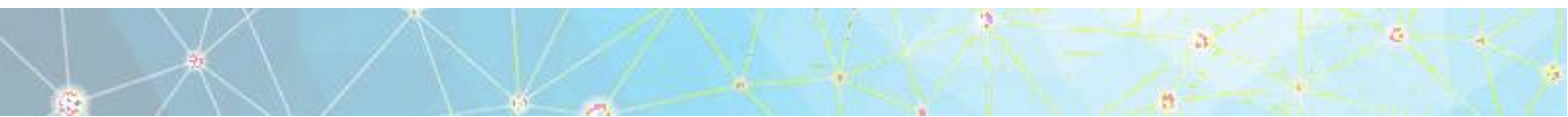




Thematic Area	Microbiology and Public Health
Main Goals	<p>The Microbiology and Public Health Thematic Area (MPHTA), in accordance with the CiiEM mission and objectives, and taking into account the Sustainable Development Goals (SDG), has, as its main objective, to contribute to the improvement and extension of the current knowledge on infectious diseases.</p> <p>The Thematic Area research activity is mainly focused on prevention, diagnosis and control of such diseases, acting towards the global improvement of Public Health.</p> <p>MPHTA members currently develop work on several relevant scientific topics, such as: emerging microbial infections, antimicrobial resistance, development of new vaccines and drugs, identification of molecular markers for different pathologies, cytotoxicity of biomaterials and pharmacoepidemiology.</p> <p>These works are framed by a network of several national and international collaborations, allowing an upscaling on knowledge sharing and results dissemination.</p> <p>The current MPHTA research interests are:</p> <ul style="list-style-type: none">Antimicrobial resistance and multidrug-resistant pathogensEvaluation of new compounds with antimicrobial potentialClinical Mycology: <i>Candida</i> spp. surveillance, fungal identification and antifungals resistanceHIV-1 and HIV-2, HCV, CMV, BKV and JCV infectionsStudy of biological properties of materials for clinical applications and biomarkers for oral diseases diagnosisBiocompatibility studies (in vitro cytotoxicity and genotoxicity) of dental and other materialsImportance of APOBEC3 in HIV-2 infection and breast cancerGenetic polymorphisms in the Portuguese populationYeast exploitation as a model for sugar transport, metabolism, and regulation but also for biotechnology purposesRisk of major adverse events following exposure to potentially inappropriate medicationsExploring medication adherenceEstablishing Clinical Pharmacy specialization in PortugalDigital health and education, through interdisciplinary and mixed methods approaches

Head	Helena Barroso, PhD
Group	Aida Duarte, PhD Alexandra Maia e Silva, PhD Ana Clara Ribeiro, PhD Evguenia Pavlovna, PhD Filipa Alves da Costa, PhD Isabel Barahona, PhD João Aguiar, PhD Lucinda Bessa, PhD Madalena Oom, PhD Mara Guerreiro, PhD Patrícia Cavaco-Silva, PhD Paulo Mascarenhas, MsC Perpétua Gomes, PhD Teresa Nascimento, MsC Ana Luísa Costa, MsC student Daniela Guerreiro, MsC





Ongoing Research Projects

“EEA.BG.CALL2.014.2021 – InFishMix” - EEA Grants 2014-2021 - Programa Crescimento Azul

“Lentes oculares inteligentes para o tratamento de doenças do olho diabético”, PTDC/CTM-CTM/2353/2021, FCT

"Cartilagens para próteses da anca com capacidade de libertação controlada de fármacos / Cartilages for hip prosthesis with controlled drug release ability", PTDC/CTM-CTM/29593/2017, FCT

2021 EuCARE – European Cohorts of Patients and Schools to Advance Response to Epidemics - Grant Agreement n. 6944397 – HORIZON-HLTH-2021-CORONA-01-02

2020 ORIGHAMI - ORIGine de l'infection à viH parmi la population Migrante . Parceria com IHMT, França, Espanha, Grécia e Itália. National Agency for AIDS Research (ANRS) (France)

2020 Micro-eliminação da hepatite C. Estratégia simplificada de diagnóstico em indivíduos de acesso difícil. (Gilead Sciences)

2019-2021 Integrase baseline resistance: a real-time surveillance program in the MEDIT-RES HIV consortium (ViiV) (PI- Portugal)

2018-2021 NTEGRIV - Caracterização da resistência aos Inibidores de Integrase usados no tratamento do VIH-1 em Portugal: Impacto clínico e económico para as guidelines de tratamento e de avaliação de resistência antirretroviral. PTDC/SAU-INF/31990/2017, FCT

