



## BBMRI Task Force on Good Examples

Definition of **good examples**: "positive stories of biobanking-based-research with a healthcare impact".

Swiss Biobanking Platform identified the CoLaus/PsyCoLaus cohort as one of the good Swiss examples of biobanking-based-research. Below is the story of this study cohort including its impact on healthcare.

### **a. premise - info on biobanking process (i.e. samples generating the successful research where collected by a study cohort, by an institutional biobank... )**

The CoLaus/PsyCoLaus cohort is a large population based monocentric study in Lausanne (Switzerland) which includes over 6000 subjects. Initiated in 2003, its main goals are to:

1. Prospectively assess the complex association between cardiovascular diseases (CVD), cardiovascular risk factors (CVRF) and mental disorders
2. Identify new molecular and genetic determinants of these conditions or their association

Assessments:

- Data: All subjects completed a face to face interview with questions on personal and familial history of CVRF, current medical conditions and medication as well as a screen for cognitive problems (in subjects older than 65 years of age). In addition, a screen for psychopathology was performed using the General Health Questionnaire (GHQ-12, Goldberg 1972). Basic anthropometric characteristics were also measured. Over 4000 subjects underwent an interview-based psychiatric assessment (DIGS) allowing to elicit DSM-V psychiatric diagnosis. Finally, additional cardiovascular and blood pressure assessments were performed in a subset of participants.

- Samples: A large array of serum biological variables was measured in the fasting state and in the urine. In addition, all participants from Caucasian origin were genotyped with a 500K SNP (Affimetrix®) DNA chip.

### **b. what successful biobanking-based-research has been developed - publications /links**

To date, CoLaus/PsyCoLaus has published over 300 articles in peer-reviewed journals. The successful biobanking-based-research that has been developed allows gain of knowledge in the genetic and epidemiological field of cardiovascular diseases and mental health.

This list of publications is available by clicking here:

<http://www.researcherid.com/ProfileView.action?returnCode=ROUTER.Success&Init=Yes&SrcApp=CR&queryString=KGOUuZjN5WnJscYjPYkldEuHtajPak9XYyGj9MQ7nQE%253D&SID=C1fUIHibJSXyV1N99tT>

### **c. what changes has been produced in terms of method/prevention/diagnosis/therapy (200 characters to synthesize the inspiring story)**

CoLaus/PsyCoLaus study provides a unique opportunity to gather prospective data on the interplay between CVRF/CVD and mental disorders. A better understanding of the psychological,

physiological and behavioral links underlying these conditions will result in the development of more specific and efficient strategies of prevention and treatment.

**d. biobank/research group contact**

> *CoLaus Study (PI, Prof Peter Vollenweider)*

Centre Hospitalier Universitaire Vaudois

Rue du Bugnon 19

1011 Lausanne

Switzerland

Phone: +41 21 314 73 61

Email: [etude.colaus@chuv.ch](mailto:etude.colaus@chuv.ch) or [peter.vollenweider@chuv.ch](mailto:peter.vollenweider@chuv.ch)

> *PsyCoLaus Study (PI, Prof Martin Preisig)*

CEPP

Site de Cery

1008 Prilly

Phone: +41 21 314 35 52

Email: [etude.colaus@chuv.ch](mailto:etude.colaus@chuv.ch) or [martin.preisig@chuv.ch](mailto:martin.preisig@chuv.ch)