The Newsletter of the APA

# T-Piece

No. 7 July 2013





Past Presidents of the APA present in Cambridge at the ASM

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## PRESIDENTS REPORT

Dr Robert Bingham President, APA

What is your vision for the APA when you become President" is a question I've been asked several times since being made President Elect. This is a very scary question, partly because it suggests that the President has far more influence than he/she actually does and partly because of the way it concentrates the mind! The immediate and instinctive answer I gave on every occasion was "not to mess up the fantastic work done by Kathy Wilkinson" because her Presidency was notable, amongst many things, for forging excellent links with other organisations (RCPCH, RCN, BAPS, NCEPOD, Children's Surgical Forum etc) and those links will considerably extend our influence and ability to make a difference in the future. She is going to be a hard act to follow. One sure focus of my attention will be to ensure that we are fully understanding and representing your views. The APA is your organisation, you fund it with your subscriptions and you elect council members to represent you, so it is very important that we know what you'd like us to do. We conducted a membership survey a couple of years ago, so we have some good information from that. We also ask you to fill in feedback forms at the end of each ASM, so that we can try and ensure that we provide the sessions and subjects that you would like in the next meeting. There's no reason why the feedback should stop there though, we can be contacted via

our offices at AAGBI at any time and we would welcome suggestions about educational material you'd like to see, the content of the website or indeed any aspect of the Council's business.



The other way you can influence things, of course, is by standing for Council election yourself. Council members are from all types of hospital and background - indeed we encourage a diverse membership, so it doesn't matter what sort of paediatric anaesthesia you do, how much you do or where you come from, if you care about our specialty and would like to influence it for the better, we have elections for Council members in the autumn – maybe you should consider applying.

Since I've only been in office for a month, I don't have that much news to report but one area, which also conveniently emphasises the vital importance of your input, is our negotiations on Safety Cannulae.

As I'm sure you're aware, the European legislation on

prevention on sharps injury came into force on the 11th May this year and we published guidance on its implementation on our website: <a href="http://">http://</a> www.apagbi.org.uk/sites/default/

files/images/Safety %20Cannulae.pdf

Our guidance pointed out that the legislation expected organisations to "substitute traditional, unprotected medical sharps, where it is "reasonably practicable" to do so" but emphasises that there is no compulsion to use safer sharps and that the use of safer sharps "should not compromise patient care" and that "ease of use" should be considered. This advice attracted the attention of the Safer Needles Network (SNN) who were unhappy with the wording and asked for a telephone conference, which I joined on the 5th June. During this, thanks to the survey that you all filled in, I was able highlight your concerns with good evidence to back me up. I pointed out that even though most of you were familiar with safety cannulae, 79.8% of you found them harder to insert in difficult veins. We all agreed that, although the technology of safety needles is extremely good, the smallest sizes are still not as easy to use as the conventional cannulae. My principal concern was that conventional cannulae would be unilaterally withdrawn by the manufacturers, thus removing the choice on the part of the clinician.

I was reassured that this would not occur and have now received a letter from SNN stating that "A representative of the industry on the SNN has confirmed that he is not aware of any plans by manufacturers to withdraw the standard products, in particular those used for smaller patients".

Having been reassured by this, I have been trying out safety cannulae myself since I have been involved in these discussions and am surprised how quickly I have become used to them. From the survey, many of you in the UK are already happy with them and colleagues who have worked in Toronto Sick Kids say that they are almost universally used there, with no apparent difficulty (although they do have some standard kit for particularly difficult veins). Their potential advantages in reducing needlestick injury are clear, so to me, using safety cannulae for routine cannulation whilst reserving standard cannulae for difficult access seems a sensible way forward, encompassing the best of both worlds. In the end though, the clinician putting the cannula in the vein has to make the decision about the best tool for the job.

Bob Bingham

# Linkman meeting 2013.

"The Linkman Meeting is scheduled to take place on Monday 18th November, at the AAGBI,

Portland Place, London, from 10 am - 4.30pm. The day will include a mixture of topical issues, both

clinical and political. The approximate price is expected to be around £100, and 5 CME points will be

applied for. Email updates are being sent to linkmen at intervals, and the mailing list continues to be

refined, so please send your email address if you want to be added."

