



L-Università ta' Malta
Faculty of Health Sciences

Degree of Master of Science (By Research)
List of Potential Research Topics
Intake October 2023

Applicants for the M.Sc. (by Research) course offered by the Faculty of Health Sciences are advised to choose a research topic from the following list and to contact the respective Department offering the research topic at the earliest opportunity.

Applied Biomedical Science

- Computational and Experimental Methods in Erythropoiesis - Prof. Joseph Borg
- Dissecting the Molecular Mechanisms of Blood Transcriptomic Endotypes in Sepsis - Dr Brendon Scicluna
- Functional Characterisation of Novel Genes and Pathogenic Mutations - Dr Rosienne Farrugia
- Genetics and Genomics of Rare Heritable Diseases - Dr Rosienne Farrugia
- Genetics of Myocardial Infarction - Prof. Stephanie Bezzina Wettinger
- Genetics of Osteoporosis and Musculoskeletal Disorders - Dr Melissa Marie Formosa
- High Throughput Sequencing - Prof. Stephanie Bezzina Wettinger
- Host Response Biomarkers for Diagnosis and Risk Stratification in Sepsis - Dr Brendon Scicluna
- Identification of Single Chain Variable Fragment (scFv) Antibodies Specific to Immune Checkpoints by Phage Display - Dr David Saliba
- Mechanisms of Inflammatory Adaptations in Innate Immune cells - Dr Brendon Scicluna
- Multi Omics of Space Flight Experiments and Model Organisms - Prof. Joseph Borg
- Regulation and Control of Globin Gene Switching - Prof. Joseph Borg

Clinical Biomechanics

- Cadaveric Foot - Prof. Alfred Gatt
- Gait Analysis - Prof. Alfred Gatt
- Motion Capture - Prof. Alfred Gatt
- Material Testing - Prof. Alfred Gatt

Communication Therapy

- Bilingual Receptive and Expressive Lexical Skills in Maltese School-Aged Children - Dr Daniela Gatt
- Lexical and Narrative Skills in Maltese Bilingual Children - Dr Daniela Gatt
- Language Abilities in Maltese Children with DLD - Dr Daniela Gatt
- Sentence Recall and Nonword Repetition Tasks as Clinical Markers for Identification of Maltese Children with Developmental Language Disorder - Prof. Helen Grech
- The Adaptation of the Stroke and Aphasia Quality of Life Scale (SAQOL-39) to the Maltese Context - Dr Ritienne Grima
- The Adaptation of the TORPAM to 5-7 Year Old Maltese Children - Dr Rachael Agius
- Validation of the MESA on Diverse Clinical Populations - Prof. Helen Grech

Food Sciences and Nutrition

- Antimicrobial Packaging Applications in Food Science - Dr Foteini Pavli
- Aspects of Public Health Nutrition, including Lifestyle/Dietary Behaviours, Attitudes and Knowledge; Nutrition Messages - Dr Claire Copperstone
- Edible Films and Coatings for Sustainable Packaging - Dr Foteini Pavli
- Food Fraud and Safety Issues Past and Present - Prof. Anna McElhatton
- Inequalities, Food Security and Sustainable Diets - Dr Claire Copperstone
- Lifestyle Factors and Cancer Prevention - Dr Petra Jones
- Maternal Nutrition:- Preconception Care, Pregnancy and Lactation - Dr Petra Jones
- Molecular Interventions in Lifestyle-Related Diseases - Dr Mario Caruana Grech Perry
- Nutrition Epidemiology: Dietary Assessment and Dietary Patterns - Dr Petra Jones
- Probiotic Solutions for Functional Foods - Dr Foteini Pavli
- Tackling Biofilms in Food-Related Abiotic Surfaces - Dr Foteini Pavli
- The Role of Dietary Interventions in the Management of Chronic Conditions (Diabetes, Cancer, Neurodegenerative Diseases) - Dr Mario Caruana Grech Perry
- Understanding the Functional Activity of Polyphenols using Omics-Based Approaches - Dr Mario Caruana Grech Perry

Midwifery

- Antenatal Education - Dr Georgette Spiteri
- Choice, Control and Continuity of Midwifery Care - Dr Josephine Attard
- Gender in Parenthood - Dr Georgette Spiteri
- Intensive Care of the Neonate - Dr Rita Pace Parascandalo
- Neonatal Resuscitation - Dr Rita Pace Parascandalo
- Newborn Care - Dr Rita Pace Parascandalo
- Post-traumatic Stress Associated with Childbearing - Dr Nicole Borg Cunen
- Preparation for Parenthood from Preconception to the First Postnatal Year - Dr Georgette Spiteri

