

Curriculum Vitae

Personal information **Sara Arenas-Lopez**

Work experience

1. Employer: Evelina London Children's Hospital, Guy's & St Thomas' NHS Foundation Trust,
 - Start date: 102010
 - End date:
 - Position: Consultant Pharmacist_Paediatric Critical Care
 - Activities:
 - Pharmacy lead for the paediatric Cardio-respiratory and Critical Care Directorate
 - Leading Medicines Management for Paediatric Intensive Care (PICU), The South Thames Retrieval Network (STRS) and High Dependency Units
 - Leading Research Projects in the area of Paediatric Critical Care and Paediatric Medicines practice
 - Senior Clinical Lecturer for King's College London University, University College London
 - Honorary Senior Lecturer at Tor Vergata University, Rome, Italy
 - Lead on the Organisation of the International Paediatric Pharmaceutical Care Masterclass: Course Design and delivery as part of King's Health Partners. Received the Peter Hyland Award in 2019 from King's College London University
 - External Expert for the Paediatric Committee Formulation Working Group at European Medicines Agency since 2010
 - Senior Consultant for GRIP WorkPackage 5 and 6 (**Global Research in Paediatrics EU Commission FP7 Grant HEALTH_F5_2010_261060** www.grip_network.org) Since 2012) . Lead on the organisation of Module 5 for the GRIP Masters with WP Leaders. Participate in other activities as explained on website such as Formulation webinars and research.
2. Employer: European Medicines Agency
 - Start date: 112008
 - End date: 022010
 - Position: Scientific Paediatric Coordinator, National Expert on Secondment
 - Activities:
 - Managed by Dr Agnes Saint Raymond, Head of Service
 - Paediatric coordinator for Paediatric Investigational Plans (PIP's) specially for products related to: Paediatric Intensive Care (i.e analgesia, sedation, anti-infectives, sepsis, inotropes), Neonatology, Cardiology, Nephrology
 - Responsible for the Paediatric Formulation Working Group at EMA Paediatric Team supporting the work of the Paediatric Committee (PDCO)
 - Coordinator of expert meetings on the topic of paediatric sepsis in view of producing international guidelines for the development of products in this area
 - Official Responses with regards to paediatric formulations to the European Commission
3. Employer: Evelina London Children's Hospital, Guy's & St Thomas NHS Foundation Trust
 - Country: United Kingdom
 - Start date: 072002
 - End date: 102008
 - Position: Specialist Paediatric Pharmacist PICU, Band 8a
 - Activities:
 - Deputy of the Principal Paediatric Pharmacist
 - Provision of clinical Pharmacy and financial Support to PICU
 - Participation in the planning of the relocation to the new Evelina London Children's Hospital
 - Co_editor of the Guy's & St Thomas', King's College and University Lewisham Hospitals Paediatric Formulary for the editions of 2001 and 2005.
 - Coordinator pf training activities for paediatric pharmacy staff
 - Member of hospital Research Ethics Committee (Pharmacist representative) (until 2007)
 - October 2004-April 2009: Chair of the Paediatric SIG_European Society of Clinical Pharmacy. Responsibility for planning and delivery of high quality paediatric programme in European Conferences and leadership of the group including establishing collaboration links with other organisations (i.e EMA, NPPG) and participation in the "International Alliance for Better Medicines for Children" initiative
 - Chair of the London Neonatal and Paediatric Pharmacist Group_Subgroup of NPPG

- Delivered paediatric Pharmaceutical Care courses internationally in Argentina (Nov 06)_University of Buenos Aires and Argentinian Association of Hospital Pharmacy; kuwait (March 06)_University of Kuwait and kuwait Pharmaceutical Association. Lead the paediatric pharmacy course at Hong Kong Hospital Authority, strategic planning and delivery of the course in collaboration with the Centre for Paediatric Pharmacy Research, School of Pharmacy (UCL) and the Hospital Authority in Hong Kong. Participation in their national Pharmacy Congress.

- Country: United Kingdom
4. Employer: Guy's & St Thomas Hospitals
- Start date: 042000
 - End date: 062002
 - Position: Specialist Pharmacist Paediatrics Grade D
 - Activities:

- Provide clinical and financial support to Paediatric Intensive Care Unit (PICU): Attendance to multidisciplinary ward rounds, production of guidelines and participating on research

- Provided clinical and financial support to the paediatric nephrology unit

- Covering wards for colleagues especially the busy Neonatal Intensive Care Unit and cardiology

- Provision of pharmaceutical care to outpatients

- Direct supervision of junior pharmacists and technicians

- Managed performance of junior pharmacists

- Liaison with primary care for interface issues (facilitation of patient discharges, funding of certain treatments, etc)

- Financial responsibilities within the paediatric directorate (i.e reduction of outpatient expenditure)

