

Human Anatomy, Hygiene and Preventive Medicine

Unit of Human Anatomy: Tayebati S.K., Tomassoni D., Traini E., Nittari G., Battineni G., Carotenuto A., Chintalapudi N., Sagaro G.G., Bellitto V., Hossain M.A., Martinelli I.

Unit of Hygiene and Preventive Medicine: Grappasonni I., Petrelli F., Acito M., Panicià M., Cangelosi G., Olivieri L. **Technical support:** Morichetti L., Celestino A.

School of Medicinal and Health Product Sciences

School of Biosciences and Veterinary Medicine

Permanent/Fixed-term staff: 8/11



Research Day UNICAM
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Characterizing studies

- 1) Chemical and microbiological analyses of surface, mineral, thermal and drinking water
- 2) Investigations into the eating habits and lifestyles of specific populations
- 3) Occupational Health (Telemedicine, Marche Region Mesothelioma Registry, Epidemiological observatory of seafarer's pathologies)
- 4) Clinical Practice in Evidence-Based Medicine View in Public Health Management
- 5) *In vitro* and *in vivo* study of the antioxidant and biological activity of foods and natural matrices
- 6) Preclinical and clinical studies on obesity and hypertension related to degeneration of central and peripheral nervous system
- 7) Machine learning approach for the prevention of adult onset dementias
- 8) Personalized medicine, drugs, diagnostics and new therapeutic approaches for the management of chronic diseases, oncological diseases with high medical need and rare diseases

National Impact: The research conducted by groups working in the fields of Human Anatomy, Hygiene and Preventive Medicine has a significant impact at local and national levels by monitoring chemical and microbiological safety and quality of surface, mineral, thermal and drinking water, and by assessing lifestyle-related risk factors for infectious and noncommunicable diseases and occupational health in different populations. Moreover, the group also focuses on the study and development of healthy lifestyle practices that directly and indirectly impact the overall health of the reference community.

In addition, preclinical and clinical studies are being carried out on the impact of ageing, obesity, diabetes and hypertension on the central and enteric nervous system and target organs. The role of drugs, nutraceuticals, functional foods and probiotics was also evaluated in counteracting the impact of pathologies.

International Impact: Furthermore, the research has a significant international impact as the working groups collaborate with researchers affiliated with foreign Universities (e.g., the Queen Mary University of London) and International Scientific Associations and Societies.

Telemedical and telepharmaceutical assistance of seafarers on cargo ships and epidemiological evaluation of health conditions (Marnavi S.P.A., D'Amico shipping, 3M shipping).

Telemedicine and telepharmacy training with Tehran University of Medical Science (TUMS) and SAIPEM.

Relations with SME

- Counselling service and analysis for filter manufacturers;
- Collaboration with developers of Healthcare Utilities for electronic devices (environmental monitoring for health and wellness, lifestyle assessment according to the bio-psycho-social model of health) and Public Health Companies;
- Collaboration with pharmaceutical and food industries for preclinical and clinical evaluation of nutraceuticals, functional foods and drugs;
- Collaboration with shipping companies for the telepharmaceutical assistance of transport ships and the health monitoring and safety evaluation of the crew members;
- Collaboration with pharmaceutical and biomedical companies in the development and evaluation of personalized medicine, drugs, diagnostics and new therapeutic approaches for the management of chronic diseases, oncological diseases and rare diseases;
- Implementation of innovative technological services in the field of aesthetic medicine and therapeutics and development of interactive data collection platforms for the practice of non-surgical cosmetic medicine.

National and International collaborations:

- Queen Mary University of London (UK)
- The European Public Health Association
- Public Authorities (INAIL)
- C.I.R.M Centro Italiano Radio Medico
- Azienda Ospedaliera di Rilievo Nazionale Antonio Cardarelli
- MARCHEBIOBANK
- Università degli Studi di Catania
- Università degli Studi di Firenze
- University of Houston (Texas, USA)
- Tehran University of Medical Sciences (Iran)
- SAIPEM
- Institut National de la Santé et de la Recherche Médicale (Inserm) Toulouse (France)
- European Medical Association

Sources of funding:

Regional (Marche Region)

Ministerial (MUR – PNRR, VITALITY)

Private companies (pharmaceutical, shipping, mineral water and food sectors)

National and International Competitive and Peer-reviewed Calls

Roles in scientific societies/Networks/Research centers:

Members of the Regional Council of the Italian Society of Hygiene and Preventive Medicine

Members of the Italian Society of Hygiene and Preventive Medicine

Members of Accademia Lombarda di Sanità Pubblica

Members of the Italian Society of Human Anatomy and Histology

Members and directive role in the Italian Society of Histochemistry

Members and General Secretary of the Italian Group for the Study of the Neuromorphology