Genomics Core services and procedures

Getting started with metagenomics projects and Bio-IT

Working with the genomics core requires a little bit of

COURTing

Working with the genomics core requires a little bit of

COURTing

Contact us

Orgnaisation code

User account

Request a project

Transport of samples

Contact us

info@genomicscore.be

Why?

→ Information on available techniques and equipment

→ Pricing

→ Practical guidelines

→ We can provide help with experimental design

→ Contact us **before** starting your experiments

→ During experiment we can provide support as well

Organization code

www.genomicscore.be/request

To be able to request a project, three steps need to be taken:

1. The Principal investigator needs to be registered
2. Register as a user
3. You have to submit a project request

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info@genomicscore.be

- Pi name
- Tax id
- Address
- City
- Country
- Email

Organization code

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info@genomicscore.be

- Pi name
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Dear,

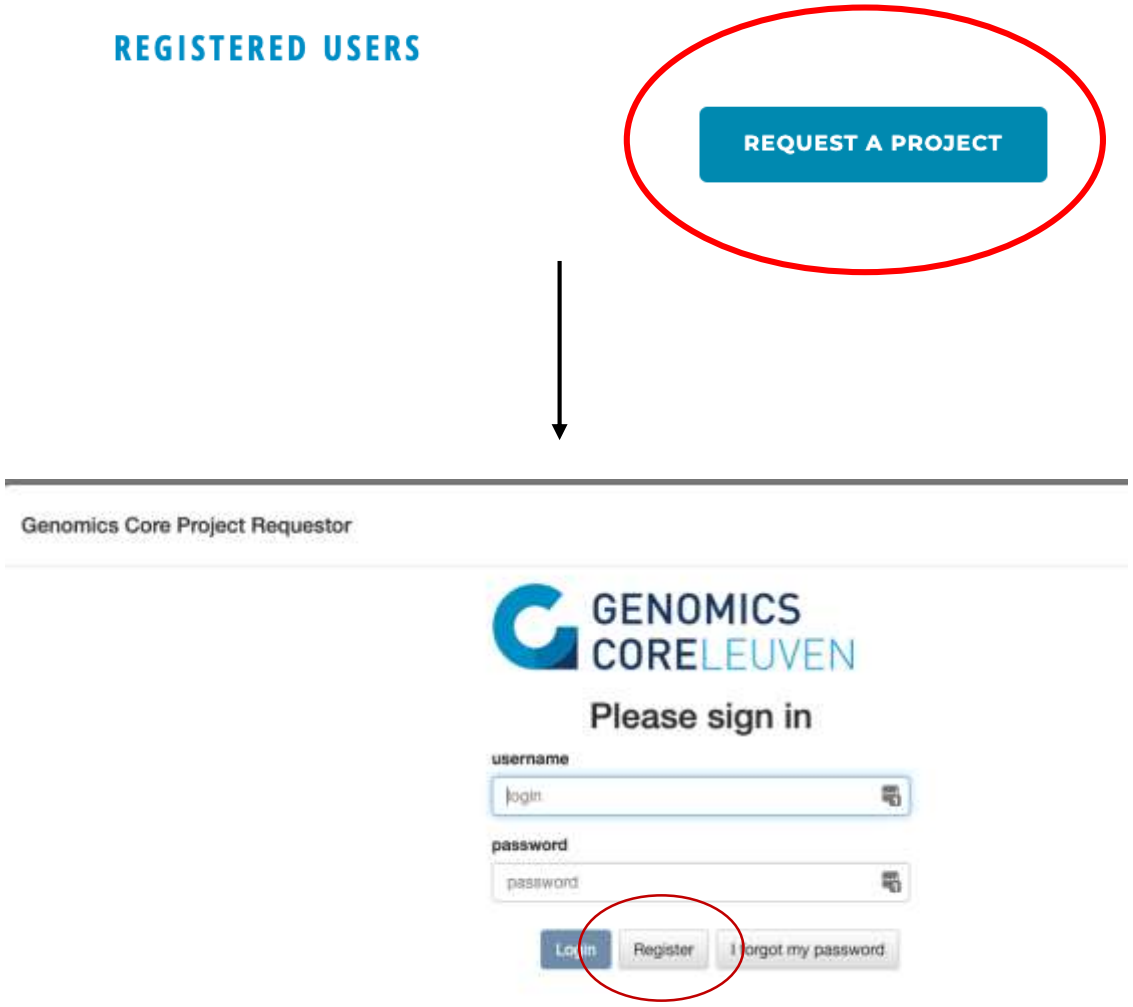
Your organization has been registered with genomics core. From now on your staff can request projects your organization code is:

b995e036-a335-4bc6-86b4-8ee485e5089f

. We look forward to working with you.

The Genomics Core Leuven Team.

User account



User account

REGISTERED USERS

REQUEST A PROJECT

Create account

username

Username

email

email adres

password

Password

repeat password

Control Password

organization

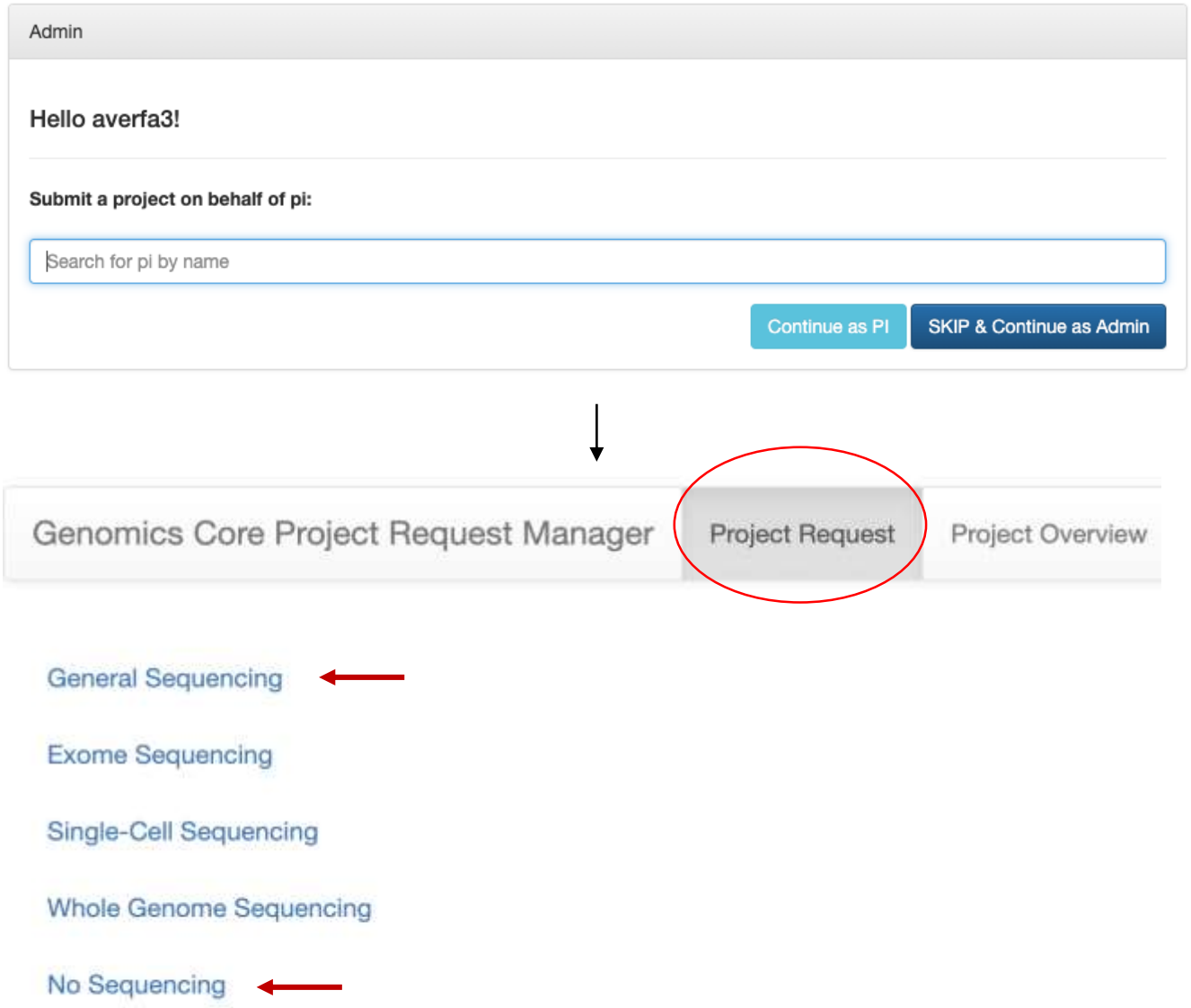
Organization

Organisation code

Create account

Request a project

Request a project



Request a project

→ Try to give as much info as you can

→ If in doubt, put a comment in the “remarks”

→ Essential: **nr of samples**

→ determines the nr of GC codes assigned to your project

GC1003046

GC1003047

GC1003048

GC1003049

GC1003050

Each sample you bring in to the core needs to be labeled with a unique GC code

