



FROM THE UK TO THE USA AS AN AA.

Professor Mark Leonard UK AA, USA CAA.

# UK QUALIFICATION

- Qualified as an ODP in 2000
- Agency ODP for several years in and around the Birmingham Area
- Settled at Queen Elizabeth Hospital Birmingham (QEHB) in 2004
- Anesthesia Practitioner Training 2006 (First two at QEHB)(Based on US Model)
- Graduated 2009
- Developed the largest group of AP/PA(A)/AA's in the UK
- Developed the largest regional anesthesia block room in the UK
- From 2012 started hosting US AA students







Welcome to  
GEHB theatres  
Do you have any further  
questions?  
Please contact your local  
GEHB representative for  
further information.

PHILIPS

PHILIPS

2

REC



# DATA CAPTURE

Delivering the best in care

Queen Elizabeth Hospital Birmingham **NHS**  
Part of University Hospitals Birmingham  
NHS Foundation Trust

## A review of non-physician delivered upper limb regional anaesthetic blocks at a tertiary referral hand centre

M. Leonard, T. Jenkins, S. Massey, A. Chimjimba, S. McColl, D. Power, S. Chavan.  
Birmingham Hand Centre,  
Queen Elizabeth Hospital Birmingham,  
Edgbaston, Birmingham, UK.



### Background

The Birmingham Hand Centre is based at the Queen Elizabeth Hospital Birmingham (QEHB) and provides trauma and elective tertiary hand services for the West Midlands as well as specialist reconstructive surgical expertise for military combat injuries through the Royal Centre for Defence Medicine, also based at the hospital. There are approximately 2500 trauma and 1000 elective operative procedures each year. The regional block service has developed alongside the hand service and the physicians' assistant (anaesthesia) role has become integral to the delivery of a safe and efficient service.

Physicians' Assistants (Anaesthesia) are highly trained and skilled healthcare professionals who are qualified to administer anaesthesia under the supervision of an anaesthetist. The role is relatively new to the UK, but is common practice in Scandinavia, northern Europe and the United States. PA(A)'s have been part of the anaesthetic workforce at QEHB for 5 years and are an established part of the anaesthetic team. Following qualification, PA(A)'s undergo a rigorous in-house training programme in regional anaesthesia which is underpinned by an internationally recognised ultrasound training course, specific to regional anaesthesia.

### Objectives

To demonstrate that Physicians Assistants in Anaesthesia can provide a safe and effective service providing ultrasound-guided upper limb regional anaesthesia.

### Methods

Since 2010, prospective data was collected on all patients having upper limb regional anaesthesia ("block") using a standard ultrasound and nerve stimulation technique as part of their surgical management. Comprehensive details of the technique were recorded on a duplicate pre-printed form, one part of which served as a record of the block, and remained within the patient's notes. This was then transferred into a database. Data recorded included patient demographics, type of block, grade of anaesthetist/PA(A), failed block requiring either top up or conversion to general anaesthesia and any complications.

### Results

2536 upper limb regional blocks were recorded of which 1382 were performed by PA(A)'s (see fig. 1). The PA(A) "Top-up" rate, defined as a peripheral nerve block performed post "primary" brachial plexus block accounts for 11% of the initial group figure (see fig. 2).

The PA(A) general anaesthesia conversion rate at less than 1% was significantly lower than the non PA group.

Two patients in the non-PA group suffered neurological complications (1:1268). There were no neurological complications in the PA group.

### Fig. 1 Percentage of blocks performed by grade



Grade	Percentage
Assoc. Specialist	32%
Consultant	28%
Senior Trainee	22%
Junior Trainee	12%
PA(A)	6%

### Fig. 2 Peripheral "top-up" rates by grade



Grade	Percentage
Assoc. Specialist	12%
Consultant	10%
Senior Trainee	18%
Junior Trainee	22%
PA(A)	38%

### Conclusions

Physicians' Assistants in anaesthesia are able to provide a safe and efficient regional anaesthesia service with low rates of conversion and neurological injury. Anecdotal evidence demonstrates an increased throughput of patients, less "down-time" between cases and improved training opportunities for junior doctors.

- ESRA 2012 - Poster
- IFSSH 2013 - Oral
- ESRA 2013 - Poster x3
- ESRA 2013 - Oral
- BACA - Oral
- FESSH 2014 - Poster
- ESRA 2014 - Poster

As well as numerous oral presentations at national meetings.

