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Doga Gülhan / Harvard Medical School (Boston) 15 mins talk + 5 mins questions

Tuesday, 19 November 2019 17:30 (20 minutes)

Doga holds a PhD in physics of the MIT during which she worked on heavy-ion collisions and continued this research during her fellowship at CERN. Currently, she is a postdoctoral fellow in the Park lab in the Department of Biomedical Informatics at Harvard Medical School. She is interested in identifying genomic markers that can be used in clinics to improve treatment decision for cancer, and to study mechanisms that lead to resistance. She did extensive work on mutational processes in cancer, and algorithms to study the specific pattern of mutations caused by these processes called "signatures". The mutational signatures of DNA damage repair mechanisms are of particular interest to her since patients with these deficiencies respond better to targeted treatments and immunotherapy. She developed a new tool called SigMA which can be used in clinics to detect signatures from low mutation counts. Currently, she is pursuing the new exciting possibilities SigMA opened up.