- Training of nursing, medical and pharmacy staff, as well as in conferences organised by patients/parents organisations

- Teaching postgraduate diploma students (University of Brighton, pharmacy students_KCL, and nurse prescribing course (South Bank University)

- Planning study days as a member of the organising committee of the Neonatal and Paediatric Pharmacist Group_PICU subgroup

- Country: United Kingdom
5. Employer: Great Ormond Street Hospital for Children (GOSH)
- Start date: 031998
 - End date: 032000
 - Position: Resident Pharmacist
 - Activities:

- Seconded to Zimbabwe on behalf of Princess Diana's Fund_GOSH Project to work with The Ministry of Health. Implemented Clinical Pharmacy Services at Harare Central Hospital (Teaching Hospital) in order to promote rational drug use and minimizing cost and medication related problems. Evaluation of resources at the hospital and initiation of the service mainly in the paediatric unit. Advice to the Directorate of Pharmacy on the national pre_registration training program and on the development of a postgraduate degree in Clinical Pharmacy

- Planned and delivered a Clinical Training programme to five pre_registration Pharmacists, to Post graduate Certificate students and to technicians. Provided ward exposure to technician trainees to put their knowledge into context.

- Negotiated between Pharmacy and Directorate staff the provision of services from Pharmacy to a new Day Procedures Unit and implemented a patient _focused service including developing printed patient information to support discharge

- Covering for colleagues, provided a Directorate level service to the Cardio_respiratory and Critical Care Directorate and led and coordinated the 8 Pharmacy residency Team

- Undertook a number of audits, including an audit on quality of prescription writing, and (with intensivists) a review of the use of surfactant therapy on Acute Respiratory Distress Syndrome children, producing guidelines for surfactant use , which would cut costs and the potential incidence of side effects

- managed the TPN preparation team, provided the ward based clinical support for TPN use, and led the Multidisciplinary Nutrition Round during the absence of colleagues

- Country: United Kingdom
6. Employer: William Harvey Hospital
- Start date: 011997
 - End date: 021998
 - Position: Resident Pharmacist
 - Activities:

- Gained experienced of all parts of the service and of all ward specialties but specifically started up an extension to the existing Pharmacy Anticoagulant Clinic, to be run by a junior Pharmacist (with senior support). This involved "dependent prescribing", applying protocols and using communication skills.

- Country: United Kingdom
7. Employer: Language training and personal Development
- Start date: 101996
 - End date: 121996
 - Position: Student
 - Activities:

- Country: Spain
8. Employer: Apotheek der Deventer Ziekenhuizen
- Start date: 071996
 - End date: 091996
 - Position: Project Pharmacist
 - Activities:

- Short Contract to gain experience in health care in another country, primarily departments of Production, Quality Control and Dispensary

- Country: Netherlands
9. Employer: Department of Biopharmaceutics, School of Pharmacy, University of Utrecht
- Start date: 091995
 - End date: 061996
 - Position: Research Pharmacist _ERASMUS
 - Activities:
- Contributed to a team identifying and developing new treatments for malaria to overcome resistance under the supervision of Prof Daan Crommelin. The project title was: Desferrioxamine_containing liposomes in the treatment of malaria. Release in vitro and effects in vivo. This completed the pre_registration year commenced in March 1994 (see Below)
- Country: Netherlands
10. Employer: Agencia Espanola de Cooperacion Internacional _AECI Ministerio de Asuntos Exteriores (Spain's Foreign Office)
- Start date: 071995
 - End date: 081995
 - Position: Pharmacy Lecturer _ Bolivia
 - Activities:
- Scholarship providing development assistance to Bolivia
- Taught final year Pharmacy students at the Universidad Mayor de San Andres, La Paz. Acted as demonstrator in practical laboratory activities, sourced materials for the experiments from a pharmaceutical company (Bago Laboratories) in which I did some Quality Control Work.
- At the Children's Hospital of La Paz, sorted donated drugs to identify those which were of value in Paediatrics and in date. Classifying them so they could be used safely.
- Country: Bolivia
11. Employer: Universidad Complutense
- Start date: 111994
 - End date: 061995
 - Position: Work Experience Physico_Chemistry Department
 - Activities:
- Final year work experience (Beca de Colaboracion) alongside studies at the University
- Contributed to Physico_chemical laboratory work on a project: Liposome technology: Obtention and characterization. Study of their surface properties by using fluorescent probes
- Country: Spain
12. Employer: Community Pharmacy Lda Bienvenida Salas
- Start date: 031994
 - End date: 101994
 - Position: "In service Training" in community Pharmacy
 - Activities: Exposure to the activities of a pharmacy in primary care.
 - Country: Spain