Allows for clear tracking during processing

Transport of samples

Shipping

Bring them in person

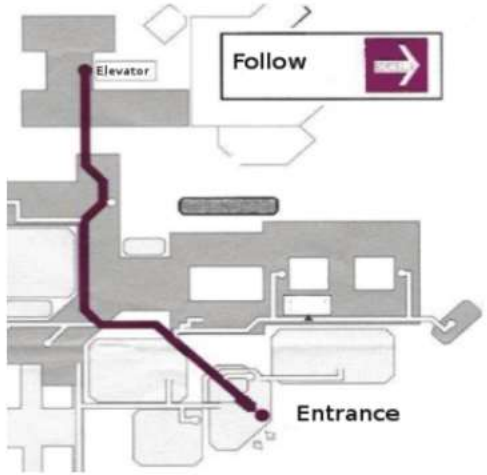
CONTACT ADDRESS

Genomics Core
Center for Human Genetics
UZ – KU Leuven
Herestraat 49 PO box 602
B-3000 Leuven
Belgium

www.genomicscore.be

info@genomicscore.be

The labs and offices of Genomics Core are situated at the 6th floor of O&N1



Office hours
Mo-fri
9h-17h

After sample submission

General turn around time

prep + sequence:	8 weeks
sequence only:	4 weeks
optimization of new protocol:	8+ weeks

→ counting from arrival of samples

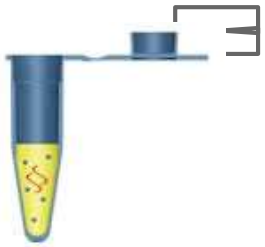
After sequencing

option 1:	you receive demultiplexed FASTQ files and analyze yourself
option 2:	we help you with analysis

