Computational fellow position - Noncoding RNA lab, University of Milan, Italy

A position for a computational fellow is available in the laboratory of Prof. Paolo Gandellini at the Biosciences Department, University of Milan, starting from February-March 2023. Main interest of the team is the study of the role of the "noncoding-ome" (i.e. the repertoire of noncoding RNAs, including microRNAs and long noncoding RNAs) in the development and progression of human cancer. Research includes functional dissection in tumor models using genome editing approaches followed by cellular, molecular and transcriptomic characterization. Research includes bioinformatic analyses of RNA-seq, ChIP-seq, RIP-seq, ChIRP-seq, long-read seq data. Applications from both <u>pre- and post-doctoral fellows</u> will be considered. Experience and independence in managing bulk and single cell RNA-seq is required. Competence in the analysis of long-read seq, ChIP-seq or ChIRP-seq will be well received.

For more information about ongoing projects, team, contract details please contact <u>paolo.gandellini@unimi.it</u>

To apply, please do not wait and submit your CV to paolo.gandellini@unimi.it.

Selected publications

Bezzecchi E, Pagani G, Forte B, Percio S, Zaffaroni N, Dolfini D, Gandellini P. *MIR205HG/LEADR Long Noncoding RNA Binds to Primed Proximal Regulatory Regions in Prostate Basal Cells Through a Triplex- and Alu-Mediated Mechanism*. **Front Cell Dev Biol. 2022** Jun 17;10:909097.

Tassinari M, Richter SN, Gandellini P. *Biological relevance and therapeutic potential of G-quadruplex structures in the human noncoding transcriptome*. **Nucleic Acids Res. 2021** Apr 19;49(7):3617-3633

Profumo V, Forte B, Percio S, Rotundo F, Doldi V, Ferrari E, Fenderico N, Dugo M, Romagnoli D, Benelli M, Valdagni R, Dolfini D, Zaffaroni N, Gandellini P. *LEADeR role of miR-205 host gene as long noncoding RNA in prostate basal cell differentiation*. **Nat Commun. 2019** Jan 18;10(1):307.

El Bezawy R, Cominetti D, Fenderico N, Zuco V, Beretta GL, Dugo M, Arrighetti N, Stucchi C, Rancati T, Valdagni R, Zaffaroni N, Gandellini P. *miR-875-5p counteracts epithelial-to-mesenchymal transition and enhances radiation response in prostate cancer through repression of the EGFR-ZEB1 axis.* **Cancer Lett. 2017** Jun 1;395:53-62.

Gandellini P, Profumo V, Casamichele A, Fenderico N, Borrelli S, Petrovich G, Santilli G, Callari M, Colecchia M, Pozzi S, De Cesare M, Folini M, Valdagni R, Mantovani R, Zaffaroni N. *miR-205 regulates basement membrane deposition in human prostate: implications for cancer development*. **Cell Death Differ. 2012** Nov;19(11):1750-60.

Gandellini P, Folini M, Longoni N, Pennati M, Binda M, Colecchia M, Salvioni R, Supino R, Moretti R, Limonta P, Valdagni R, Daidone MG, Zaffaroni N. *miR-205 Exerts tumor-suppressive functions in human prostate through down-regulation of protein kinase Cepsilon*. **Cancer Res. 2009** Mar 15;69(6):2287-95.