

FLUIDS TRANSCRIPTOMICS

FLOMICS

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Flomics

- Flomics was born in late 2018
- Our goal is to bring genomics (NGS-based) tests to the clinical practice
- Our main expertise is in liquid biopsy test (blood, plasma, urine, saliva, ...)
 - Oncology, brain development, male infertility, ...
- We have molecular lab + bioinformatics capacity
- Flomics can act as main developer or collaborator in any NGS-based project

During COVID-19 pandemic we decided to apply our know-how in RNA sequencing and analysis to help sequencing SARS-CoV-2 virus and managing this major treat.



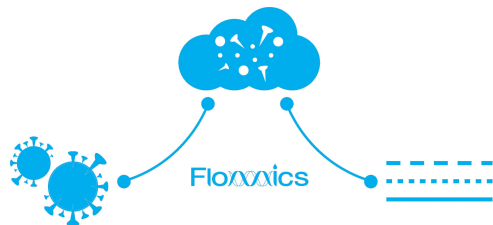
Flomics is part of the Barcelona Biomedical Research Park (PRBB) in Barcelona, Spain

- one of the largest hubs of biomedical research in southern Europe



Flomics is supporting the implementation of Fiocruz' binational laboratory in Portugal

- cooperating in the Science, Technology and Health Innovation between Brasil and Europe*



Flomics is analysing COVID-19 NGS data for our partners

- enabling any hospital, research or clinical lab to extract the most value out of their virus sequencing data

