

# The First Postgraduate Master Study in Biobanking offered as Distance Learning Course in English

Gabriele GRANITZ, Karine SARGSYAN, Berthold HUPPERTZ

**Biobank Graz**

*Medical University of Graz, Austria*

## Background

The number of projects using biobank samples for research is increasing constantly. At the same time, requirements on quality of biobanking samples are increasing because of the growing spectrum of potential methods for different analyses and applications. The further development of biobanking processes depends on a deeper understanding of biobanking processes, to keep quality of biobank resources up-to-date with research. Hence, there is an essential and demanding requirement for training of experts in the field of biobanking, e.g. of well-structured postgraduate training programs.

## Methods

An overview of biobanking education opportunities has shown that currently only three such Master courses are offered: (1) „Management and Biobanking“ at the Catholic University of Lyon in French, (2) „Master en biobancos UCV“ at the Catholic University of Valencia in Spanish and (3) „Research Biobanking“ at the King’s College in London in English. As all three courses are offered as a classic study course with regular attendance, we decided to design a master course in biobanking in English as a distance learning course.

## Results

This university course is open for graduates with a bachelor degree in medicine, technical specialists and graduates in natural sciences (biology, pharmacy, biotech etc.), who have interest in the field of biobanking or wish to specialise or broaden their professional knowledge in biobanking. Also people with a respective expertise working in biobanks may apply.

The master distance learning course „Biobanking“ should be completed within four semesters (90 ECTS Credits) and the curriculum is comprised of 13 modules.

The goal of this course is to acquire knowledge, experience and practical skills which will qualify for the work in the multidisciplinary field of biobanking. Therefore, knowledge and skills that will be educated include areas such as (1) organisation of a biobank, (2) implementation of a biobank in the health care system and in existing research infrastructures, (3) representing a biobank and networking in the national and international area, (4) Sample management including pre-analytic handling, logistics, storage and shipment, (5) Quality management, (6) ELSI (ethical, legal and societal issues of biobanking), (7) Biobanking IT-landscapes and needs, (8) Biobank budgeting, business planning and sustainability and others.

Overview of the curriculum					
Module	TU Face to face (45 min)	TU Distance learning (45min)	ECTS - Credits	Performance Review	Rating
Module 1: Introduction to the Study	40	0	1	Assignment to send in	5 - w/oS
Module 2: Basic Knowledge Biobanking	0	170	7	Written exam	1-5
Module 3: Ethics and Law	0	100	6	Assignment to send in	1-5
Module 4: Collection and Management of Samples (Hands-on)	40	60	6	Written exam, Continual Assessment	5 - w/oS
Module 5: Risk Management and Biobanking	0	100	6	Assignment to send in	1-5
Module 6: Biobanking IT	0	100	6	Written exam	1-5
Module 7: Sustainability, Budgeting and Business Planning in Biobanks	0	70	5	Assignment in form of a case study	1-5
Module 8: Epidemiology	0	100	6	Written exam	1-5
Module 9: Quality Management and Quality Control	0	100	6	Written exam	1-5
Module 10: Management and Communication	40	60	6	Assignment to send in, Continual Assignment	1-5
Module 11: Strategy and Development, Networks	0	60	4	Assignment to send in	1-5
Module 12: Research I (Hands on)	40	60	6	Written exam, Continual Assessment	5 - w/oS
Module 13: Designing and Implementation of Clinical Studies OR OPTIONAL Research II	40	60	5	Continual Assessment	5 - w/oS
Master thesis	10	0	20	Presentation of the master thesis	1-5
<b>Total</b>			<b>90</b>		

## Conclusion

The extensive growth of biobanks requires training of highly qualified personnel in the field of biobanking and different disciplines linked to it. To meet this developmental needs this postgraduate master distance learning course will educate in knowledge and practical know-how on organisation, management, infrastructure and emerging challenges in biobanking.

The first course will start on **1<sup>st</sup> of October 2016**. For detailed information to this course please contact our homepage <http://www.medunigraz.at/mscibiobanking/>.

Funded by