




Laboratory Name	Forensic Biochemistry Research Laboratory (LabForSci)	
Main Goals	<p>Forensic sciences belong to the vast field of applied sciences and are characterized by the concurrence of different areas of knowledge supporting criminal investigation and judicial decision making. Our group works closely with courts, prosecution, police forces, forensic providers and government-associated laboratories promote a stronger link between scientific achievements and judicial system in areas such: Forensic toxicology, NPS research, genetics, chemical analysis of documents and GSR analysis.</p>	

Lab Head	Alexandre Quintas, PhD
Group	<p>Paula Silva, PhD Carlos Família, PhD Joana Couceiro, PhD student Carla Ferreira (PhD student) Cathy Paulino (PhD student) Ana Luzio (Master student) Teresa Leal (Master student) Ana Mouquinho (Master student) Daniela Guerreiro (Master student) Ana Luísa Costa (Master student) Bruna Almeida (BSc final trainship)</p>
Senior Researchers	<p>Paula Silva, PhD Carlos Família, PhD</p>



Joana Couceiro

PhD Students

Carla Ferreira

Cathy Paulino

**Research Projects
(from 2013)**

HOME/2014/JDRU/AG/DRUG/7086 – Identification and assessment of new psychoactive substances: A European Network

NEUROTOX - Novel Psychoactive Substances and Parkinson Disease: Molecular and cellular

TASCA - Toxicity Assessment of Synthetic Cannabinoids

DATA - Dating Age on the Time of Death through Aspartic Acid Racemization in Portuguese Population

GENA - Genetic of Aggressive Behaviour

INKDATE - Dating documents by chromatographic analysis of dyes

**Publications (10
most relevant, last 5
years)**

Quintas, A. (2019). Shifting the Paradigm of Forensic Sciences within Inquisitorial Judicial System In *SCITECH EUROPA* 30

Couceiro J, Ferreira C, Khosasiha V, Sakenova R, Constantino S, Quintas A. Novel strategies to address the challenge of synthetic cannabinoids: first developments. *Transl Res Innov Hum Heal Sci Ann Med* 50:S135–S136, 2018.

Ferreira C, Couceiro J, Quintas A. Development of a novel methodology to produce synthetic cannabinoids' combusted products for cellular toxicity assays. *Transl Res Innov Hum Heal Sci Ann Med* 50:S133–S134, 2018.

Effect of β -Cyclodextrin on the Multistate Species Distribution of 3-Methoxy-4',7-dihydroxyflavylum. Discrimination of the Two Hemiketal Enantiomers (2017) DOI: 10.1021/acs.jafc.6b04892

Glycation potentiates α -synuclein-associated neurodegeneration in synucleinopathies (2017) DOI: 10.1093/brain/awx056

Toxicological impact of JWH-018 and its phase I metabolite N-(3-hydroxypentyl) on human cell lines. (2016) DOI: 10.1016/j.forsciint.2016.03.024

Prediction of Peptide and Protein Propensity for Amyloid Formation. (2015) DOI: 10.1371/journal.pone.0134679




Photochromism of the complex between 4'-(2-hydroxyethoxy)-7-hydroxyflavylium and β -cyclodextrin, studied by ^1H NMR, UV-Vis, continuous irradiation and circular dichroism (2014) DOI: 10.1016/j.dyepig.2014.04.038

Transthyretin proteins regulate angiogenesis by conferring different molecular identities to endothelial cells (2013) DOI: 10.1074/jbc.M113.469858

Insights into the molecular mechanism of protein native-like aggregation upon glycation (2013) DOI: 10.1016/j.bbapap.2012.12.001

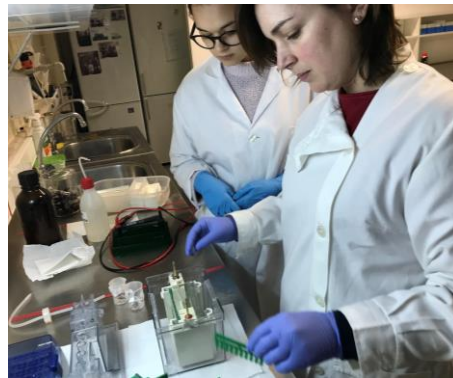
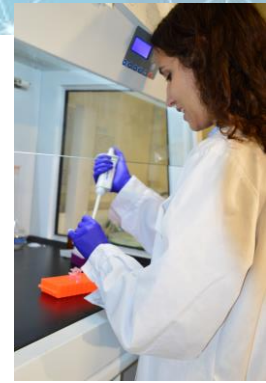
Evolution of the human immunodeficiency virus type 2 envelope in the first years of infection is associated with the dynamics of the neutralizing antibody response (2013) DOI: 10.1186/1742-4690-10-110

An ancestral HIV-2/simian immunodeficiency virus peptide with potent HIV-1 and HIV-2 fusion inhibitor activity AIDS (2013) DOI: 10.1097/QAD.0b013e32835edc1d

Equipment/Techniques	Spectropolarimeter Spectrophotometer HPLC-DAD GC-MS GC-NPD Microplate Reader 2D gel proteomic setup
Announcements	Labmeetings each Thursday at 12:00
Some Pictures	



CENTRO
DE INVESTIGAÇÃO
INTERDISCIPLINAR
EGAS MONIZ



Location

Campus Universitário, Quinta da Granja

Links