- Preterm Birth - Care of the Preterm Infant and the Family - Dr Rita Pace Parascandalo
- Social Aspects of Childbirth - Dr Josephine Attard
- Social Determinants Involved in the Transition to Parenthood - Dr Georgette Spiteri
- Spiritual Care and Compassion - Dr Josephine Attard
- The Tie to the Unborn Child in Expectant Mothers and Fathers -
Dr Nicole Borg Cunen
- Women's Health - Dr Rita Pace Parascandalo

Nursing

- Advanced Nursing Practice - Dr Corinne Scicluna
- Anthropological and Social Perspectives in Nursing - Dr Catherine Sharples
- Antimicrobial Resistance - Ms Ermira Tartari Bonnici
- Antimicrobial Stewardship - The Role of the Nurse/Competencies for Nurse Education -
Ms Ermira Tartari Bonnici
- Cancer Care - Dr Joanna Depares
- Catheter-Associated Urinary Tract Infections - Ms Ermira Tartari Bonnici
- Catheter-Related Bloodstream Infections (Peripheral/Central Catheters; Bundle
Approach) - Ms Ermira Tartari Bonnici
- Community Health Care - Dr Norma Josephine Delezio
- Critical Care Nursing - Dr Josef Trapani
- Death and Dying - Dr Joanna Depares
- Dementia Care - Dr Anthony Scerri
- Diabetes Care - Dr Roberta Sammut
- Diabetic Foot - Dr Corinne Scicluna
- Drug Administration - Dr Corinne Scicluna
- Emergency Nursing - Dr Trevor Abela Fiorentino
- Emerging Viral Infectious Diseases Outbreaks/Pandemics (COVID-19) -
Ms Ermira Tartari Bonnici
- Empowerment in Nursing - Dr Corinne Scicluna
- Equity and Equitable Healthcare - Dr Joanna Depares
- Evidence Based Nursing - Roderick Bugeja/Anthony Scerri
- Facilitating Assessment and Learning in Virtual Learning Environments -
Dr Michelle Camilleri
- Hand Hygiene/Electronic Automated Hand Hygiene Monitoring -
Ms Ermira Tartari Bonnici
- History of Nursing - Dr Catherine Sharples
- Informal Learning in Practice - Dr Michelle Camilleri
- Interprofessional Collaboration - Dr Anne C Cini
- Implementation of Evidence-based Medicine/Nursing in Daily Practice -
Dr Anthony Scerri
- Issues related to Death and Dying and End of Life Care - Dr Joanna Depares
- Issues related to Palliative Care - Dr Joanna Depares
- Issues related to Refugee Healthcare - Utilisation and Provision - Dr Joanna Depares

- Leadership - Dr Corinne Scicluna
- Management of Care - Dr Corinne Scicluna/Dr Catherine Sharples
- Migration and Healthcare Provision - Dr Joanna Depares
- Nursing Care of Older Persons in Formal Care Settings - Dr Anthony Scerri
- Nursing Rituals and Change - Dr Catherine Sharples
- Online Teaching and Learning - Dr Josef Trapani
- Paediatric Nursing Research - Dr Anne C Cini
- Palliative Care - Dr Joanna Depares
- Pre-Hospital Emergency Care - Dr Trevor Abela Fiorentino
- Politics in Nursing - Dr Corinne Scicluna/Dr Catherine Sharples
- Prevention of Surgical Site Infections - Ms Ermira Tartari Bonnici
- Professional Development - Dr Michelle Camilleri
- Professionalisation, Autonomy and Accountability in Nursing - Dr Catherine Sharples
- Public Health - Dr Norma Josephine Delezio
- Rehabilitation - Anthony Scerri
- Resuscitation Education - Dr Trevor Abela Fiorentino
- Self-Management of Chronic Conditions - Dr Roberta Sammut/
Dr Norma Josephine Delezio
- Sexual and Reproductive Health - Dr Roderick Bugeja
Sexuality and Sexual Health
Sexuality and Relationships Education
Genito-Urinary Medicine, including HIV/AIDS
Fertility and Reproductive Health, including:-
 - *Periconception Care*
 - *Assisted Reproductive Technology (ART)*
 - *NaPro technology (Natural Procreative Technology)*
 - *In-Vitro Fertilisation (IVF) (Lived Experience / Quality of Life)*
- Simulation Education - Dr Trevor Abela Fiorentino
- Skin and Wounds - Dr Corinne Scicluna
- Specialist Nursing - Dr Corinne Scicluna
- Ventilator-Associated Pneumonia - Ms Ermira Tartari Bonnici

