

An international call on www.crs4.it

COVID-19: CRS4 makes available to the scientific community the core facility massive sequencing for studies on SARS-CoV-2

The CRS4 (Research, Development, Higher Studies Center in Sardinia) for 30 years active in the field of research on enabling digital technologies and in particular on Biosciences, opens to international collaboration with partners who want to test the use of genomic sequencing, bioinformatics and data analysis technologies. The machines of the NEXT massive sequencing facility (<http://next.crs4.it>) located in the Technology Park of Pula (Cagliari), will be made available to researchers from all over the world who will have the opportunity to request access remotely with a priority procedure - i.e. without having to physically move to the Pula laboratories - to carry out experiments useful for studying and developing new diagnostic methodologies, new therapies, carrying out sequence studies to support the development of vaccines, identifying the best treatments for the treatment of the disease, supporting epidemiological monitoring useful for modulating the impact of public health interventions, using massive sequencing technologies on samples of non-pathogenic nucleic acids.

The call is highlighted in the homepage of the NEXT Laboratory (<http://next.crs4.it>).

The researchers operating at CRS4 will carry out sequencing experiments at the Illumina certified laboratory. CRS4 researchers are available to collaborate to check if there are opportunities in the use of massive sequencing technologies, to define the design of the experiments, and to identify the best ways to use the machines.

The Center for Research, Development and Higher Studies in Sardinia (CRS4) - <http://www.crs4.it> - is an interdisciplinary research center based in Pula (Cagliari). The center develops and applies innovative solutions in a large number of important domains by exploiting its strengths in various scientific and technological disciplines. CRS4 operates a high-throughput sequencing facility (<http://next.crs4.it>) equipped with the latest Illumina technology (1 Illumina HiSeq 3000, 3 HiSeq 2000 / HiSeq 2500 and 1 MiSeq). This facility is one of the largest NGS sequencing facility in Italy and one of the most important in Europe. The facility is tightly integrated with a leading High Performance Computing (HPC) center equipped with a concentration of high computing power and large-scale centralized and distributed storage systems. Based on a unique combination of a strong research and development program in enabling technologies for data intensive applications, experimental technologies and computational resources, this integrated infrastructure represents an European reference of integrated computing and experimental infrastructure to support biomedical research. Furthermore, at national level, the CRS4 is a driver in the application of NGS by developing experimental and computational procedures that can handle the gigantic data flow generated by high processivity instrumentation and extract significant data from the combined analysis of the entire genome, exome and transcriptome.

For further information

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