Bioinformatics Seminar Series

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14:00-15:30 at CB207

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The Biological Carbon Pump from Genes to the Ecosystem

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The biological carbon pump is the process by which CO2 is transformed to organic carbon via photosynthesis, exported through sinking particles, and finally sequestered in the deep ocean. Dr. Lionel Guidi is a coordinator of *Tara* Oceans for the aspect of oceanography. Dr. Guidi developed a method to measure vertical carbon flux with the use of under vision profiler (UVP). With this measurement on board Tara, Dr. Guidi and his colleagues have been investigating the correlation between the intensity of the biological carbon pump and plankton community compositions/networks.

Reference

Guidi, L., Chaffron, S., Bittner, L., Eveillard, D., Larhlimi, A., Roux, S., Darzi, Y., Audic, S., Berline, L., Brum, J., Coelho, L.P., Espinoza, J.C., Malviya, S., Sunagawa, S., Dimier, C., Kandels-Lewis, S., Picheral, M., Poulain, J., Searson, S., Tara Oceans Consortium Coordinators, Stemmann, L., Not, F., Hingamp, P., Speich, S., Follows, M., Karp-Boss, L., Boss, E., Ogata, H., Pesant, S., Weissenbach, J., Wincker, P., Acinas, S.G., Bork, P., de Vargas, C., Iudicone, D., Sullivan, M.B., Raes, J., Karsenti, E., Bowler, C., Gorsky, G. Plankton networks driving carbon export in the oligotrophic ocean. Nature, 532, 465-470 (2016).