Occupational Therapy

- Alzheimer's Disease and Related Dementias - Dr Marjorie Bonello
- Availability and Accessibility of Play and Communal Spaces - Dr Nathalie Buhagiar
- Children's Participation in Home, School and Community - Dr Nathalie Buhagiar
- Clinical Reasoning in Acute Physical Occupational Therapy Settings - Dr Rene Mifsud
- Ergonomics and Occupational Therapy - Dr Marjorie Bonello
- Evaluating School Based Occupation Therapy Services - Dr Nathalie Buhagiar
- Exploring Occupational Engagement and Balance in Children with and without Disability - Dr Nathalie Buhagiar
- Occupation-Based Resources and Technology - Dr Rene Mifsud

- Outcomes of Occupational Therapy Rehabilitation - Dr Rene Mifsud
- Parenting Children with Disability - Dr Nathalie Buhagiar
- Practice Based Education - Dr Marjorie Bonello
- Pre-school Children, Play and Practice - Dr Nathalie Buhagiar
- Strengths and Challenges in Engaging in Childhood Occupations - Children's Voices - Dr Nathalie Buhagiar
- Supported Community Living of Older Adults - Dr Rene Mifsud
- The Incidence and Impact of Neurodevelopmental Disorders on Paediatric Occupation Therapy - Dr Nathalie Buhagiar

Physiotherapy

- Health-related Determinants in the Development of Athletes Involved in Aquatic Sport Disciplines - Dr John Xerri de Caro
- VR Exergaming for Older Persons - Dr Stephen Lungaro-Mifsud

Podiatry

- Clinical Biomechanics - Prof. Alfred Gatt
- Diabetes Foot Screening - Prof. Cynthia Formosa
- Diabetic Foot Biomechanics - Prof. Alfred Gatt
- Diabetic Footwear - Dr Stephen Mizzi
- In Shoe Micro-Climate - Dr Stephen Mizzi
- Nail Surgery - Dr Anabelle Mizzi
- Peripheral Arterial Disease - Dr Anabelle Mizzi
- Podiatric Dermatology - Dr Stephen Mizzi
- Podiatric Sports Medicine - Prof. Alfred Gatt
- Podogeriatrics - Prof. Cynthia Formosa
- Podopaediatrics - Prof. Cynthia Formosa
- The Diabetic Foot - Prof. Cynthia Formosa
- Thermography - Prof. Alfred Gatt/Dr Stephen Mizzi
- Vascular Assessment of the Lower Limbs - Dr Anabelle Mizzi

Radiography

- Advanced Practice in Radiotherapy - Dr Guilherme Couto
- Advanced Practice/Role Development/Role Extension in Radiography - Dr Paul Bezzina/Dr Jonathan L. Portelli/Prof Francis Zarb
- AI in Medical Imaging and Radiotherapy - Dr Susan Mercieca/Dr Jonathan L. Portelli
- Applications of Digital Health Technologies to Improve Hospital Workflows and Treatment Outcomes - Dr Susan Mercieca/Dr Jonathan L. Portelli

- Assessment of Maltese Patients' Perceptions of the Educational Requirements of Therapy Radiographers - Dr Paul Bezzina
- Benefit-Risk Communication in Radiography - Dr Jonathan L. Portelli
- Cancer Survivorship - Mr Gerbert van Dijk
- Dose/Risk Optimisation - Prof. Francis Zarb/Dr Paul Bezzina/Dr Jonathan L. Portelli
- Image Quality - Prof. Francis Zarb
- Management of Uncertainties in Radiotherapy Planning - Dr Susan Mercieca
- Nuclear Medicine Imaging - Dr Karen Borg Grima
- Paediatric Radiography - Dr Jonathan L. Portelli
- Patient Review - Dr Guilherme Couto
- Patient Care/Patient Experience in Radiography - Dr Paul Bezzina/
Dr Jonathan L. Portelli/Dr Karen Borg Grima
- PET/CT Imaging - Dr Karen Borg Grima
- Quality of Life of Cancer Patients, Survivors and Carers - Mr Gerbert van Dijk
- Radiation Safety - Dr Paul Bezzina/Dr Jonathan L. Portelli
- Radiobiology in Radiotherapy - Dr Guilherme Couto
- Radiography Research - Dr Paul Bezzina/Prof. Francis Zarb
- Radiographers' Competencies and Education - Dr Paul Bezzina/Dr Jonathan L. Portelli