Topics to include;

Peer review update
Revalidation update
Network update
Post-operative pain
Retrieval
Standards of Training
O and A

## **APRICOT** study

Walid Habre and Francis Veyckemans proposed a research project entitled "Anaesthesia Practice In Children an Observational Trial (APRICOT)" to the Clinical Trial Network of the European

Society for Anaesthesiologists (ESA) and the Scientific Committee of the European Society for Paediatric Anaesthesiology (ESPA). Both Committees accepted to support this project and a common sterring committee has been appointed.

The aims of the APRICOT study are:

- to describe the differences in paediatric anaesthesia practice throughout Europe.
- to establish the incidence of severe critical events in children undergoing anaesthesia in Europe
- to study the potential impact of this variability on the occurrence of some severe critical events: e.g., laryngospasm, bronchospasm, aspiration, anaphylaxis, cardiovascular instability, neurological damage and cardiac arrest.

It will thus be a prospective observational multi-center cohort study.

The patients' inclusion criteria are:

- age: from birth to 15 years included
- all children admitted for an inpatient or outpatient procedure under general anaesthesia with or without regional analgesia
- children admitted for a diagnostic procedure under general anaesthesia (such as endoscopy, radiology...)
- children admitted out-of-hours for emergency procedures

This study will recruit as many participating institutions as possible among the 30 European countries represented at the ESA Council. It is planned to recruit at least 24,000 children

over a period of two consecutive weeks including weekends and after-hours. The 2-weeks recruitment period will be chosen by each site to occur between 1st April 2014 and 31st December 2014. The study

designers anticipate that a total number of at least 200 centres will be needed to include between 20 and 200 children over the 2 weeks period.

In order to obtain the largest view possible on paediatric anaesthesia in each countries, every hospital is invited to participate whether it is specialized in paediatric care, a district general hospital, a private hospital or a small hospital. The participation of all the APAGBI members but also of colleagues

whose anaesthetic practice is occasional is encouraged.

Each centre will have a local coordinator. Each country will have one or two national coordinators who will ensure that all participating centres in her/his country are in accordance with the study protocol. The study CRF protocol is currently being written and will be tested on the field in a few centers before being distributed among participating centers. In short, epidemiologic and anaesthetic data of every anaesthetic will be summarized on an anonymized CRF protocol. The latter will have to be completed on a secured website by the local coordinator. The study will be launched as soon as possible but will not start before April 1st 2014 to allow each center to obtain its Ethical Committee advice (parental consent needed or waived, depending on the national regulations) in time.

To be involved please contact by e-mail Walid Habre or Francis Veyckemans (Study Coordinators) at <a href="mailto:esa.apricot@gmail.com">esa.apricot@gmail.com</a> or the ESA Secretariat (<a href="mailto:research@esahq.org">research@esahq.org</a>).

### **Annual Scientific Meeting Cambridge 2013**

Alistiair Cranston, Meetings Secretary

APAGBI/ESPA Meeting, Cambridge, 19th - 21st June 2013

Cambridge hosted the 40th Annual Scientific Meeting of the APAGBI, jointly with the European Society for Paediatric Anaesthesiology (ESPA) this year and, by popular consent, this has been one of the most successful meetings of recent years. Almost 500 delegates attended the meeting in the West Road Concert Hall and Law Faculty of the University of Cambridge, the weather was fine and the City of Cambridge an excellent backdrop for proceedings. We are hugely grateful to Dr Liam Brennan and his colleagues from Addenbrookes Hospital, who hosted and organised the meeting in fine style. Thanks are also due to our trade sponsors, event venues and our event organisers from the AAGBI headed by Oliver Kingham. Wednesday 19th June saw 140 delegates enjoy a half-day history session to celebrate the 40th Anniversary of the APA with 4 compelling lectures from an international faculty. These were complemented by a small exhibition of equipment and paraphernalia relating to our specialty organised by Trish Willis of the AAGBI Heritage Centre. It was splendid to welcome 9 former presidents of our association, including several founder members to this special event.