PTDC/BIA-EVL/1100/2020 - Harnessing comparative genomics to understand the role of horizontal acquired genes in yeast evolution, FCT

“Esterilização de EPIs com radiação gama com vista à sua reutilização”, Research4COVID-19 - ID613466866; FCT

“Quick COVID-19 Detection (QuiCoviDe)”, Research4COVID-19 - ID613754337, FCT

CiiEM investiga 2018- ABIPER. GenPsyDrugs. Interactions between oral bacteria and amoebae in periodontitis, Egas Moniz, CRL

CiiEM investiga 2018- Using the Genetic Predisposition to Periodontal Disease to Understand Spontaneous Preterm Birth, Egas Moniz, CRL

CiiEM investiga 2018- Cannabinoid Consumption: Genetic and Psychological Factors in Drugs Abuse [Preliminary Research], Egas Moniz, CRL

CiiEM investiga 2019 - Assessing of Mycobiome in Hospital Intensive care units and in clinical ambulatory services (MSG), Egas Moniz, CRL

CiiEM investiga 2019 - In Vivo and In Vitro Implant Evaluation Protocol: Microbiome and Implant surfaces characterization (PAI2i2v), Egas Moniz, CRL

CiiEM investiga 2019 – MMP89 Polyact - Relationship between metalloproteinases 8 and 9 promoter gene polymorphisms, protein activity and periodontitis susceptibility in a Portuguese population, Egas Moniz, CRL

CiiEM investiga 2020 - Gut Status in Parkinson's disease (GutSPark), Egas Moniz, CRL

CiiEM investiga 2020- PIP (Peri-implantitis research). Association between IL-1 and IL-1ra gene polymorphisms with peri-implantitis, Egas Moniz, CRL

CiiEM investiga 2021 - Causal association between Parkinson's Disease and periodontitis (CAUSE-P2D), Egas Moniz, CRL

CiiEM investiga 2021 - Insects as a tool in urban waste recovery - a technical and risk assessment project (FlyWast), Egas Moniz, CRL

Cardio and Cerebrovascular Risk of Major Adverse Events Following Exposure to Potentially Inappropriate Medications (PIMs), FCT

Identifying determinants and consequences of drug-induced acute kidney injury (AKI)

Exploring medication adherence in metastatic breast cancer (MBC) patients: identifying technological solutions to overcome barriers

Development of a remote pharmaceutical care model for cancer medicines optimization

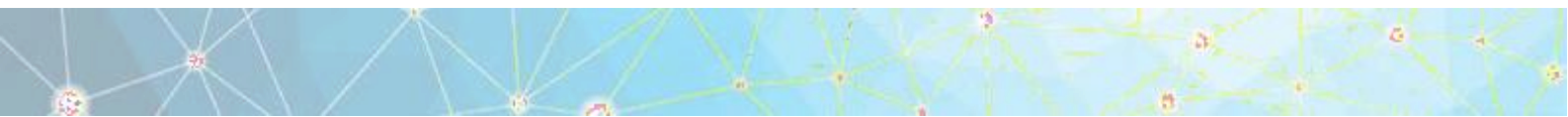
Role of community pharmacies in promoting physical activity (PA) in people living with diabetes type 2 (PLD2)

Establishing Clinical Pharmacy Specialization in Portugal

Real-world Effectiveness of Innovative Therapies for the Most Prevalent Cancers in Portugal

Improving healthcare students' competences for behaviour change to effectively support self-care in chronic diseases – Train4Health (2019-1-PT01-KA203-061389)

ECCo: Harnessing the power of conversational e-Coaches for health and well-being through Swiss-Portuguese Collaboration (HES-SO & CSISP seed grant)



“Language matters” Portugal: recomendações sobre a linguagem preferencial na comunicação com e sobre as pessoas com diabetes