Bioinformatics Consultancy Center

Genomics Core Leuven

- **Experimental Design**



- **Library Preparation**

- **Sequencing**

- **Bioinformatics**

- Follow up and support

HELP

Bioinformatics Analysis

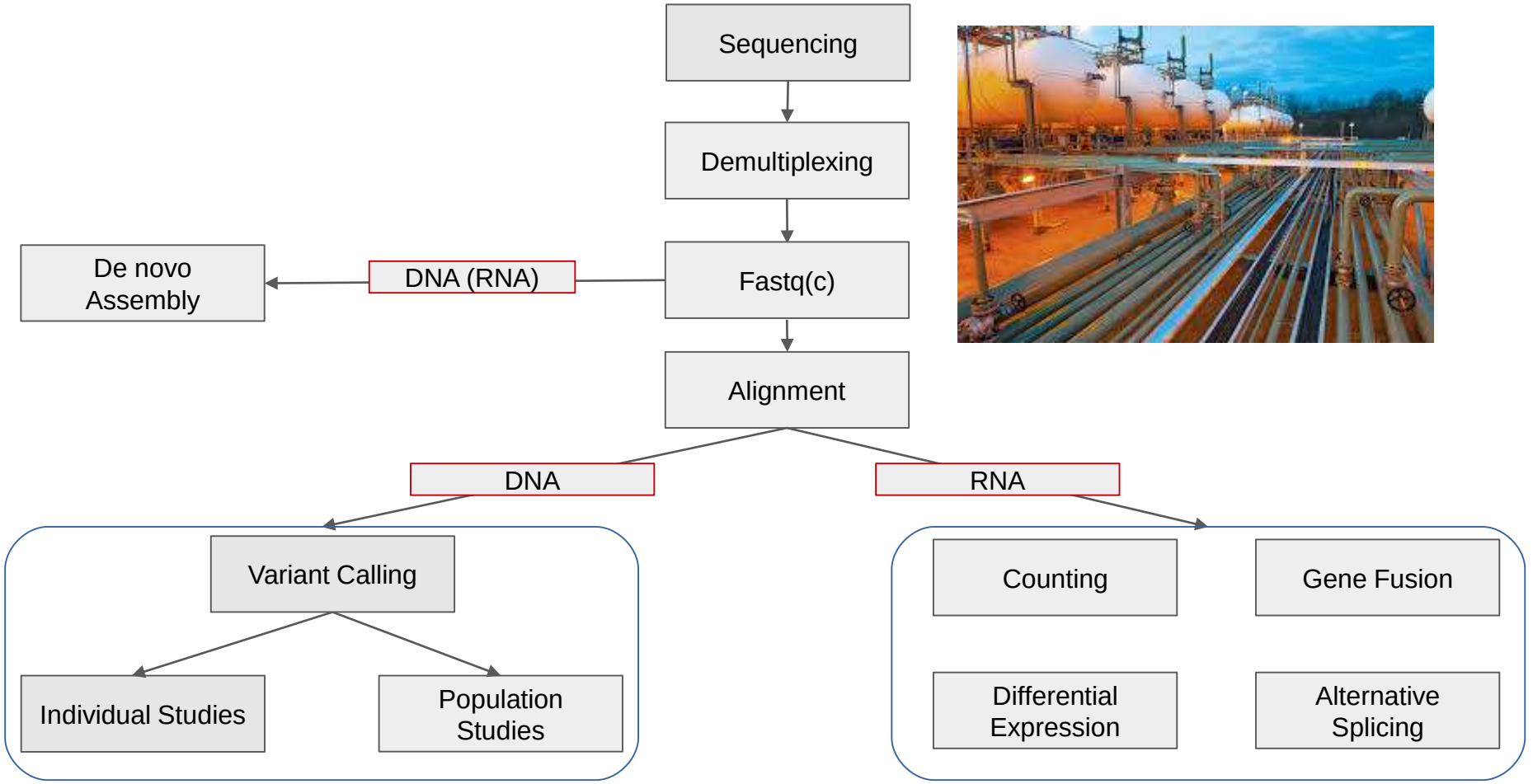
Self

Hybrid

Genomics Core

Flemish Super Computer

NGS Pipeline



Bioinformatics Analysis Pipelines Genomics Core

DNA

- WGS
- SNP
- GBSX

RNA

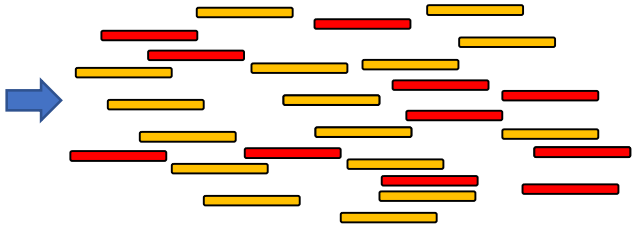
- Differential Expression
- Gene Fusion
- Alternative Splicing (Pacbio)