COVID-19 DETECTION PROBLEM



<5% OF THE CASES
ARE BEING DETECTED



NO PROGNOSIS
INFORMATION AT ALL



NO TOOL TO GUIDE
HEALTH CARE
PRACTICES

**WE'RE JUST REACTING
TO THE SYMPTOMS!!**

**OUR KEY
MESSAGE IS:
TEST, TEST,
TEST**

World Health Organization

THE SOLUTION: NGS-BASED TESTING



VIRAL LOAD CALCULATION -
ASSOCIATED WITH AGGRESSIVENESS



COMPLETE SEQUENCE OF THE VIRUS
INFECTING EACH PATIENT
- VARIANTS INTERPRETATION



PHYLOGENETIC STUDY
- TO IDENTIFY TRANSMISSION CHAINS

NGS POSSIBLE APPLICATIONS



DIAGNOSIS



MONITORING



PHYLOGENETICS



TARGET
THERAPEUTICS



GENETIC
VARIANTS



STRATIFICATION

IT GIVES US THE POSSIBILITY TO ACT AND NOT REACT

MANY COMPANIES/INSTITUTIONS HAVE DEVELOPED SUCH KITS AND ARE ALREADY ON THE MARKET



UNFORTUNATELY HOSPITALS AND DIAGNOSIS LABS CANNOT ANALYSE THIS DATA



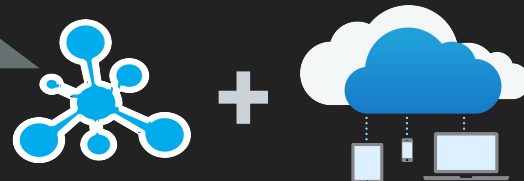


HOSPITALS AND LABS WITH THE NEED TO
DIAGNOSE AND TREAT PATIENTS

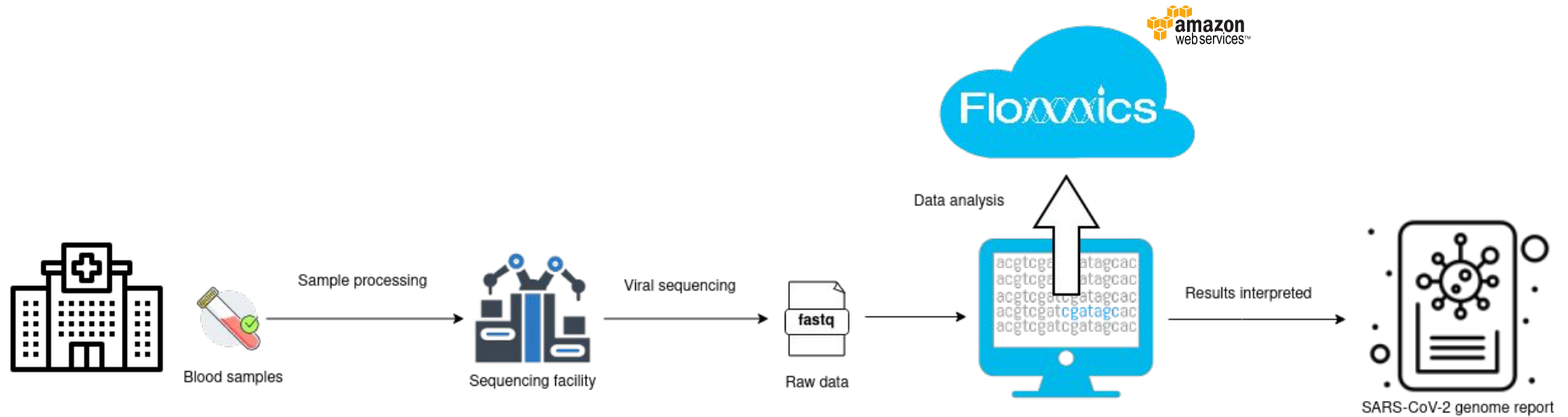


BIOTECH COMPANIES SELLING NGS KITS /
SERVICES

Floxxmics



AUTOMATED DATA ANALYSIS PIPELINE
IN THE CLOUD
NO NEED FOR BIOINFORMATICS
NO NEED FOR COMPUTATIONAL RESOURCES





The image shows a login and registration form for 'Floxxics SARS-CoV-2 Analysis'. The form is centered on a dark blue background. It includes fields for 'Email*' and 'Password*', a 'LOGIN' button, a 'REGISTER' button, a 'LOGIN WITH DEMO ACCOUNT' button, a 'FORGOT PASSWORD?' link, and an 'ABOUT US' button.

Floxxics

SARS-CoV-2 Analysis

Email*

Password*

LOGIN REGISTER

LOGIN WITH DEMO ACCOUNT

FORGOT PASSWORD?

ABOUT US

- Dashboard
- Submit a New Request
- Analysis Results
- Support Center
- User Manual

Last 7 Days

- 0 Pending Requests
- 0 Analysis with Error
- 2 Completed Analysis
- 2 Total Requests

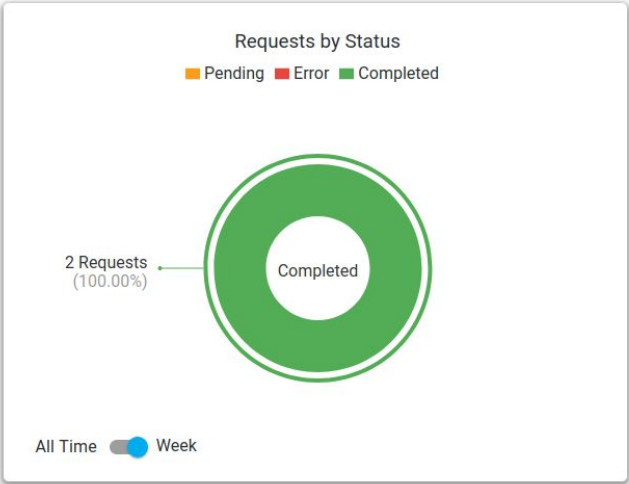
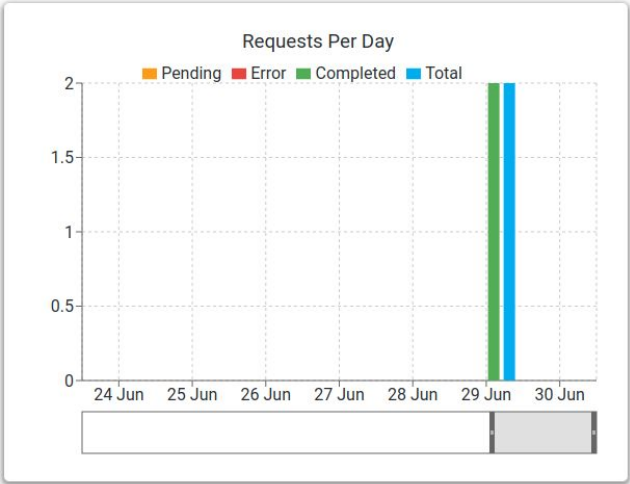
All Time






- 0 Pending Requests
- 0 Analysis with Error
- 4 Completed Analysis
- 4 Total Requests

Account

- 0 Credits Available
- 10 Credits Spent
- 10 Credits Redeemed

ACCOUNT SETTINGS



-  Dashboard
-  [Submit a New Request](#)
-  Analysis Results
-  Support Center
-  User Manual



Select Pipeline



Fill Form



Upload Request

Protocol Type*

- ☐ Metagenomic-seq
☐ Amplicon-seq

Sequencing Type*

- ☐ Illumina Single-end
☐ Illumina Paired-end

Sample Names*

sample1
sample2



Sequencing Kit*



Sample Files*

sample1_R1.fastq.gz
sample1_R2.fastq.gz
sample2_R1.fastq.gz
sample2_R2.fastq.gz



Request cost: 0 credits

[PREVIOUS STEP](#)[SUBMIT REQUEST](#)