The spectacular Fitzwilliam Museum hosted the evening reception event and we were welcomed to Cambridge by Professor Sir Leslek Borysiewicz, Vice Chancellor of the University. Sir Leslek also presented a donation, on behalf of the APA, to the East Anglian Children's Hospices movement. We enjoyed acapella musical entertainment from a quartet of boys from The King's School, Ely.

For the main sessions of the meeting, we were delighted to welcome Dr Nigel Turner, ESPA president, and many of his colleagues to co-host the meeting. Attendance at the meeting was fantastic with close to 500 delegates registering, equalling numbers for the 2009 Glasgow meeting.

A varied programme of talks, workshops and interactive discussions for both specialist and generalist children's anaesthetists with an emphasis on neuroscience and core topics kept (most) delegates away from the other attractions of Cambridge for two days and the standard was agreed to be excellent by all. Full details of the programme can be found on the APA website, www.apagbi.org

The APA was delighted to confer honorary membership of the association on Dr Martin Johr, Dr Jane Peutrell and Mrs Ann Seymour.

Prof David Spiegelhalter delivered the keynote Jackson Rees Lecture on the subject of risk in anaesthesia and surgery. His unravelling of some aspects of how to 2 present risk was entertaining and informative and the subject of much conversation. Prof Spiegelhalter was also able to plug his book, "The Norm Chronicles" more details of which together with much more can be found on his website.



We received record number of abstract submissions for the meeting and were able to accept 9 free paper presentations and 100 poster presentations, including 10 selected for the trainee poster prize. Dr Ruth Treadgold won the poster prize with her presentation of a paediatric pain care-bundle across the South-West clinical

network of ED and minor injury units. The free paper prize-winner was Dr Hannah Gill who presented "MACvoc": A new sub-anaesthetic measurement in neonatal rats. The standard of submissions was very high and we are grateful to members of the APA Scientific Committee for selecting and judging these. All of the accepted abstracts can be viewed in the online abstract booklet via the APA website; <a href="http://www.apagbi.org.uk/professionals/meetings/annual-scientific-meeting">http://www.apagbi.org.uk/professionals/meetings/annual-scientific-meeting</a> as can some photos of the meeting.

During the meeting Sarah Kessler made a presentation on behalf of the "Lifebox" charity. A collection raised £400 and an equal amount will be pledged by APA Council. This will allow the purchase of spare paediatric and neonatal paediatric oximeter probes for the initiative. For more information on Lifebox, please visit <a href="http://www.lifebox.org/">http://www.lifebox.org/</a>

The Annual Dinner was held in the imposing surroundings of Queens College and was a sell-out event. We were delighted to be joined by the President of BAPS and the lead for Children and Young People at the RCN as well as several of our past presidents and honorary members. "Cambridge Voices", who included a musical version of checking the anaesthetic machine in their repertoire, entertained us. Dr JP van Besouw, President of The Royal College of Anaesthetists, proposed the toast to the APA.

As the meeting closed, our indefatigable president of the last two years, Dr Kathy Wilkinson, handed over the reins and the presidential medal of office to our new President, Dr Bob Bingham. Prof Andy Wolf becomes our president-elect. May I request that all delegates who have not already done so please return feedback forms for the meeting (available on the APA website), so that we can continue to plan meetings that are relevant and informative for all of our members. On that note the caravan moves on, but we hope the dogs are not barking too loudly! Preparations are well advanced for next year's meeting in Leeds. This will be held at The Royal Armouries Museum on 15th and 16th May and we trust will be as successful as was this meeting.

# Citations for new Honorary Members of the APA Mrs Ann Seymour

Delivered by Dr Simon Courtman

I would like to call this citation "The lay representative - A token force or a force to be reckoned with?" as her column in the college bulletin was called.

Apparently what I am about to say has all occurred by accident, with the blame falling completely on her son Carl who started a series of events whilst he was sitting on an adult surgical ward after having his appendix out.

