

PRESENTATION

The **National DNA Bank**, created in 2004, is a technological platform supporting biomedical research with the aim of promoting genetic and genomic research in Spain.

The **National DNA Bank** has become a national and international reference biobank for the management of biological samples, not only for its facilities and technical capacities but also for the unique and singular sample collections that offers to the scientific community.

For the collection of samples and data the biobank has collaborated with more than **60 associated centers** distributed within all the country including hospitals, regional transfusion centers, blood banks, foundations, universities and other public institutions.

QUALITY MANAGEMENT SYSTEM

The **National DNA Bank** has developed, documented and implemented a **quality management system (QMS)** according to **UNE-EN-ISO 9001:2015** model, as a basic strategy for increasing the user's and other interested parties satisfaction by guarantying the fulfillment of their requirements.



16/03/2004

16/03/2021

BIOSPECIMEN PROFICIENCY TESTING

The **National DNA Bank** has participated in a Proficiency Testing (PT) programme, endorsed by the International Society for Biological and Environmental Repositories (**ISBER**). This quality assessment tool verify the precision and accuracy of our biospecimen testing methods, and the efficiency of our processing methods.

Resulting of this validation, the following processes have obtained the qualification of **“satisfactory/ very satisfactory”** for the processes of:

- DNA and RNA Extraction from whole blood
- DNA and RNA Quantification and purity
- DNA and RNA Integrity

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NATIONAL DNA BANK...

