

# Creating value in health sciences at NOVA – implementation

## of biobanks in Infectious and Chronic Diseases

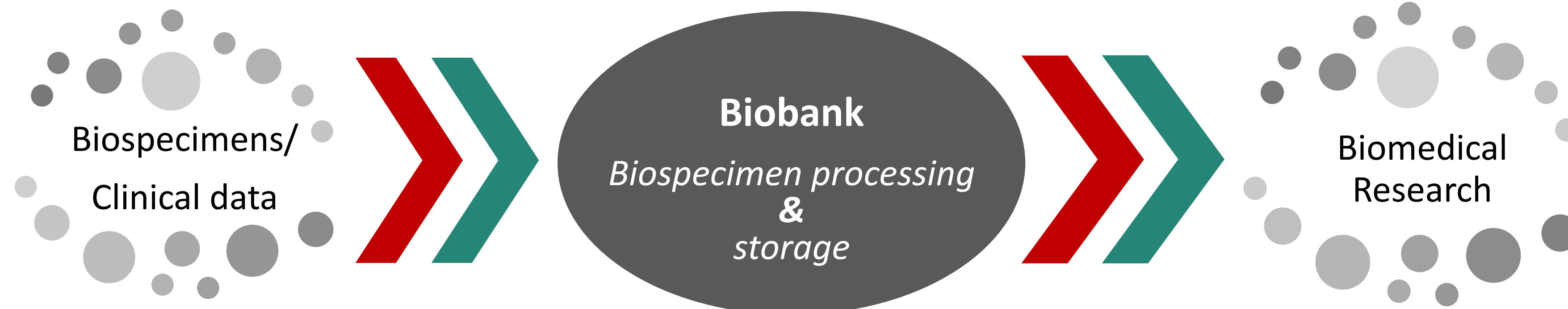
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**BIOBANKS** are considered key instrumental infrastructures in supporting biomedical research

At NOVA University of Lisbon (UNL) exist two local biobanks: **BIOTROP & CHRC-BIOBANK**



### Common Mission

Research collaboration in chronic and infectious diseases is essential to promote research excellence and health improvement worldwide. Together, they constitute a major asset at UNL to strengthen research quality and encourage national and international collaborations

#### Biotropical Resources

Created in 2016 to support research in tropical medicine and infectious diseases. This infrastructure is prepared to receive and provide biological samples of both human and non-human origin. Management is assured by two Coordinators (general and technical), a Scientific and a Technical Committees and external Consultants.

#### Best Practices, Ethical and Legal

- High quality adapted facility
- Follows the ISBER and OECD Best Practices
- Follows GDPR and Nagoya Protocol
- NOVA Data Protection Officer Approval

