestis*', *Mol. Cell. Prot.*, 15, 3220-3232 (2016)
- M. Sordo, S. Wuchty and M. Ogihara, 'An analysis of the evolution of research groups and topics in the ISMIR conference', 16th Intl. Soc. for Music Information Retrieval Conf. (2015)
- S.L. Keasey, M. Natesan, C. Pugh, T. Kamata, S. Wuchty and R.G. Ulrich, 'The road to linking genomics and proteomics of pathogenic bacteria: from binary protein complexes to interaction pathways', *BMC Bioinformatics*, 16 (Suppl 2):A9 (2015)
- S. Khuri and 'Essentiality and centrality in protein interaction networks revisited', *BMC Bioinformatics*, 16:109 (2015)

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- S. Wuchty, 'Controllability of protein interaction networks', *Proc. Natl. Acad. Sci. USA*, 111 (19) 7156-7160 (2014)
- S.V. Rajagopala, P. Sikorski, A. Kumar, R. Mosca, J. Franca-Koh, S. B. Pakala, J. Vlasblom, R. S. Phanse, A. Ceol, R. Häuser, G. Siszler, S. Wuchty, A. Emili, M. Babu, P. Aloy, P. Uetz and R. Pieper, 'Binary Protein-protein Interaction Landscape of *Escherichia coli*', *Nature Biotechnol.*, 32, 285-290 (2014)

- R. Häuser, A. Ceol, S.V. Rajagopala, R. Mosca, G. Siszler, N. Wermke, F. Schwarz, S. Wuchty, P. Aloy and P. Uetz, 'An extended protein interaction network of *H. pylori*', *Mol. Cell. Proteomics*, 13: 1318-1329 (2014)
- C. Butler, O. Lucas, S. Wuchty, B. Xue, V. Uversky and M.W. White, 'Identification of novel pan-picomplexa cell cycle regulated genes', *PLoS One*, 9(5), e97625 (2014)
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- S. Blasche, S. Arens, A. Ceol, G. Siszler, M.A. Schmidt, R. Häuser, F. Schwarz, S. Wuchty, P. Aloy, P. Uetz, T. Stradal and M. Kögl, 'The EHEC-host interactome reveals novel targets for the translocated intimin receptor', *Nature Sci. Reports*, 4: 7531 (2014)

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- Y. Huang, S. Wuchty and T. Przytycka, 'eQTL epistasis – challenges and computational approaches', *Front. Genet.* 4, 51, (2013)
- H. Nishi, M. Tyagi, S. Teng, B. Shoemaker, K. Hashimoto, E. Alexov, S. Wuchty and A. Panchenko, 'Glioblastoma missense mutations alter binding properties of proteins and their interaction networks', *PLoS One*, 8(6): e66273, (2013)
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- Y.-A. Kim, R. Salari, S. Wuchty and T. Przytycka, 'Module Cover – A New Approach to Genotype-Phenotype Studies', *Pac. Symp. Bioinf.*, 18:135-146, (2013)
- B. Shoemaker, S. Wuchty and A. Panchenko, 'Computational Large-Scale Mapping of Protein-Protein Interactions Using Structural Complexes', *Curr. Protoc. Prot. Sci.* 73:3.9.1-3.9.9, (2013)
- S. Wuchty, D. Arjona and P.O. Bauer, 'Important miRs of pathways in different tumor types', *PLoS Comp. Biol.*, 9(1): e1002883, (2013)
- S. Wuchty, A. Vazquez, S. Bozdogan and P.O. Bauer, 'Genome-wide Associations of Signalling Pathways in Glioma Subtypes', *BMC Med. Genomics*, 6:11, (2013)
- A.L. Vogel, K.L. Hall, S.M. Fiore, J.T. Klein, L.M. Bennett, H. Gadlin, D. Stokols, L.C. Nebeling, S. Wuchty, K. Patrick, E.L. Spotts, C. Pohl, W.T. Riley and H.J. Falk-Krzesinski, 'The Team Science Toolkit: Enhancing Research Collaboration Through Online Knowledge Sharing', *Am. J. Prev. Med.*, 45(6), 787-789, (2013)

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- B. Jones, S. Wuchty and B. Uzzi, 'Multi-University Research Teams: Shifting Impact, Geography, and Stratification in Science', *Science*, 322, 1259-1262, (2008)

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- S. Wuchty, B. Jones and B. Uzzi, 'The Increasing Dominance of Teams in the Production of Knowledge', *Science*, 316, 1036-1039, (2007)
- S. Wuchty, B. Jones and B. Uzzi, 'Science Commentary: Why do Team-Authored Papers get cited more?', *Science*, 317, 1496-1498, (2007)
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