So, It was an accident that following this experience in the 1980s she joined the National Association for the Welfare of Children in Hospitals and began fundraising.

She accidentally set up a helpline for distressed parents and after listening to their pleas to stay with their child, demanded that her local hospital allowed parents into the AR with their children.

After this local success, and others, which begins to let us see a trend developing,

She joined the RCOA Patient Liaison Group in the 1990s and hence started her long career in bothering anaesthetists, nurses and managers who are responsible for caring for children.

She then helped with the Tanner Report followed by demanding that starvation times RCOA guidance on provision of paediatric anaesthesia included. Apparently irritating quite a few people along the way.

There then follows a list of misdemeanours including:

- lay representative to the APA council in 2009-2012
- British Paediatric Surveillance Unit Scientific Committee
- Royal College of Paediatrics and Child Health, Patients' and Carers' Advisory Group
- NCEPOD Expert Working Group, 'Surgery in Children
- Confidential Enquiry into Maternal and Child Health (CEMACH) Board
- National Collaborating Centre for Women and Children's Health Board
- National Advisory Committee for Enquiry into Child Health
- · safeguarding provision
- · children's information project
- lots of guidelines
- spoken at APA conferences
- written on the website for parents and children section



But perhaps her greatest contribution to children and the parents of , has been her unswerving commitment to peer review.

She started reviews in 2004 in Manchester and joined visits with whichever hat she was wearing ASC, CHC, MLSC, RCOA, APA.

Over the last few years she has been a constant presence in the APA peer review team.

It is very time consuming with lots of travel and time away from home but she was overwhelmed by the sense of getting out there, seeing what was really going on and really making a difference. She even postponed her hip surgery to fit in a review!! She came back even faster and more driven after.

I have had the greatest pleasure in doing many reviews with her.

Quickly realising that the smile and gentle tones were a disarming distraction for the steely determination within to represent the needs of children and parents in hospitals.

She might sit quietly in the room or at the back of the team but If Ann tilts her head and speaks, you listen.

The size of her contribution to fighting for and representing children and families over 30 years is immeasurable.

So a token force or a force to be reckoned with?

Well perhaps the story which answers this is Ann's involvement in organising the Olympics. "Apparently they're going to put surface to air missiles in the park outside my house" she announced one morning.

"Well, I will be seeing Lord Coe and I will be seeing about that."

Yes I thought, might as well move them now.

So it is with great pleasure that I recommend Ann Seymour, to become an Honorary Member of the APA.

### **Dr Jane Peutrell**

### Delivered by Dr Neil Morton

I am delighted to give this citation for Jane Peutrell who has made several major contributions to the APA during her tenures of office as elected representative for Scotland and as Honorary Secretary. Jane was the driving force behind the Linkman scheme and also helped set up the Scottish Paediatric Anaesthetic Network (SPAN), both highly successful initiatives. She was an outstanding Honorary Secretary and all her achievements were in addition to busy clinical and managerial careers. She also made a strong contribution to medical education with the publication of three popular textbooks, as Editor-in-Chief of Anaesthesia and Intensive Care Medicine and, in particular, in organising three highly acclaimed Paediatric Regional Anaesthesia courses in collaboration with the Department of Anatomy at the University of Glasgow. These were especially innovative in their use of specially prepared plastinated paediatric anatomical specimens. Jane is now enjoying retirement but is busier than ever ling the "Good Life" as the growing season reaches its belated peak!

It is with great pleasure that I propose Jane Peutrell for Honorary Membership of the APA.





The Citation for Dr Martin Johr will appear in the next edition of the newsletter





To everyone at the APAGBI,

Sincere thanks from all of us at the Lifebox Foundation for your donation of £408.67, matching funds raised at the recent Cambridge conference.

It was a pleasure to introduce Lifebox to your members las month, and we were overwhelmed by their spontaneous generosity.

We know that paediatric anaesthesia is particularly challenging in the countries where we work, with resources, support and training scarce.

