



Dr Dimitrios Doultinos

Education

- 2016-2019 INSERM and University of Rennes 1, France
ITN Marie Skłodowska Curie Research Fellow and PhD in Oncology. Thesis on “Targeting IRE1 Activity in Glioblastoma Multiforme (GBM)”.
- 2014-2016 Imperial College London, UK
MRes Clinical Research and Translational Medicine (Hons) and subsequent Associate Researcher
Taught elements (4 weeks):
- Initiation, Monitoring, Implementation and Statistics of Clinical Trials
 - European Legislation on Clinical Trials, Good Clinical & Manufacturing Practice, First in Human and Challenge trials. Devices and Imaging in Translational Medicine, CE marking
 - Therapeutic approaches, biomarkers, biologics, pharmacokinetics and dynamics, regenerative medicine
 - Good Clinical Practice certification
- Research element (November 14-July 15)
- Characterising novel mutations arising from exome capture in familial ALS
- 2011-2014 University of Birmingham, UK
BMedSci, Bachelor of Medical Sciences (Hons)
Specialised taught elements in final year included:
- “From Genes to Therapy”; Mitochondrial diseases, epigenetics, NGS, genomic medicine
 - “Experimental Immunology”; Antibody production, Role of Immune Cells, Inflammation, T cell regulation, Transcription Factors in Immunological response
- 2006-2010 University of Sheffield, UK
MBChB, Bachelor of Medicine and Surgery
- Clinical experience as student doctor in South Yorkshire NHS Trusts and five more countries (Austria, Switzerland, Greece, Ghana).
- 2005-2006 Modes Study Centre, Oxford, UK
A Levels Chemistry A, Mathematics A, Biology B

Research Experience

- 2020-present University of Oxford, Oxford Universities NHS Trust
Targeting the UPR-AR interactome in treatment resistant Prostate Cancer.
- Testing novel therapeutics in pre-clinical models of CRPC
 - Developing tissue slice surgical models of PCa
- 2019 e-NIOS, Greece
Bioinformatic approaches to individualised medicine
- Bioinformatics, data mining, healthcare, RNAseq and Whole Exome sequencing data analysis and genetic biomarker identification through the e-NIOS proprietary pipeline BioInfoMiner, SevenBridges Genomics, the CGC genomic cloud, Salmon and Kallisto.
- 2018 University of Gothenburg, Sweden
In silico drug discovery.
- Medicinal chemistry, computational chemistry and structural modelling through Maestro Schrodinger, Chimera and SuperMimic. Design of novel pharmacological modulators of the Unfolded Protein Response, in the context of treating Glioblastoma Multiform, a neurological malignancy.
- 2016-2019 INSERM and University of Rennes 1, France
Targeting IRE1 in CNS disorders.

- Generation of translational GBM models of modulated IRE1 expression in primary patient lines.
 - Pharmacological studies and peptidomimetic generation for novel therapeutic design.
 - Transfection, infection, cloning, molecular biology and specialised cell assays.
- 2014-2016 Hammersmith Hospital, Imperial College London
Characterising novel mutations arising from exome capture in familial ALS.
- Sanger Sequencing, Pedigree analysis on novel gene implicated in ALS pathogenesis
 - Western Blotting, Gel Electrophoresis. qPCR, RNA extraction, cDNA production
- 2013-2014 Birmingham Children's Hospital
Paediatric UK Demyelinating Disease Longitudinal Study
- 4th year follow up in an attempt to characterise Multiple Sclerosis as a paediatric disorder
 - Progress of demyelinating episodes in children aged 3 months-16 years in the UK and Ireland
 - GP follow up through letter construction and data gathering, analysis and interpretation
- 2014 Birmingham Institute for Biomedical Research, University of Birmingham
Employing Zebrafish as a translational model to define systemic consequences of Congenital Adrenal Hyperplasia
- Cloning and sub-cloning into different plasmid vectors, RT-PCR, tissue expression analysis
 - Rhodamine screening, zebrafish embryo phenotyping and maintenance 1 cell-120 hrs post fertilisation
 - COS7 cell line passaging, Gold Ultra-competent Bacterial Cell Growth
 - Morpholino design and TALEN, CRISPR construction
- Birmingham Institute for Biomedical Research, University of Birmingham
2 x Biomedical Sciences Module Specific Projects
- Zebrafish embryo injection and morpholino solution construct. Confocal Microscopy of Zebrafish Embryos and murine spleen and thyroid both in 2D and 3D
 - Murine Secondary Lymphoid Organ excision and homogenisation. Flow cytometry of B and T cell populations
- 2008 Sheffield Institute for Translational Neuroscience (then Hallamshire Hospital), Sheffield
Causative and Susceptibility genes of Motor Neurone Disease
- Mutation verification in FUS/TLS gene in cohorts of both control and MND patients from Sheffield Brain Bank cohort