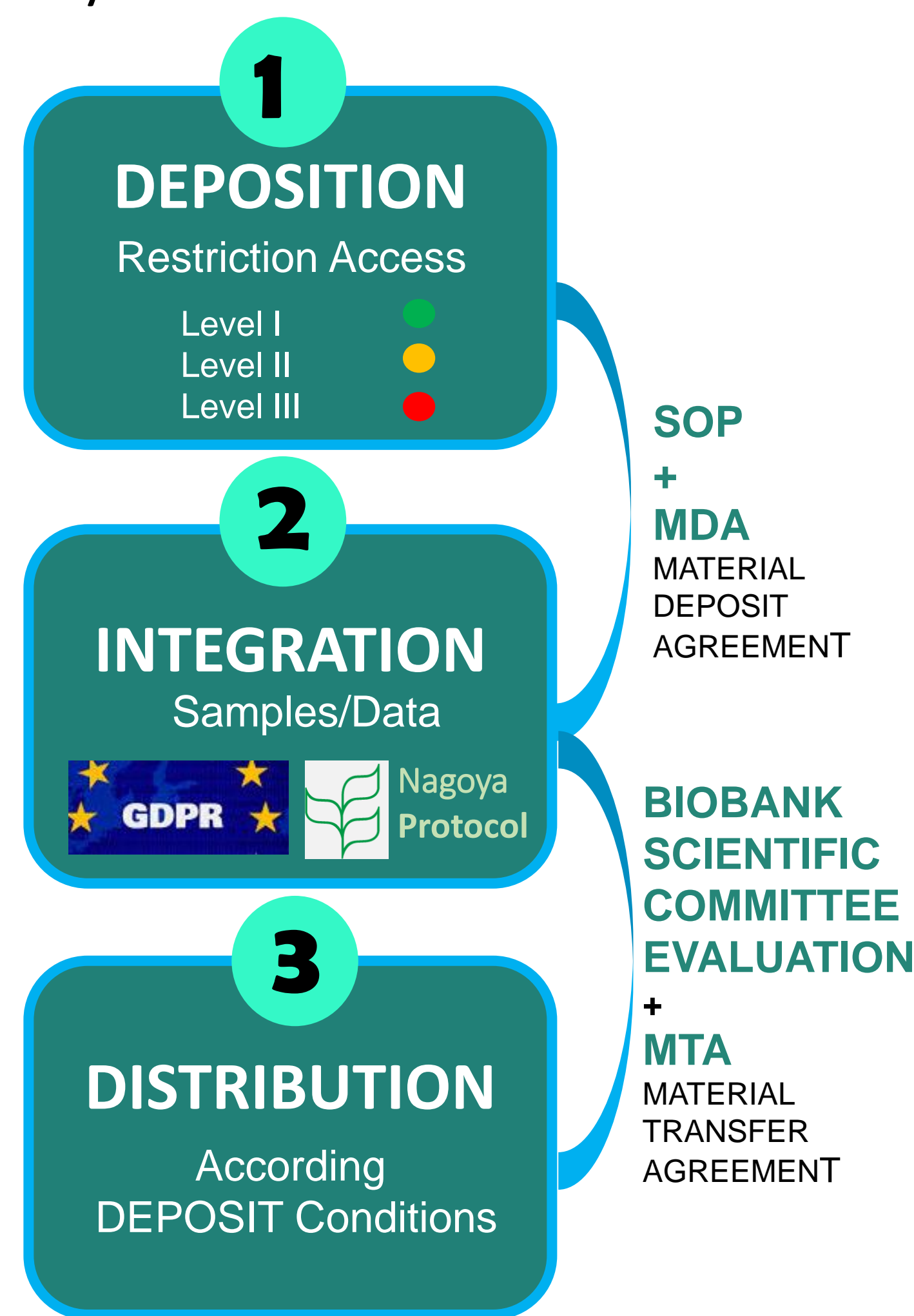


#### Resources and Services

- Collections:** pathogens, vectors, reservoirs and samples of human and companion animals origin
- Services:** Sample distribution, collections deposit, pathogen molecular typing and phylogenetic analysis

Table 1. Biotropical Resources collections

SAMPLES	COLLECTIONS	QUANTITY
NON-HUMAN SAMPLES	GHANA	
	<i>Anopheles gambiae</i>	13018
	<i>Culex quinquefasciatus</i>	1282
	Other insects	691
	Galba sp.	60
	<i>Radix spp.</i>	50
	<i>Physa sp.</i>	30
	DNA <i>Galba truncatula</i>	13
	DNA <i>Galba schirazensis</i>	2
	RNA <i>Rhipicephalus bursa</i>	219
RNA <i>Ixodes scapularis</i> (cell line IDE8)	14	
PORTUGAL	Kennel Cats blood	123
	Kennel Staff blood	25
	Sera Positive (Antibodies anti- <i>Leptospira interrogans</i> )	1037
	Sera Negative/Not Conclusive (Antibodies anti- <i>Leptospira interrogans</i> )	3478
	Fecal swab (Children)	215
	Microbiome - Polio Vaccine	215
	Nasopharyngeal swab (Children Microbiome - Polio Vaccine)	215
	DNA Fecal (Children)	215
	Microbiome - Polio Vaccine	215
	DNA Nasopharyngeal (Children)	215
Microbiome - Polio Vaccine	215	
TOTAL		20902