Your matching donation, combined with the Cambridge contribution, will enable us to provide an additional 51 paediatric or neonatal probes to oximeters that we distribute, making a life-changing difference to health workers striving to deliver safe treatment to young children in such dangerous circumstances.

Your organization's support for safe anaesthesia and surgery in low-resource settings is enormously important. Thank you for helping us to make a permanent, positive change in the quality and safety of care worldwide.

With best wishes,

Deulu Pla

Pauline Philip Chief Executive

Lifebox Foundation

### **Trainee Update**

# July 2013 Alyson Calder, Trainee Representative, APAGBI

It was great to see such a good trainee turn out at the Annual Scientific Meeting in Cambridge. During the planning sessions for this meeting, the committee was keen to provide something for specialists, generalists and trainees alike. I think that the programme achieved this and I certainly found it educational. I hope that those of you preparing for consultant job interviews managed to secure a place at one of the "Finding and Securing Your Ideal Consultant Post" Workshops for trainees. If you have any requests for topics you would like to see covered at future meetings, then please email me with them so that I can represent your wishes to the organisers.

127 abstracts were submitted for presentation at this year's ASM. Nine of these were invited to deliver oral presentations. The prize winning oral presentation was entitled "MACvoc: a new sub-anaesthetic measurement in neonatal rats" by Dr Hannah Gill. 10 posters were selected to be judged for the trainee poster prize. This was won by Dr Ruth Treadgold who presented her study into the "Implementation of a paediatric pain carebundle across the South West clinical network of emergency departments and minor injury units". The APA council was delighted to see so much trainee involvement in the meeting this year, and I hope that you will all submit abstracts to next years meeting in Leeds!

There are several other meetings coming up which might be of interest to you. There will be an APA Linkman Meeting in London on Monday 18th November. You'll find details of

THE APAGBI TRAINEE HANDBOOK

Guidance for those planning a career in Paediatric Anaesthesia

Editors: Alyson Calder and Robin Sunderland

the programme at <a href="www.apagbi.org.uk/professionals/apa-linkman-scheme/apa-linkman-meeting">www.apagbi.org.uk/professionals/apa-linkman-meeting</a> when they become available. The 6th Plymouth Symposium of Paediatric Anaesthesia is on the 20th of September (<a href="www.apagbi.org.uk/sites/default/files/images/Symposium%20of%20Paediatric%20Anaesthesia%202013%20v2.pdf">www.apagbi.org.uk/sites/default/files/images/Symposium%20of%20Paediatric%20Anaesthesia%202013%20v2.pdf</a>). In the sunny climes of Glasgow, the Scottish Paediatric Anaesthetic Network will hold their annual educational meeting on the 29th of November (see <a href="www.span.scot.nhs.uk">www.span.scot.nhs.uk</a>). If you fancy going further afield, there will be an ESPA meeting in Geneva this September (<a href="www.euroespa.org/geneva/welcome-in-geneva.html">www.euroespa.org/geneva/welcome-in-geneva.html</a>).

And finally.... the 1<sup>st</sup> Edition of the APAGBI Trainee is here! The hard copies have been printed and are in the APAGBI offices in London. All trainee members will receive a free hard copy soon, so please do make sure that Busola (busola@aagbi.org) has your correct postal address. The handbook is almost 100 pages long and full of useful articles to guide your career in paediatric anaesthesia. A PDF version is available on the Trainee Section of the website in order to make this publication accessible to all, including the international paediatric anaesthetic community. I'd like to thank all of the contributors to the handbook who volunteered their time and expertise willingly.

Please email me with any requests/questions you have and let me know if the APA can help you in any way.

# **Guidelines**

Does your department have any guidelines that you can share?

The APA is compiling a list of those in use to produce a database of existing guidelines.

If you have please send them to Colin Dryden <a href="mailto:colin.dryden@gmail.com">colin.dryden@gmail.com</a>.

# Advance Notice.

Elections to APA council

An election will be held for 3 new council members in September 2013.