Clinical Experience

- 2011 Speising Orthopaedisches Spital, Vienna, Austria & Universitaetsspital, Basel, Switzerland
Orthopaedic surgery and anaesthesiology & Neurology
- Scoliosis corrective surgery and anaesthetic management of 10 hr+ procedure along with stem cell spinal orthopaedic treatment. Arthroscopies, knee and hip replacements and their anaesthetic management
 - Multiple sclerosis examination and treatment plan. Stroke and CNS infection management, intervention
- 2007-2010 Doncaster Royal Infirmary, Sheffield Teaching Hospitals
A&E, Cardiology, Respiratory, MAU, Urology, Breast Surgery, Gastroenterology
- History taking, diagnostics, ward rounds, bloods, cannulations, catheterisations, NG tube insertion, examinations, advanced and basic life support training.
- 2004-2008 Ho District Hospital, Ghana; Onassis Cardiosurgical Centre, Athens; Abingdon Hospital, Abingdon; John Radcliffe Hospital, Oxford
General Surgery, Obs & Gynae, Infectious Diseases, Cardiothoracic Surgery, Palliative Care
- C-Sections, Varicocoele Operations, Cystic operations, EOUs
 - Coronary stenting shadowing, cardiological examinations and clerking. Care of the elderly.

Honours & Awards

- 2019 **Bridges Awards** for scientific and business partnerships (under consideration)
- 2016 **Doctoral Fellowship:** 3 year MSCA ITN Research Fellowship
- 2014 **Travel Grant:** European Society of Endocrinology Summer Conference, Bregenz, Austria. **“Employing Zebrafish as a Translational model to define systemic consequences of Congenital Adrenal Hyperplasia”.**
- 2010 **Travel Grant:** 16th International Congress for Student Doctors and Junior Doctors, Athens, Greece. **“Causative and Susceptibility genes of Motor Neurone Disease”.**

Publications

A. Patents

- 2019 (filed) IRE1 inhibitors as adjuvant therapy in oncology.

B. Papers

- 2020
1. Doultsinos, D.; Mills, I. **“The role of the androgen receptor as a driver and mitigator of cellular stress”**. *J. Mol. Endocrinol.* **2020**, doi:10.1530/JME-20-0057.
 2. Doultsinos, D.; Carlesso, A.; Chintha, C.; Paton, J.C.; Paton, A.W.; Samali, A.; Chevet, E.; Eriksson, L.A. **“Peptidomimetic-based identification of FDA approved compounds inhibiting IRE1 activity.”** *FEBS J.* **2020**, febs.15372, doi:10.1111/febs.15372.
 3. Raymundo, D.P.; Doultsinos, D.; Guillory, X.; Carlesso, A.; Eriksson, L.A.; Chevet, E. **“Pharmacological Targeting of IRE1 in Cancer”**. *Trends in Cancer* **2020**, *6*, 1018–1030.
- 2019
4. Dimitrios Doultsinos, Mari McMahon, Konstantinos Voutetakis, Aristotelis Chatziioannou, Eric Chevet, Tony Avril et al. 2019. **“Constitutive IRE1 α signaling maintains glioblastoma cell differentiation”**. doi: doi.org/10.1101/594630
- 2018
5. Lhomond Stéphanie, Tony Avril, Nicolas Dejeans, Konstantinos Voutetakis, Dimitrios Doultsinos, Mari McMahon, Raphaël Pineau, et al. 2018. **“Dual IRE1 RNase Functions Dictate Glioblastoma Development.”** *EMBO Molecular Medicine*, January, e7929. doi:10.15252/emmm.201707929.
 6. Almanza Aitor, Antonio Carlesso, Chetan Chintha, Stuart Creedican, Dimitrios Doultsinos, Brian Leuzzi, Andreia Luís, et al. 2018. **“Endoplasmic Reticulum Stress Signalling – from Basic Mechanisms to Clinical Applications.”** *The FEBS Journal* **0** (0). Wiley/Blackwell (10.1111). doi:10.1111/febs.14608.
- 2017
7. Doultsinos, Dimitrios, Tony Avril, Stéphanie Lhomond, Nicolas Dejeans, Philippe Guédat, and Eric Chevet. 2017. **“Control of the Unfolded Protein Response in Health and Disease.”** *SLAS DISCOVERY: Advancing Life Sciences R&D*, April. SAGE Publications Inc STM, 2472555217701685. doi:10.1177/2472555217701685.