...is not a target in itself but a tool for cooperative research

ACTIVITY

17 YEARS WORKING FOR THE IMPROVEMENT OF BIOLOGICAL RESEARCH

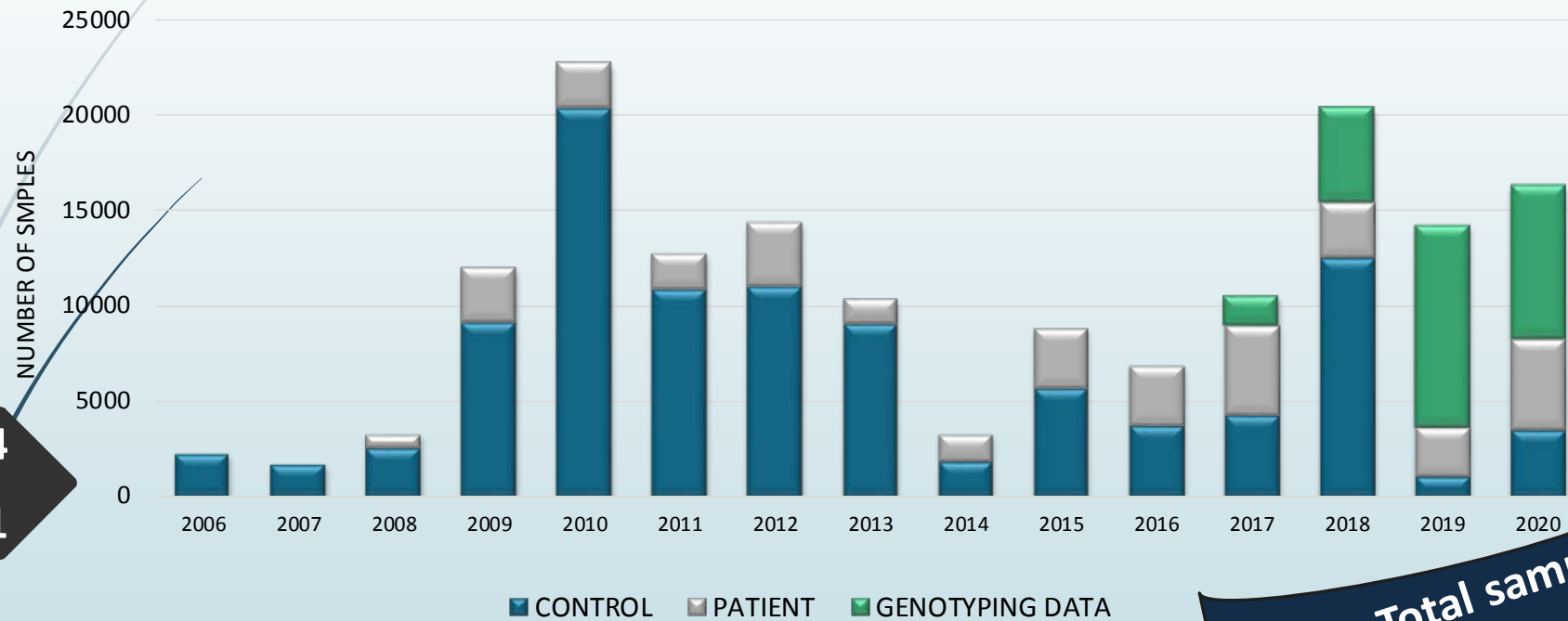
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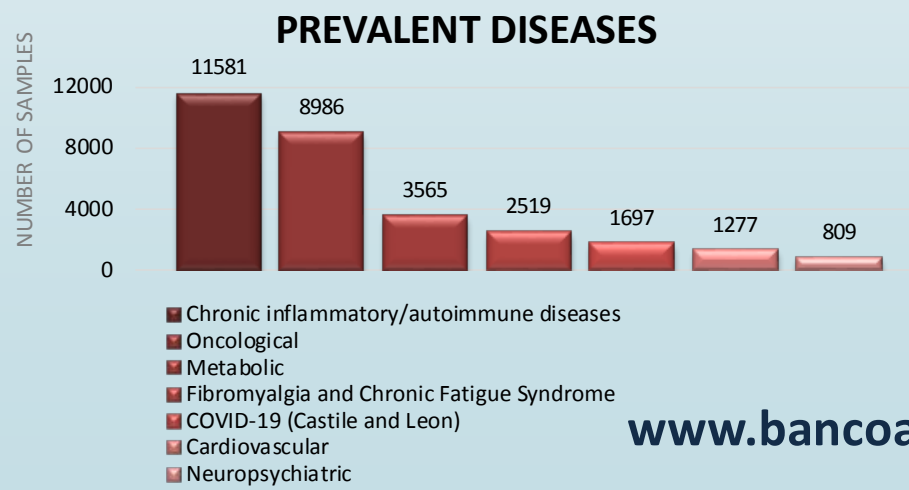
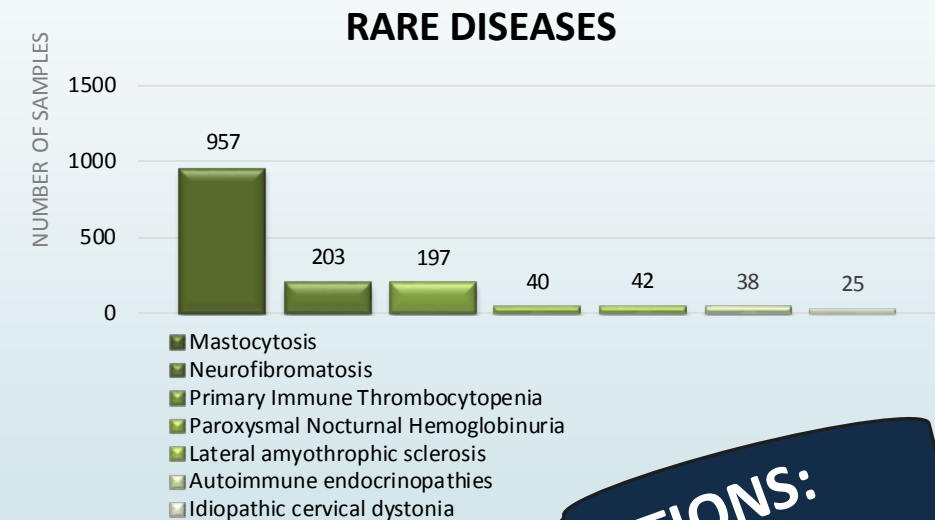
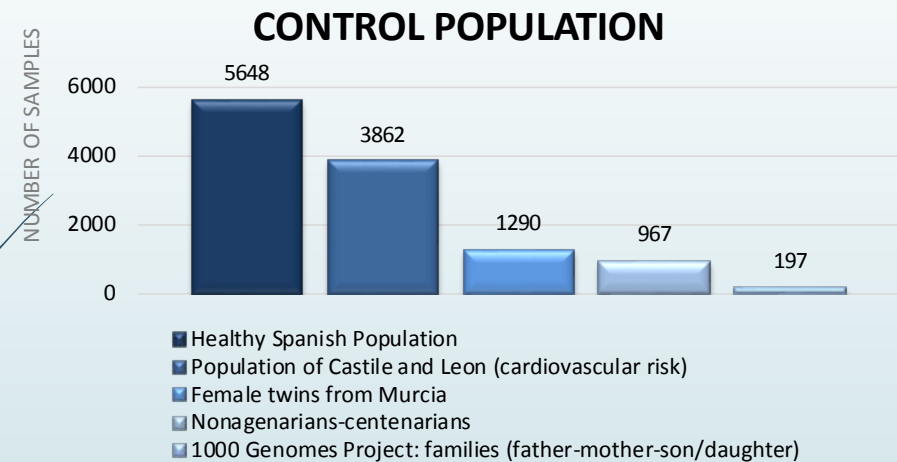
NUMBER OF SAMPLES DISTRIBUTED TO RESEARCH GROUPS:



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Total samples: 134.804
Total genotyping data: 25.208
Total research projects: 335

SUMMARY OF SAMPLE COLLECTIONS:



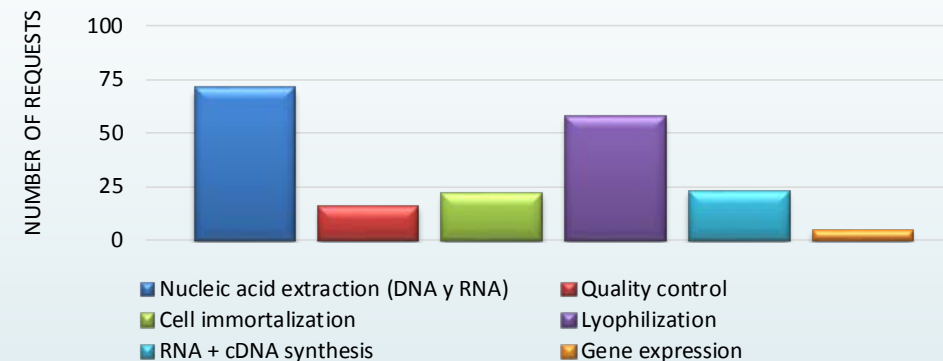
**TOTAL DONATIONS:
43.900**

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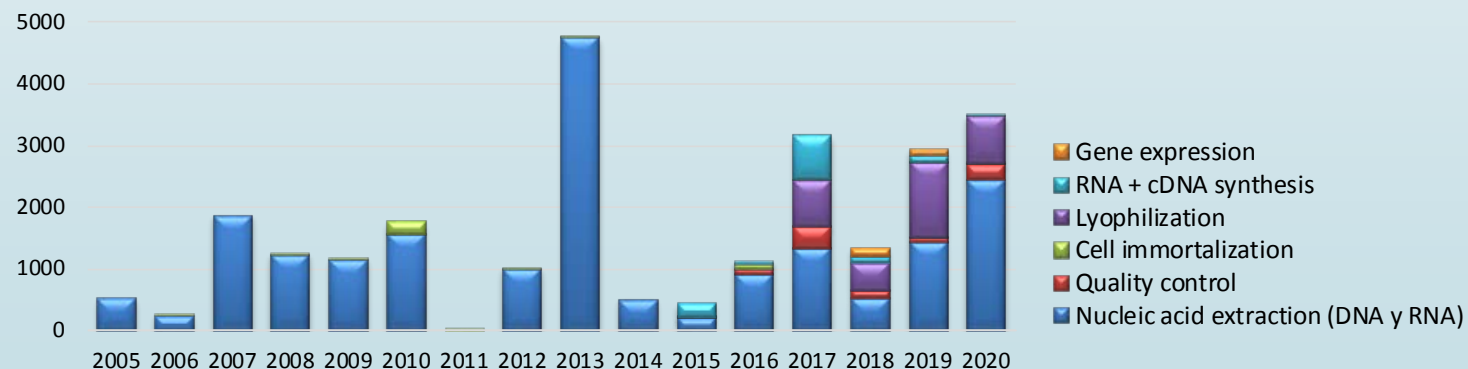
SERVICES PROVIDED:

- Nucleic acid extraction (DNA y RNA)
- Quality control of nucleic acids
- Cell immortalization
- Lyophilization
- RNA + cDNA synthesis
- Gene expression
- Others

TOTAL SERVICES REQUESTED



TOTAL SAMPLES PROCESSED



16/03/2004

16/03/2021

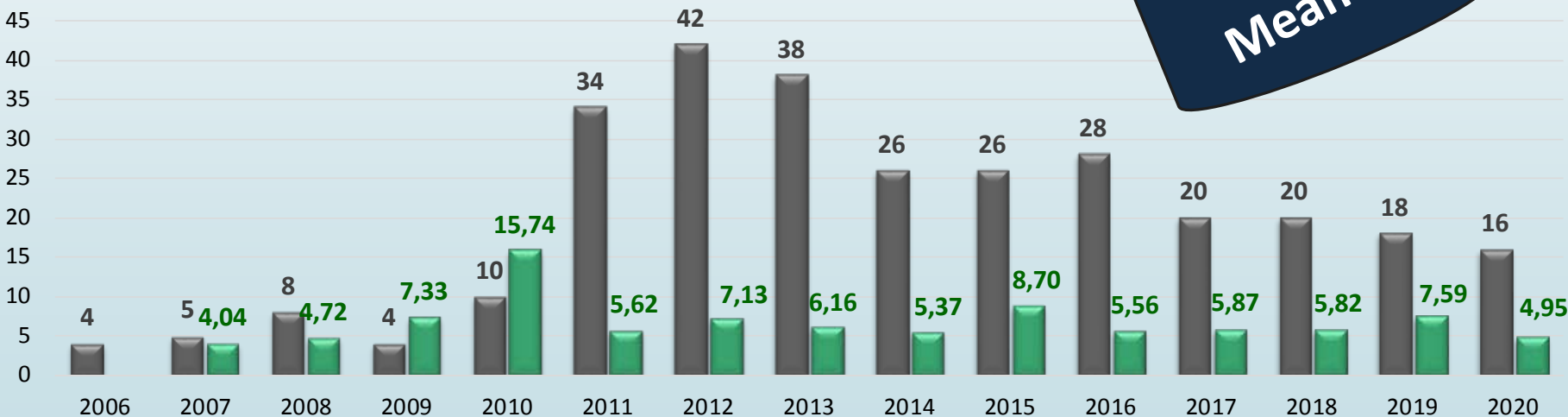
Total samples: 29.640
Total services: 205

NUMBER OF PUBLICATIONS AND IMPACT FACTOR:

Scientific publications derived from the samples distributed by the biobank.

Total publications: 299
Mean impact factor: 6,76

Number of publications and IF



■ N. Publications ■ Impact Factor

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TRAINING COURSES:

- **On site personalized educational courses at the biobank:** 1) general techniques at a DNA biobank.; 2) cell immortalization (lymphoblastoid cell lines); 3) quality control of nucleic acid samples/procedures; 4) quality management system for biobanks (ISO 9001:2015); 5) general biobanking course.
- **Educational workshops** in collaboration with the University of Salamanca.
- **Practical courses** for on-training technicians.
- **EXPERT TITLE in “Management and Handling of biological samples in Biobanks and other Biomedical Research Laboratories”** in collaboration with the University of Salamanca.

16/03/2004

16/03/2021

862 PARTICIPANTS

PARTICIPANTS IN TRAINING COURSES



COVID-19 PANDEMIC:

During the initial stage of COVID-19 pandemic, the biobank worked, in collaboration with the Microbiology Service of the University Hospital of Salamanca, in the design and adjustment of a RT-qPCR method for detection of SARS-CoV2 virus.

Since April 2020, we have been authorized by the Health Institute Carlos III, as a COVID-19 diagnostic center in support of the National Health System, specifically helping the Regional Health System of Castilla y León (SACyL). Since then, the biobank have diagnosed by RT-qPCR more than 18.000 individuals with suspected SARS-CoV2 infection.

Moreover, since March 2021, we are sequencing SARS-CoV2 samples in order to identify the virus strains present in our environment.