### JOINT MEETING ESPA-SPA

In collaboration with the Swiss Society for Paediatric Anaesthesia (SGKA-SSAP)



# ESPA Congress Geneva, Switzerland 2013 5<sup>th</sup>-7<sup>th</sup> september

**Congress Information** 

**Scientific Information** 

Exhibition

#### Welcome

Dear Colleague,

Geneva, the most international city in Europe, will be host to the 2013 Annual Congress of the European Society for Paediatric Anaesthesiology (ESPA) to be held jointly for the first time with the American Society for Pediatric Anesthesia (SPA). This is a great opportunity to meet, share and learn from internationally known keynote speakers and experts during a variety of sessions including plenary lectures, panel discussions, interactive sessions, workshops, case based discussions and also at formal and informal networking events.

The programme is focused on improving the quality and safety of anaesthetic services for children and for the first time, TIVA for Tots and congenital cardiac anaesthesia satellite meetings will be part of the three-day congress. Together with our host society, the Swiss Society for Paediatric Anaesthesia (SGKA/SSAP), we are organizing an outstanding congress that meets the needs and interests of both the specialist paediatric anaesthesiologist and the generalist.

Not to be missed will be the wide choice of amazing social events such as a winecycling tour and rewarding excursions to Mont-Blanc, or the 27-kilometre particle accelerator at CERN.

With its humanitarian traditions and cosmopolitan flair, the European seat of the United Nations and world headquarters of the Red Cross, Geneva, 'capital of peace' welcomes you in September 2013 for what promises to be a very special ESPA congress!

Nigel Turner President ESPA Walid Habre SGKA/SSAP Nancy Glass President SPA

**GOLD SPONSOR** 





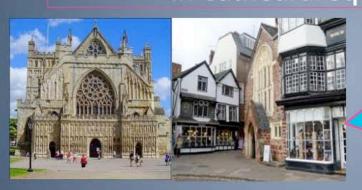


# CYLCH ANESTHETYDDION PLANT CYMRU PAEDIATRIC ANAESTHETISTS' GROUP OF WALES

The 2013 Annual PAGW meeting will take place on the 7-8th November at the Metropole Hotel, Llandrindod Wells, Powys. This will be a joint meeting with the Society of Anaesthetists of Wales. Full details will be posted on the PAGW website <a href="http://www.pagw.org.uk">http://www.pagw.org.uk</a> and on the APA site once available.



Friday 11th – Saturday 12th October
At the exclusive Abode Hotel (Royal Clarence)
in Cathedral Square, Exeter

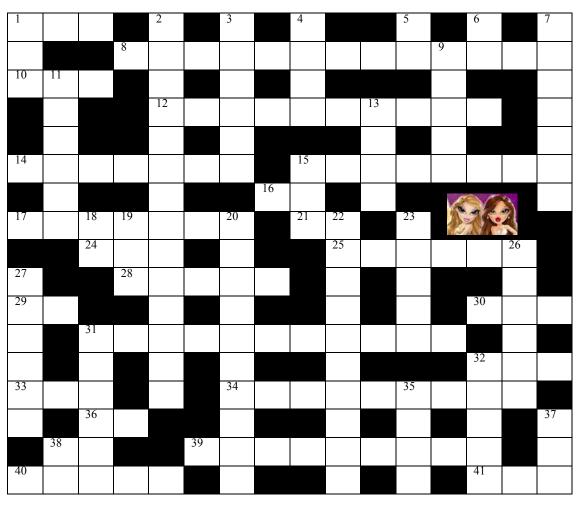


Trainees welcome!
Prizes available
Closing date for abstracts
13th September 2013

For further information or abstract application forms please contact:

Dr Lauren Barker or Dr Philippa Dix via email at Lauren Barker@nhs.net or Philippa.Dix@nhs.net