Education and training

- Subject: Safe and effective use of Medicines in Paediatric Intensive Care
 - Start date: 122013
 - End date: 032017
 - Qualification: PhD
 - Organisation: Paediatric Medicines/pharmacology/Pharmaceutics. Premio Extraordinario de Doctorado November 2020 University of Granada
 - Country: Spain
- Subject: Clinical Pharmacy
 - Start date: 092001
 - End date: 072002
 - Qualification: Master of Science (MSc) in Clinical Pharmacy
 - Organisation: University of Brighton
 - Country: United Kingdom
- Subject: Hospital Pharmacy Specialisation
 - Start date: 022010
 - End date:
 - Qualification: Especialista en Farmacia Hospitalaria
 - Organisation: Comision Nacional de la Especialidad
 - Country: Spain
- Subject: Clinical Pharmacy
 - Start date: 101998
 - End date: 071999
 - Qualification: Postgraduate Diploma in Clinical Pharmacy
 - Organisation:
 - Country: United Kingdom
- Subject: Pharmacy degree
 - Start date: 091990
 - End date: 061995
 - Qualification: Pharmacy Degree
 - Organisation: Universidad Complutense de Madrid
 - Country: Spain
- Subject: Fomento de Centros de Enseñanza
 - Start date: 091989
 - End date: 061990
 - Qualification: Curso de Orientación Universitaria (C.O.U) Final mark 8.2
 - Organisation:
 - Country: Spain
- Subject: Colegio Aldeafuente
 - Start date: 091979
 - End date: 061989
 - Qualification: Educación General Básica (E.G.B) & Bachillerato Unificado Polivalente (B.U.P)
 - Organisation:
 - Country: Spain