Dashboard



Submit a New Request



Analysis Results



Support Center



User Manual



0 Pending Requests



0 Analysis with Error



4 Completed Analysis



4 Total Requests

Request ↓	Status	Pipeline	Samples	Sequencing Type	Submission Date	Completed At
16	Completed	COVID-19 NGS data analysis	4	Illumina Paired-end	2020-06-29 11:54:14	2020-06-29 13:57:48
		Sample	Report	Outputs		
		Full Analysis	SHOW FULL REPORT	DOWNLOAD		
		2020-04-04-3027_S1	SHOW SAMPLE REPORT			
		2020-04-04-3029_S2	SHOW SAMPLE REPORT			
		2020-04-17-3052_S3	SHOW SAMPLE REPORT			
		2020-04-18-3049_S4	SHOW SAMPLE REPORT			
15	Completed	COVID-19 NGS data analysis	1	Illumina Paired-end	2020-06-29 11:40:35	2020-06-29 11:52:56
2	Completed	COVID-19 NGS data analysis	4	Illumina Paired-end	2020-06-22 23:12:59	2020-06-22 11:29:04
1	Completed	COVID-19 NGS data analysis	1	Illumina Paired-end	2020-06-22 22:59:21	2020-06-22 11:29:04

Search

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General statistics
Number of trimmed reads
Number of mapped reads
Coverage
Trimmed primers from reads
Number of variants
Taxonomy
Parameters
Contact

Number of trimmed reads

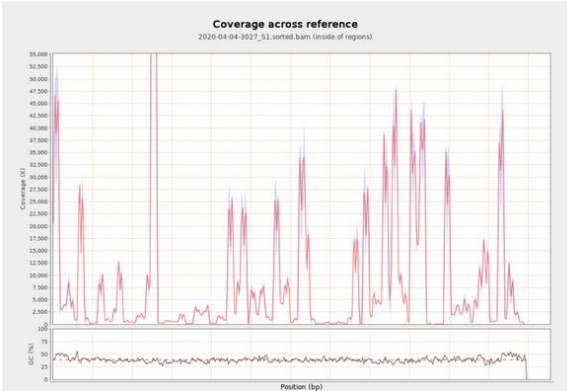
2020-04-04-3027_S1	Filtered_reads
R1	273213
R2	273213

Number of mapped reads

	value
Paired reads for mapping	970689
%mapped reads	99.53%
mapped reads	966127

Coverage

coverage	Percentage
Genome covered (1X)	99.87%
10X	98.99%



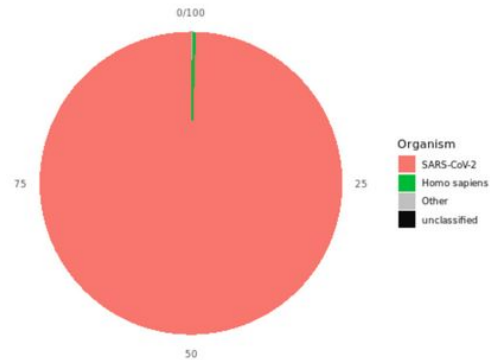
[General statistics](#)[Number of trimmed reads](#)[Number of mapped reads](#)[Coverage](#)[Trimmed primers from reads](#)[Number of variants](#)[Taxonomy](#)[Parameters](#)[Contact](#)

Number of variants

	value
Number of variants detected	20
DEL	3
INS	1
SNP	16

Taxonomy

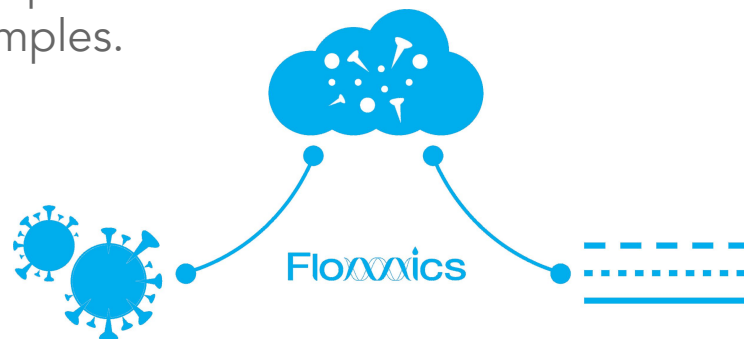
Figures



Register and try for free our platform at <https://www.flomics.com/covid19/>

If you use the voucher **"ENRICH-BRAZIL"** in our platform
your get 25 FREE extra credits to analyse your samples.

Contact us at info@flomics.com for more info.
Tell us about your projects and we'll help
you to find the best solution.



My contact details:

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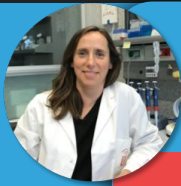
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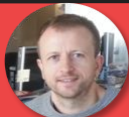
CBO
Market access
Business
development



ADVISORS



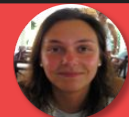
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Dr. Ceres Fernandez
IDIS Santiago



THANK YOU