C. Posters & Conferences

- 2020 Swedish Symposium for Prostate Cancer Research. Gothenburg, Sweden
- **“Novel IRE1 Inhibitors impact Prostate Cancer treatment resistance”**
- 2019 Endoplasmic Reticulum 2019 Paris: From basic cell biology to translational approaches: A path to the clinic
- **“Novel IRE1 inhibitors chemo-sensitise glioblastoma cells to temozolomide”**
- 2018 EMBO Workshop: Endoplasmic Reticulum Function in Health and Disease, Lucca, Italy
- **“Unfolded Protein Response signaling impedes tumor cell reprogramming into cancer stem cells”**.
- Also attended in 2017:
1. Inaugural **Cancer Cell Death and Therapy Congress**, Saint Malo, France

2. Endoplasmic Reticulum functions in physiology and pathology, Paris, France

- 2016 Imperial Neuroscience, Hammersmith Hospital patient open day, London, UK
- “Characterising novel mutations arising from exome capture in familial ALS”
- 2014 European Society of Endocrinology Summer Conference, Bregenz, Austria
- “Employing Zebrafish as a Translational model to define systemic consequences of Congenital Adrenal Hyperplasia”
- D. Talks**
- 2010 16th International Congress for Student Doctors and Junior Doctors, Athens, Greece
- “Causative and Susceptibility genes of Motor Neurone Disease”

Memberships

- 2014-Present **European Society of Endocrinology**
2016-Present **Society for ER Stress (Newly formed)**

Other Employment

- 2011-Present Birdsong Crafts & Interiors, Bakewell, Derbyshire.
Co-founder and manager
- IT and web-developer. Trading and customer care through trade shows and shop floor
- 2009-2011 Aspect 3 Apartments Ltd, Sheffield
Student Warden
- Out of hours emergency help including fire alarms and maintenance issues plus clerical work
 - End of tenancy contract and repairs dispute handling
- 2003-2009 Attica Zoological Park; National Securities SA, Athens; Martha’s Decorations, Athens
- Veterinary assistant and wildlife caretaker
 - Clerk and on site assistant on wedding and christening planning and design

Achievements in Academia, Sports & Charity

- 2014-Present Imperial Plus Volunteering Accreditation
- Imperial Science Festival volunteer
- Academic Representative for MRes Translational Medicine and Clinical Research
- Staff-student liaison, Journal Club organisation, First 3 min thesis event organised for Masters students
 - Introduction of Careers days at Hammersmith campus, Implementation of pastoral care changes
- 2006-2016 University of Sheffield Sport & Wicker Camp Thai Boxing Gymnasium
- Treasurer and Captain of the University Muay Thai Club for 3 years
 - One of three finalists for Sports Personality of the Year Award in 2012 for contribution to club sport
 - Independently training at world renowned Wicker Camp
 - Sheffield Medics Rugby Union Club
- 2006-Present Charity
- Barcelona Marathon 2013 and 2016, Vienna city marathon 2018 and multiple 10 k races for AICR (now WCR), Alzheimer’s Society. 24hr cycling and 100 round boxing sparring challenges
 - Overall raised more than £2,000
- 2001 **Junior European Parliament, Strassbourg**
- Won national competition to represent Greece at the Junior European Parliament
 - Represented and debated issues political, scientific and environmental