Additional information

Publications

- 2022** A Sutherland, M Jones, M Howlett, S Arenas-Lopez, A Patel, B. Dean-Franklyn. Strategic recommendations for improving IV Medication Safety. *Drug Saf.* 2022 Aug;45(8):881-889. doi:10.1007/s40264-022-01203-1. Epub 2022 Jul 15 <https://pubmed.ncbi.nlm.nih.gov/35838875>
- 2019** Rashed AN, Tomlin S, **Arenas_Lopez S**, Cavell G, Whittlesea G. Evaluation of the practice of dose rounding in paediatrics. *International Journal of Pharmacy Practice* 2019, doi: 10.1111/ijpp.12549 [Epub ahead of print]
- 2017** Hassanzad M, **Arenas_Lopez S**, Baniasadi S. Potential Drug-Drug Interactions among critically ill paediatric patients in a tertiary pulmonary center. *The Journal of Clinical Pharmacology* 2017, 00(0) 1_7 DOI:10.1002/jcph.996
- 2017** **Arenas_Lopez S. PhD Thesis.** Safe and Effective Use of Medicines in Paediatric Intensive Care. ISBN: 978_84_9163_216_0 <http://hdl.handle.net/10481/46520>. Universidad de Granada, Spain
- 2017** **Arenas_Lopez S**, Gurung K, Tibby SM, Calleja_Hernandez MA, Tuleu C. Accuracy of Enteral Syringes with commonly prescribed paediatric oral liquids. *Arch Dis Child* 2017 Feb 24;pii: archdischild_2016_312492. doi: 10.1136/archdischild_2016_312492. [Epub ahead of print]
- 2016** Perkins J, Aguado_Lorenzo V, **Arenas_Lopez S**. Standard Concentration Infusions in Pediatric Intensive Care: The Clinical Approach. *Journal of Pharmacy and Pharmacology* published first online August 14, 2016 doi: 10.1111/jphp.12604 .
- 2016** **Arenas_Lopez S**, Stanley I, Tunstell P, Aguado_Lorenzo V, Philip J, Perkins J, Calleja_Hernandez MA, Durward A, Tibby S. Safe implementation of standard concentrations of morphine intravenous infusions in Paediatric Intensive Care. *Journal of Pharmacy and Pharmacology* Published online June 2016. DOI 10.1111/jphp.12580.
- 2015** **Arenas_Lopez S** and Tomlin S. Paediatric Pharmaceutical Care. In: *Optimising Treatment for Children in the Developing World*. Eds; MacLeod S, Hill S, Koren G, Rane A. Springer 2015; 117-125.
- 2014** Snoek A, James P, **Arenas_Lopez S**, and Durward A. Levomepromazine for difficult sedation in pediatric intensive care. *Journal of Pediatric Intensive Care* 3 (2014) 53-57
- 2014** **Arenas_Lopez S**, Mulla H, Manna S, Durward A, Murdoch IA, Tibby SM. Enteral absorption and haemodynamic response of clonidine in infants post cardiac surgery. *Br J Anaesth*. 2014 Dec;113(6):964-9. doi: 10.1093/bja/aeu258. Epub 2014 Jul 30
- 2013** Quijano Ruiz B, Desfontaine E, **Arenas_Lopez S**, Wang S. Pediatric formulation issues identified in Paediatric Investigation Plans. *Expert Rev. Clin. Pharmacol.* Early online, 1-6 (2014). doi: 10.1586/17512433.2014.857600
- 2013** **Versporten A, Sharland M, Bielicki J, Drapier N, Vankerckhoven V, Goossens H; ARPEC Project Group Members.** The antibiotic Resistance and Prescribing in European Children Project: a Neonatal and Pediatric antimicrobial web based point prevalence survey in 73 hospitals worldwide. *Pediatr Infect Dis J*. 2013 Jun;32(6):e242-53. doi: 10.1097/INF.0b013e318286c612
- 2013** Aguado_Lorenzo V, Weeks K, Tunstell P, Turnock K, Watts T, **Arenas_Lopez S**. Accuracy of the concentration of morphine infusions prepared for patients in a neonatal intensive care unit. *Arch Dis Child* published online October 22, 2013 doi: 10.1136/archdischild_2013_304522
- 2012** **Arenas_Lopez S**, Van der Poel, L_A, Lack G, Du Toit G, Fox AT. Are reported drug allergy in children always properly diagnosed? *Pharmaceutical Journal* vol 289, august 2012 online version.
- 2011** **Arenas_Lopez S**, Fajardo C, Valls i Soler A, Garcia_Corzo JR, Lima_Rogel MV, Calle G, Leite R, Lobos E, Hume_Wright Q, MacLeod S. Paediatric Clinical Trials in Latin America and Guyana: Present views of local practitioners and ways to embrace the future. *Pediatric Drugs* 2011; 13(4): 257-265.
- 2010** **Arenas_Lopez S**, Mulla H, Durward A, Tibby S. Extended interval gentamicin: Population pharmacokinetics in pediatric critical illness. *Pediatr Crit Care Med* 2010 Vol. 11, No. 2
- 2010** **Arenas_Lopez S**, Jarvis S, Gill A, Edwards S, et al. Paediatric Critical Care Pharmacist' training manual. Published online www.nppg.org.uk
- Significant Contribution to production of EU guidelines and Scientific reports:**
- 1_Guideline on the Investigation of Medicinal Products in The Term and Preterm neonate. Ref EMEA/536810/2008. London 25 June 2009
- 2_Guideline on Quality of Medicines for Use in the Paediatric Population. Draft submitted for approval by CHMP for External Consultation in March 2011.
- 3.Report on the Expert meeting on Neonatal and Paediatric Sepsis 8 June 2010. (http://www.ema.europa.eu/docs/en_GB/document_library/Report/2010/12/WC500100199.pdf)
- 2008** Knoppert D, **Arenas_Lopez, S** and McCartney R. The infancy of an International Paediatric Pharmacy Network. *Pediatr Drugs* 2008; 10(2):71-73.
- 2007** Tuleu C, **Arenas_Lopez S**, Robinson C, McCarthy D, Paget R, Tibby S, Taylor K Poppy seeds' in stomach aspirates: is oral omeprazole extemporaneous dispersion bioavailable? *Eur J Pediatr*. 2008 Jul;167(7):823-5. Epub 2007 Jul 20
- 2005** **Arenas_Lopez S** & Tomlin S. Paediatric Formulary 6th & 7th Edition, Guy's & St Thomas', Kings College and University Lewisham Hospitals. April 2005.
- 2004** **Arenas_Lopez S**, Riphagen S, Tibby SM, Durward A, Tomlin S, Davies G, Murdoch IA. Use of oral clonidine for sedation in ventilated paediatric intensive care patients. *Intensive Care Med*. 2004 Aug;30(8):1625-9.
- 2002** **Arenas_Lopez S**, Simoyi T, Tissocki K, Wilson E. The challenge of developing paediatric pharmacy services in Zimbabwe. *The Pharmaceutical Journal* (268), 13th Apr 2002, 501-3.

Projects

Memberships

WHO Lead Expert on the Development of Paediatric Formulations Guideline Update 24-25

Participation as speaker at the World Health Organisation Paediatric Regulatory Network Meeting, Nairobi, 20th-21st September 2023

Honorary Senior Lecturer at Tor Vergata University, Rome (Italy), University College London (U.K.) and King's College London (U.K.)

November 2020-Premio Extraordinario de Doctorado-University of Granada-Spain

February 2014_ Faculty Fellow Royal Pharmaceutical Society (FFRPS)

2004_2009 Chair of the Paediatric Interest Group from European Society of Clinical Pharmacy

From 2002 Member of the Paediatric Intensive Care Society U.K.

From 1999 Member of Neonatal and Paediatric Pharmacist Group (NPPG)

1997 Registration with The Royal Pharmaceutical Society of Great Britain. **Registration number: E_373, and GPhC: 2046036** (MRPharmS)

Other Relevant Information