Laboratory Name	Applied Microbiology Lab	
Main Goals:	Microbial infections, with a particular focus on HIV infection and the study of resistance to antibiotics, with the aim of understanding virulence factors and finding solutions that contribute towards the control and prevention of those microorganisms.	

Lab Head	Helena Barroso, PhD
Group	Patrícia Cavaco Silva (PhD) Perpétua Gomes (PhD) Teresa Nascimento (MsC) Inês Figueiredo (MsC-research fellowship) Aida Duarte (PhD) Nuno Taveira (PhD) Pedro Borrego (PhD)
Senior Researchers	Patrícia Cavaco Silva (PhD) Perpétua Gomes (PhD) Teresa Nascimento (MsC) Inês Figueiredo (MsC-research fellowship)
PhD Students	

Research Projects (from 2013)	**2014-2017** – Title - Development of a new Nab based strategy to produce a universal HIV vaccine. Funding entity - FCT, Portugal (VIH/SAU/0008/2011). PI: Helena Barroso **2014-2016** - Title - Development and pre-clinical evaluation of a new microbicide gel for the prevention of HIV-1 and HIV-2 infection. Funding entity - FCT, Portugal (VIH/SAU/0029/2011). PI: Nuno Taveira. **2016 – 2019** – Title - Sterilization of clinically active hydrogels: looking for efficient strategies. Funding entity - FCT, Portugal (PTDC/CTM-BIO/3640/2014). PI: Ana Paula Serro. **Since 2015** – Title - Evaluation of substances with potential antimicrobial activity against cariogenic bacteria. - Funding entity – Egas Moniz, CRL. PI: Helena Barroso **Since 2016** – Title – Evaluation of toothbrush contamination and its influence on oral flora. Funding entity – Egas Moniz, CRL. PI: Helena Barroso **Ongoing work** Bacterial cross-talk in biofilm-enclosed mixed populations from diabetic foot infection Study of the environmental microbial contamination in healthcare facilities
Publications (10 most relevant, last 5 years)	Barroso H, Ramalhete R, Domingues A, Maci S. 2018. Inhibitory activity of a green and black tea blend on Streptococcus mutans. Journal of Oral Microbiology. In press. Doi: 10.1080/20002297.2018.1481322. Bártolo I, Diniz AR, Borrego P, Ferreira JP, Bronze MR, Barroso H, et al. 2018. Evaluation of the fusion inhibitor P3 peptide as a potential microbicide to prevent HIV transmission in women. PLoS ONE 13(5): e0197015. https://doi.org/10.1371/journal.pone.0197015 Borrego P, Gonçalves MF, Gomes P, Araújo L, Moranguinho I, Figueiredo IB, Barahona I, Rocha J, Mendonça C, Cruz MC, Barreto J, Taveira N. 2017. Assessment of the Cavidi ExaVir™ Load assay for monitoring plasma viral load in HIV-2 infected patients. J Clin Microbiol. 2017 May 17. pii: JCM.00235-17. doi: 10.1128/JCM.00235-17. [Epub ahead of print] Pironti A, Pfeifer N, Walter H, Jensen B-EO, Zazzi M, Gomes P, Kaiser R, Lengauer T. 2017. Using drug exposure for predicting drug resistance – A data-driven genotypic interpretation tool. PLoS One. 2017 Apr 10;12(4):e0174992. doi: 10.1371/journal.pone.0174992. eCollection 2017.

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Mottola C, Matias CS, Mendes JJ, Melo-Cristino J, Tavares L, Cavaco-Silva P, Oliveira M. Susceptibility patterns of Staphylococcus aureus biofilms in diabetic foot infections. BMC Microbiol. 2016 Jun 23;16(1):119. doi: 10.1186/s12866-016-0737-0.

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H.M. Solo-Gabriele, V.J. Harwood, D. Kay, R.S. Fujioka, M.J. Sadowsky, R.L. Whitman, A. Wither, M. Caniça, R. Carvalho da Fonseca, A. Duarte, T.A. Edge, M.J. Gargatéa, N. Gunde-Cimerman, F.Hagen, S.L. McLellan, A. Nogueira da Silva, M. N. Babic, S. Prada, R. Rodrigues, D. Romão, R. Sabino, R.A. Samson, E. Segal, C. Staley, H.D. Taylor, C. Veríssimo, C. Viegas, H. Barroso and J.C. Brandão. 2016. Beach sand and the potential for infectious disease transmission: observations and recommendations. Journal of the Marine Biological Association of the United Kingdom. Volume 96, Issue 1: 101-120. Published online July 2015 (doi:10.1017/S0025315415000843)

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Equipment/Techniques	
Announcements	
Some Pictures	
Location	Lab D07, Campus Universitário, Quinta da Granja - Monte de Caparica 2829-511 Caparica
Links	**http://ciiem.egasmoniz.edu.pt/pt-pt/research/research-labs.aspx**