#### Achievements and Future Strategies

- IMPLEMENTATION OF THE INFRASTRUCTURE AND BIOBANKING ACTIVITIES
- MEMBER OF THE PT-mBCN, BIOBANCO.PT AT RNIE
- NATIONAL AND INTERNATIONAL DISSEMINATION AND NETWORKING
- FORMAL ESTABLISHMENT AS RESEARCH RESOURCE

Acknowledgments | We are grateful to all GHTM/ IHMT NOVA researchers for their collaboration and sample donation

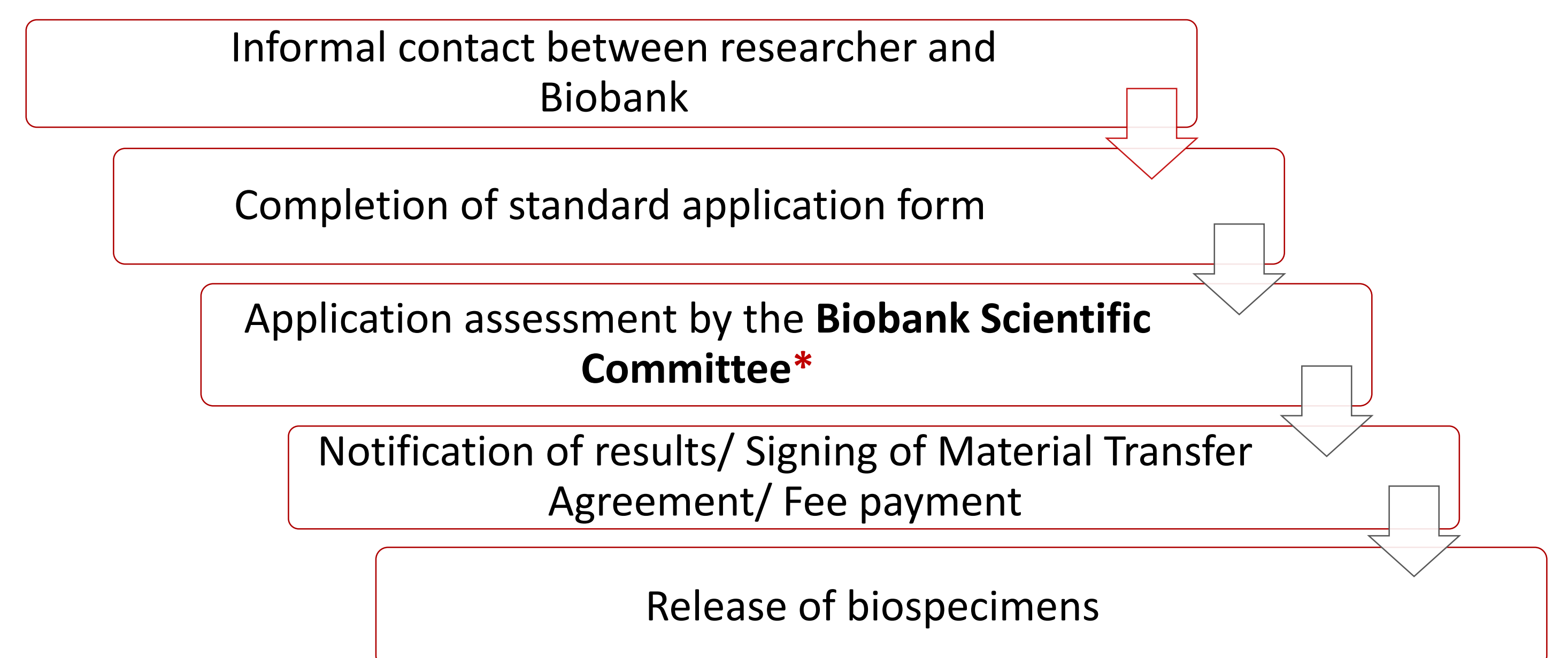
#### CHRC-Biobank

Created in 2020 as part of the Comprehensive Health Research Centre located at CEDOC/NMS, specialising in Chronic Diseases such as musculoskeletal, cardio and respiratory disorders. One main asset of the CHRC-Biobank is its collections from national cohorts, namely EpiReumaPt (a population-based cohort representative of the Portuguese population).