National Partnerships

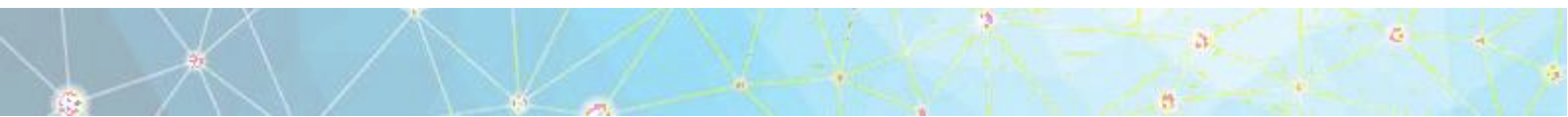
Centre for Interdisciplinary Research in Animal Health (CIISA), FMV-UL
Centro Hospitalar e Universitário de Lisboa Centro
Centro Hospitalar Lisboa Ocidental (CHLO) – H Egas Moniz
Centro Hospitalar Psiquiátrico de Lisboa (CHPL) – H Júlio Matos
Entogreen - Ingredient Odyssey, S.A.
EnviHealthMicro Lab, Instituto de Saúde Ambiental (ISAMB), Faculdade de Medicina da Universidade de Lisboa (FMUL)
Escola Superior de Desporto de Rio Maior, Instituto Politécnico de Santarém (IPS)
Escola Superior de Enfermagem de Lisboa (ESEL)
Faculdade de Ciências da Universidade de Lisboa (FCUL)
Faculdade de Farmácia da Universidade de Lisboa (FFUL)
Faculdade de Farmácia da Universidade do Porto (FFUP)
Faculdade de Medicina Veterinária da Universidade de Lisboa (FMV-UL)
Faculdade de Ciências e Tecnologia, Universidade de Coimbra (FCTUC)
Fibrenamics Green Azores
Instituto de Higiene e Medicina Tropical (IHMT)
Instituto de Tecnologia Química e Biológica António Xavier (ITQB Nova)
Instituto Nacional de Saúde Dr. Ricardo Jorge (INSA), Lisboa e Porto
Instituto Português de Oncologia de Lisboa (IPO)
Instituto Superior Técnico (IST)
NOVA School of Science and Technology (FCT Nova)
PRIREV - Surface Technology, S.A.
Research Institute for Medicines (IMed) – FFUL

Tecnophage, SA
UCIBIO, REQUIMTE
Universidade do Minho (UMinho)
Universidade dos Açores (UA)

Centro de Microscopia Eletrónica e Histopatologia, CiiEM
Clinical Research Unit, CiiEM
Laboratório de Biomateriais, CiiEM
Laboratório de Bioquímica, CiiEM
Laboratório de Ciências Forenses e Psicológicas, CiiEM
Laboratório de Interações Moleculares, CiiEM

International Partnerships

National Agency for AIDS Research (ANRS) (France)
European Society of Clinical Pharmacy
Atrial Fibrillation Association
Katholieke Universiteit Leuven (KULeuven)
Barts Hospital, UCL partners
Un. Brussels
European Students Union
InHolland University of Applied Sciences
Royal College of Surgeons in Ireland
University of Maribor
University of Applied Sciences Western Switzerland
School of Hygiene and Tropical Medicine, London
University of Brighton
Genomics Institute Singapore
Viral Biochemistry Section, Laboratory of
Molecular Microbiology, NIH (USA)



Nuno Taveira (IMed, FFUL)

Advisers

Publications (10 most relevant, last 5 years)

Pimentel VF, Pingarilho M, Sole G, Alves D, Miranda M, Diogo I, Fernandes S, Pineda-Pena A, Martins MRO, Camacho R, Gomes P, Abecasis AB; Portuguese HIV-1 Resistance Study Group. Differential patterns of post-migration HIV-1 infection acquisition among Portuguese immigrants of different geographical origin. *AIDS*. 2022 Feb 25. doi: 10.1097/QAD.0000000000003203. Epub ahead of print. PMID: 35220350. (Impact Factor: 4.177)

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Cadogan, C. Development of a European competency framework for health and other professionals to support behaviour change in persons self-managing chronic disease. BMC Medical Education, 2021, 21(1), 287. <https://doi.org/10.1186/s12909-021-02720-w>

<p>Equipment/Techniques</p>	<p>Characterization of antibiotic/antifungal resistance Evaluation of new compounds as antimicrobial products Antimicrobial activity of antiseptics and disinfectants Microbiome characterization Epidemiology studies on Healthcare-Associated Infections (HAIs) Viral diagnostics Microbial control of different products Sterility tests Study of genetic polymorphisms Cytotoxicity and genotoxicity studies (biocompatibility of biomaterials) Study of biomarkers for oral diseases diagnosis</p>
<p>Announcements</p>	
<p>Some Pictures</p>	
<p>Location</p>	<p>Campus Universitário, Quinta da Granja, 2829 - 511 Monte de Caparica, Almada</p>
<p>Links</p>	<p>http://ciem.egasmoniz.edu.pt/pt-pt/research/research-labs.aspx</p>