# USA QUALIFICATION

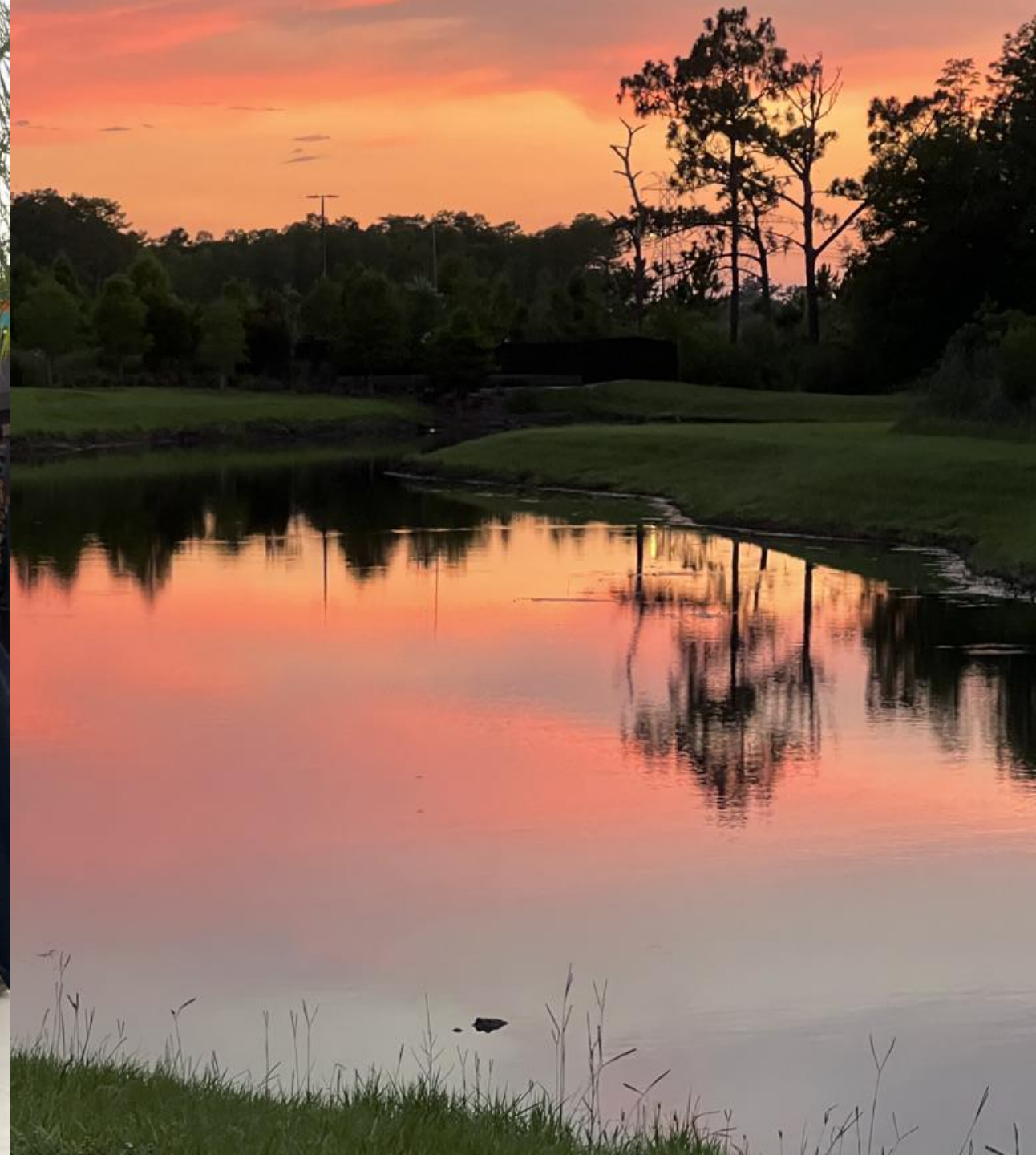
- Moved to Tampa, Florida 2018
- Assistant Professor at Nova Southeastern University (NSU)
- Graduated as a Certified Anesthesiologist Assistant (CAA) 2019
- Currently work at HCA Florida – Trinity (North of Tampa)
- Director of Simulation and Ultrasound Education for all NSU Locations
- Only Midlevel provider in the world licensed to work in the UK and USA
- A very, very, very complex process!







