

UBB School of Health

Postgraduate Program for Bio-Behavioral Integrative Medicine

<u>Vision & Mission</u>: To use a complex bio-psycho-social model, based on personalized and evidence-based frameworks, in the context of big data approaches, to guide research, training (postgraduate/continuous education), and applications in human health.

General Structure: At this moment, the Program works as a framework for three clinical-research sections in the Program: (1) Mental Health; (2) Internal Medicine/Cancer (e.g., Psychosomatics); and (3) Public Health. A Biomedical Engineering/Technology section is also developed within the program, important in itself and as a support for the three clinical sections. There are also two transversal sections: (1) Big Data & Bioinformatics and (2) BioMedical Ethics/Social Medicine & Health. A Miscellaneous section includes aspects that are more specific and/or in an incipient phase of development.

- Strategic coordinator: The Executive Board of the UBB Council of Administration
- Executive coordinators: Professor, PhD, Marko Balint & Professor, PhD, Dan Lazăr
 - o Address: No. 9 Clinicilor St., Cluj-Napoca; Contact: marko.balint@ubbcluj.ro

I. Section I: Psychology & Psychiatry - Mental Health

- Coordinators: Professor, PhD, Anca Dobrean (psychology) & Adjunct Researcher, MD, PhD, Andreea Robe (psychiatry)
 - Contact: ancadobrean@psychology.ro

Board of the Section

• The Board, composed of psychologists and psychiatrists proposed by the coordinators, will be the main decision body of the Section.

Major Academic Units

- BrainQ Institute https://news.ubbcluj.ro/en/brainq-inspire-ubb-international-development-in-cognitive-neurosciences-and-magnetic-resonance-imaging-mri-within-the-bbu-academic-school-of-health/
 - o 3 and 7 Tesla MRI technologies for humans
 - o 7 and 11,7 Tesla MRI technologies for animal and tissue studies
- International Institute for Psychotherapy https://portal.meril.eu/meril/view/facilitys/15809
 - o State of the art virtual/mixed realities and EEG technologies
- Cognitive Neuroscience Unit http://www.cognitive-neuroscience.ro/
- One BSc program (i.e., cognitive science) and three MSc programs (i.e., clinical psychology/psychotherapy/clinical public health psychology) are associated to the Section, together with specific doctoral research.

Major Clinical Units

• UBB "PsyTech" Psychological Clinic (http://clinicadepsihologie.psiedu.ubbcluj.ro/)

• Partners - Public/private hospitals and various clinical units

II. Section II: Internal Medicine & Oncology/Cancer (Psychosmatics)

- Coordinators: Professor, PhD, Manuela Banciu (biology) & Researcher, MD, PhD, Cristina Pojoga (medicine internal medicine/gastroenterology)
 - o Contact: manuela.banciu@ubbcluj.ro or cristinapojoga@yahoo.com

Board of the Section

• The Board, composed of specialists proposed by the coordinators, will be the main decision body of the Section.

Major Academic Units

- BioNanomedicine https://biogeo.ubbcluj.ro/pages/biologie/laborator-biologie-moleculara-biochimie-si-biofizica/ and https://biogeo.ubbcluj.ro/pages/biologie/laborator-biologie-moleculara-biochimie-si-biofizica/ and https://centru3b.centre.ubbcluj.ro/en/nanomedicine-group/
- Specific doctoral research is associated to this Section.

Major Clinical Units

• Partners - Public/private hospitals – clinical units

III. Section III – Public Health & Policy

- Coordinator: Professor, MD, PhD, Marius Ungureanu (public health)
 - o Contact: marius.ungureanu@ubbcluj.ro

Board of the Section

• The Board, composed of medical and non-medical specialists proposed by the coordinator, will be the main decision body of the Section.

Major Academic Units

- Public Health Department https://publichealth.ro
- BSc/MSc programs and specific doctoral research are associated to the Section.

Major Clinical Units

• Partners - Public/private hospitals – clinical units

IV. Section IV – Biomedical Engineering/Technology

- Coordinators: Professor, PhD, Lucian Baia (physics-engineering) & Professor, PhD, Gilbert Gillich (engineering)
 - o Contact: lucian.baia@ubbcluj.ro / gilbert.gillich@ubbcluj.ro
- Medical physics (Associate professor, PhD, Balint Zoltan) -
- Clinical-medicinal chemistry (Professor PhD, Gabriela Nemeş & Professor, PhD, Radu Silaghi-Dumitrescu/)
- Clinical biology laboratories (Senior assistant professor, PhD, Alina Sesărman)
- Kinetotherapy (Professor, PhD, Dumitru Rares Ciocoi-Pop)
- BSc/MSc programs and specific doctoral research are associated to the Section.

V. Section V – Transversal Approaches

V.1. Big Data & Bioinformatics

- Coordinators: Professor, PhD, Anca Andreica (computer science) and Professor, PhD, Horia Banciu (bioinformatics/biostatistics)
 - o Contacts: anca.andreica@ubbcluj.ro or horia.banciu@ubbcluj.ro
- UBB Supercomputer: http://www.cs.ubbcluj.ro/mos/infrastructure.html and its associated master program co-created with the German company Bosch (https://www.cs.ubbcluj.ro/education/academic-programmes/masters-programmes/high-performance-computing-and-big-data-analytics-programme-profile/.
- BSc/MSc programs and specific doctoral research are associated to the Section. A new MSc will start in 2023 in Bioinformatics.

V.2. Biomedical Ethics/Social Medicine & Health

- Coordinator: Associate professor, PhD, Laszlo Csaba Degy (social work/sociology)
 - o Contact: degi.csaba@ubbcluj.ro

VI. Section VI – Miscellaneous

- Coordinator: Professor, PhD, Markó Bálint
 - o Contact: marko.balint@ubbcluj.ro
- Health economics (Associate professor, PhD, Levente Szasz economist)
- Medical art

<u>Note</u>: Each of these components can become a specific section in the future, based on its more complex development.

VII. InfoBioNano4Health will be a general academic infrastructure of the Program

- https://news.ubbcluj.ro/en/the-winner-of-the-solution-bid-of-the-new-smart-specialisation-of-the-city-of-cluj-napoca-ubb-infobionano4health-2/
- https://news.ubbcluj.ro/en/ubb-outlines-the-pan-european-competitive-advantage-for-cluj-through-infobionano4health/

VIII. General notes

- Current results of UBB in various international ranking in the Medical/Health field:
 - \circ QS (2022) 2 in Romania (601-650 international);
 - Leiden Ranking (2022) 2 in Romania (1100 international);
 - UBB is also typically the first university from Romania in most international rankings in the field of psychology/psychiatry/mental health (often in Top-500 in the world).
- **The relevant staff** associated formally with UBB in various "units" related to the Program is also part of the Program (the Board of each section will specify it).
- The working language of the Program is English.
- Expressions of interest: Other (clinical) adjunct staff can be added based on common interest. The (clinical) adjunct staff have access to all UBB infrastructure/facilities and students and to develop new projects through UBB. Those interested can contact UBB Vice-rector Markó Bálint at marko.balint@ubbcluj.ro