Single Cell

- RNA
  - Seurat
  - Scater

Sequencing data flow

Sequencing

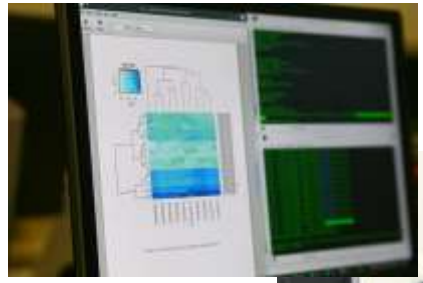


Raw Data

Google Bucket

Custom Bioinformatics Projects

- Analysis is completely or partly developed by the Genomics Core
- Duration is project dependent, usually between 2 days to 2 weeks
- Together with the user
- Good alternative if bioinformatics expertise of infrastructure is not readily available…
- …But is has a cost
- Interested? Drop us a line at info@genomicscore.be



VSC: Flemish Super Computer

Supported by

fwo

Started 2007

Credit: VSC

Tier-0
Europe

PRACE

EuroHPC

Project proposals

Vlaanderen
is supercomputing

Tier-1
Flanders

BrENIAC

Access for all academics
and students

Tier-2
University

GHENT UNIVERSITY — STEVIN

VUB VRIJE UNIVERSITEIT BRUSSEL — HYDRA

Universiteit Antwerpen — HOPPER/LEIBNIZ

KU LEUVEN UHASSELT — THINKING/GENIUS

Credit: VSC

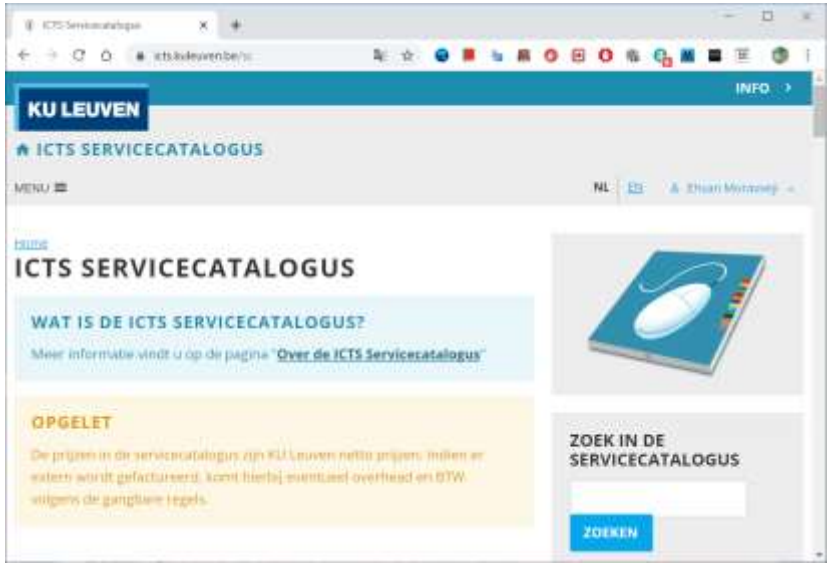
Joining VSC – for project leaders

- Request project credits (for supervisors and project leaders)
  - You need to create a VSC group
    - Add users to the group to give them access to use credits
    - Fill out the request form
  - You can join an existing group

- Extra storage requests

- All service costs (compute and storage) are all explained
  Go to ICTS service catalogus: https://icts.kuleuven.be/sc
  Click on High Performance Computing (NL/EN)

- Talk for support via hpcinfo@kuleuven.be



Specialized Bioinformatics Support for VSC?
Info@genomicscore.be

- Workshops
- Trainings
- Individual or group sessions

On behalf of the Genomics Core Leuven

Thank You!