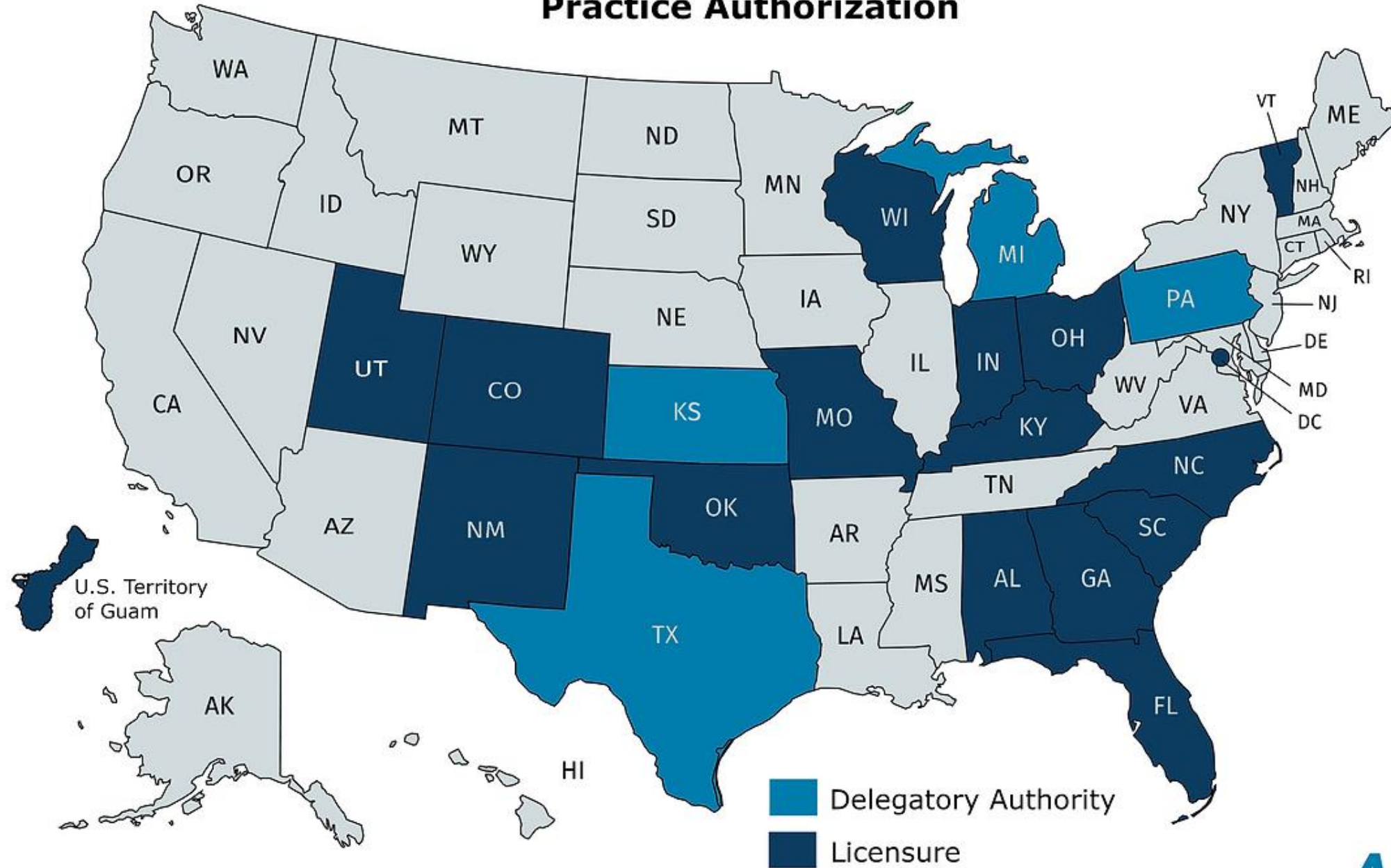




# USA CAA ROLE

- ASA 1-5
- Anesthesiologist 4:1
- Regional Anesthesia (USGRA/Spinal/Epidural)
- Vascular Access (Arterial/CVC)
- Lead from Cardio-Thoracic Anesthesia (Largest Robotic Lung Program In Area)
- Varied Shift Structures – Start early 07:00!
- Very Large Salaries, bonus's, pension plans, CME etc.

# Certified Anesthesiologist Assistants Practice Authorization



# TRAINING DIFFERENCES

- US students apply direct to university (MSc in Anesthesia)
  - NSU is the largest educator of CAA's in the USA
- Need an undergraduate degree, GPA of at least 3.5 and GRE or MCAT exam
- 27 months training – Didactic for 15 months, full time clinical for final 12 months
- Graduation with MSc in Anesthesia then sit board exam
- Recertification exam every 6 years
- Apply directly to hospitals for a position



WHICH PART OF COLD WET  
BIRMINGHAM MADE YOU  
WANT TO MOVE TO FLORIDA!