Or telephone Sharon Bartlett – course secretary (01392) 402474



#### Across

- 1 Short \_\_ syndrome: malabsorption disorder after removal of the small intestine (3)
- **8** Treatment for pyloric stenosis (13)
- 10 Causes a butterfly rash (1,1,1)
- **12** Antifibrinolytic acid, sometimes cited as an alternative to aprotinin in cardiac surgery (10)
- **14** Abnormalities of this may be associated with Goldenhar syndrome (7)
- 15 Describes the mitral valve (8)
- **16** Teratogenic (particularly in the first trimester) (abbr.)(2)
- **17** Fast metabolisers of this drug are more commonly of Middle Eastern/African/Ethiopian descent (7)
- **21** There are seven of these units (1,1)
- 24 Overseer of research (1,1,1)
- 25 Its oxide is a free radical vasodilator (6)
- **28** Controversial dolls with a passion for fashion (see picture inset) (5)
- **29** This ECG interval varies with heart rate and so is often shorter in younger children (1,1)
- **30** Haemoconcentration technique used following cardiopulmonary bypass (1,1,1)
- **31** The Safe and \_\_\_\_\_ Review of Cardiac Services has been widely discussed recently (11)
- **32** Some use an i\_\_ as a distraction device in the anaesthetic room (3)
- **33** An emotional punky goth (3)
- **34** There are two arteries and one vein in this cord (9)
- **36** Chemical formula for 25 Across (1,1)
- **38** Chemical symbol for germanium (2)
- **39** Necrotising \_\_\_\_\_ (9)
- **40** The \_\_\_\_ metabolic rate of neonates is higher than adults (5)
- **41** Affirmative (3)

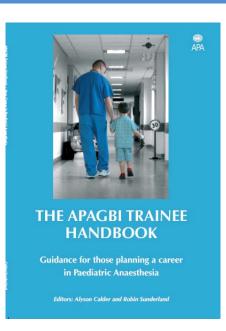
### Down

1 Initial findings from this study into spinal vs. general anaesthesia were presented at the Cambridge ASM (1,1,1)

Answers available in the Trainee Section at

www.apagbi.org.uk

- 2 Autosomal recessive condition most commonly associated the mutation  $\Delta \text{F}508\text{-CFTR}$  on Chromosome 7 (6, 8)
- **3** Vitamin B9 (6)
- **4** The SA \_\_\_\_ is found where the SVC and right atrium meet (4)
- **5** Anti- \_ antibodies can be associated with 10 Across (2)
- **6** Karyotype commonly seen in Turner's Syndrome (1,1)
- **7** Byproduct of sodium nitroprusside metabolism (7)
- **9** Can be monozygotic or dizygotic (5)
- 11 Fine downy hair on newborns (6)
- **13** Brachiocephalic, L common carotid and L subclavian arteries originate from the aortic \_\_\_\_ (4)
- 15 Index of measuring depth of anaesthesia (abbr.)(3)
- **18** \_ George syndrome is associated with athymia (2)
- **19** Palsy arising from shoulder dystocia (3)
- **20** Damage to the middle meningeal artery may cause this sort of haematoma (10)
- 22 Used in managing local anaesthetic toxicity (10)
- **23** Subclavian \_\_\_\_ syndrome can cause syncope and circulation problems to the hand (5)
- **26** Epidural space can be accessed via this route (6)
- **27** Premature neonates are more prone to this (6)
- 31 \_\_\_\_ Complex includes supravalvular mitral membrane, subaortic stenosis and aortic coarctation (6) 32 Paralysis (5)
- **35** Very small 9<sup>th</sup> letter of the Greek alphabet (4)
- **37** Recently split teeny bop pop group who sang "She Makes Me Wanna" (1,1,1)
- 38 Chemical symbol for Gallium (2)



# The 1<sup>st</sup> Edition of the APA Trainee Handbook is here!

#### A Day in the Life of a Paediatric Anaesthesia Fellow

**Organising Out of Programme Training** in Paediatric Anaesthesia



Paediatric Anaesthesia Research

### The 1st Edition of the APAGBI Trainee Handbook is available as a PDF document at www.apagbi.org.uk.

A free hard copy will be sent to all trainee members. Additional copies are available to purchase for £10.00. Order forms available on the website.

#### Paediatric Regional Anaesthesia



#### Developing your management and leadership skills



### Paediatric Anaesthesia in Developing