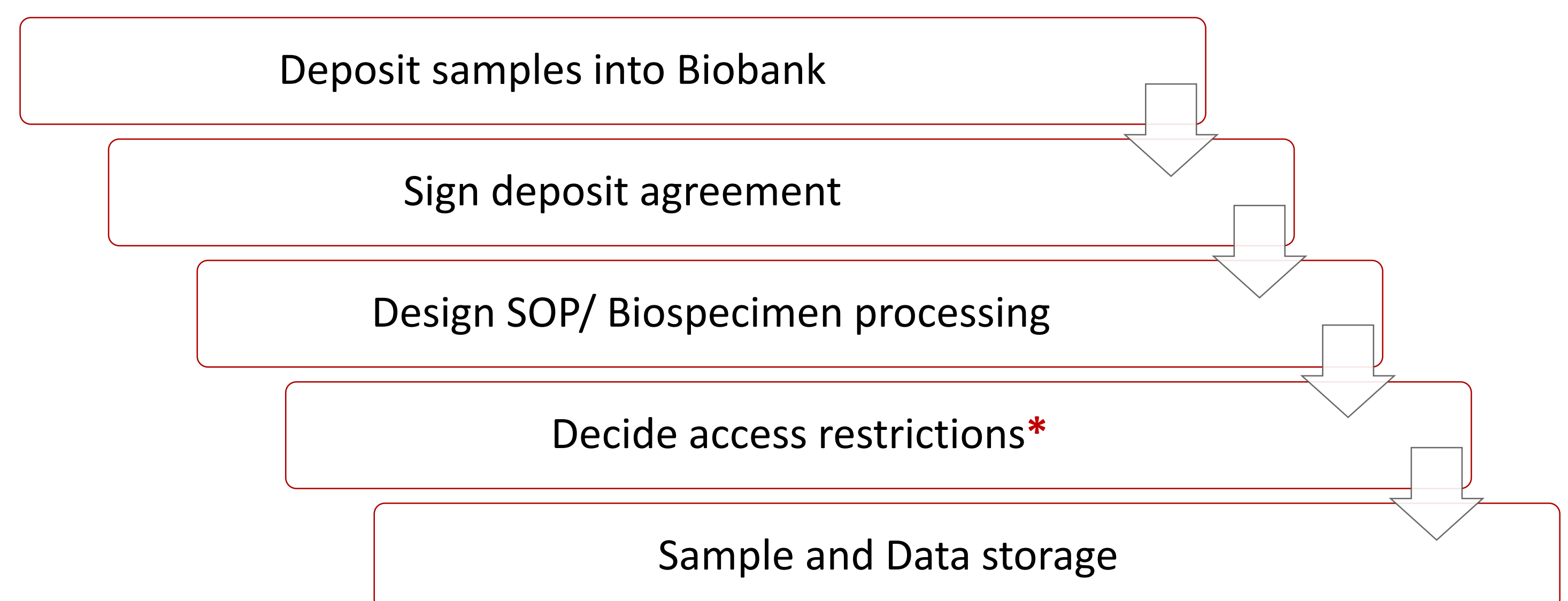
#### Current Collection

Collection	No. of samples	No. of donors
<b>EpiReumaPt</b> (Blood, DNA, Serum)	32 377	3664
<b>Bone</b> (Blood, serum, SF, DNA, bone powder, cartilage, proteins, RNA and femoral bone)	3132	582
<b>Serology</b> (serum, PBMC)	1882	1524

#### Sample Request and Release



#### Sample Deposition



- \* **SAMPLES RESTRICTION ACCESS:**
- Level I ● Share without restrictions
  - Level II ● Share without restrictions | Depositor with veto right
  - Level III ● No share during project + 3 years after project ends

Acknowledgments: FCT for funds to CHRC -UID/04923/2020