

SRHSB Newsletter – Spring 2020.

Coping with the current ‘pestilential contagion’ of Covid-19.

In the midst of so much painful news and controversy, how are you all coping? How should the SRHSB adapt? We were planning to travel to Doha this autumn for our annual conference but obviously this has been deferred until 2021. We are now planning an alternative way forwards.

SRHSB 2020 – ‘Doha’ – *quo vadis*

Much has been written about the future of scientific conferences post-Covid (eg Giuliana Viglione. *A year without conferences? How the coronavirus pandemic could change research* Nature 2020; 579:327-329). There has long been enthusiasm for alternatives to death by powerpoint lectures including active learning and flipped classrooms (Eric Mazur. *Farewell, Lecture?* Science 2009; 323:50-51). We, our families and our employers are eager to save the time away from home and money involved whilst minimizing our environmental footprint. However, many of us worry about the loss of creative networking, new collaborations, opportunities to advance research, and the experiencing of new cultures that are facilitated by the better conferences.

With the lockdown, our inboxes have filled with invitations to video conferences. For better or worse, we all now have experience of the various platforms to facilitate this. It is against this background that the Executive is keen to deliver a Webinar in lieu of travelling to Doha this autumn. It builds on the successful approach in Bristol in 2018 whereby the lectures at the SRHSB meeting remained accessible to the Membership via the website for a year. We are eager to try the Webinar platform with a format that encourages participation and inclusivity. We are designing the programme to include cutting-edge presentations and minimise the risk of virtual conferencing fatigue. We are trying to mitigate the inevitable technical issues with unpredictable internet transmission and have been working towards arrangements to limit this possibility. Andy Wynd has done a really great job in establishing this initiative and leading the pilot rehearsals.

**SRHSB ‘DOHA’ Webinar Conference
Save the dates: November 5th – 7th 2020.**

**Registration fee: FREE!
Registration details to follow**

**Deadline for submission of abstracts: July 31st 2020
Please use the Abstract Form: <https://srhsb.com/abstracts-submission-form/>**

Notification of acceptance: August 17th 2020.

Diversity, Inclusion and Equality

In light of the international response to the appalling death of George Floyd in Minneapolis, the SHRSB reaffirms its zero tolerance towards Discrimination, Bullying behaviour and any form of Harassment, whether this is on the grounds of a protected characteristic (race, sex, disability, sexual orientation, religion or belief, nationality, age, marital status or civil partnership, pregnancy/maternity, gender reassignment), appearance or for any other reason.

The SRHSB seeks to foster a welcoming community in which all members are able to contribute fully. Sexual harassment and other harassing behaviours have no place in a healthy scientific enterprise. It applies equally the other way round - employees are protected from harassment of any kind from clients and business contacts.

My activity during lockdown

Many of you will be providing front-line care in the hospitals and community, coping with new ways of working. The general public has, in the main, been remarkable in its acceptance of self-isolation and home education albeit with real fears over employment and mental health. Clinical staff have to dress up in claustrophobic PPE for long shifts and for difficult delicate procedures. Wherever possible, telephone consultations have become the norm. Researchers will be locked out of their laboratories unless Covid-related and making do with video-conferencing for face to face interactions with colleagues. Oh for a vaccine and a world with sufficient PPE and robust 'test, trace and isolate' programmes to inform the reopening phase. Our institutions, universities, funding agencies, charities and industries are all working so hard to meet the challenges during lockdown and planning the next tentative steps towards recovery. Some reflections follow from members of the Executive Committee on coping with the lockdown.

Impact of covid-19 on Spina Bifida Hydrocephalus Scotland families – Andy Wynd

For those of you who remember the SRHSB Conference in Scotland some years ago, you will recall the visit to the purpose built SBH Scotland National Family Support Centre. The Centre is now closed for the foreseeable future.

Scotland, as a devolved power, with a separate National Health Service infrastructure joined forces with the other devolved administrations in the UK to develop a plan (or two!) as we moved slowly to a greater understanding of the coronavirus and how it impacted on our daily lives. "Lockdown" of our daily work and social activity and a move home working and social distancing has helped the NHS to manage the significant increase in critical patients filling our Intensive Care Units. Scotland converted its new Exhibition Centre in Glasgow within 14 days into a new standby, fully functional COVID-19 hospital, to manage the increase in acutely ill patients if numbers increased beyond our current enhanced capacity. Thankfully, this extra capacity has not yet been required.

Within days of the lockdown we were fortunate, in that SBH Scotland were already digitally ready and were able to transfer all of our operations and staff to home working and to begin to deliver services remotely to families throughout the country via video conferencing, good old-fashioned telephone and the new world of social media. We began a daily and weekly schedule of keeping in touch contact with all of our families and this continues. We set up a dedicated Coronavirus hub on our website with access via videoconferencing to our clinical team.

Interestingly families affected by neural tube defects have been, in our experience, ultra cautious about social distancing and almost 50% decided almost immediately to stay at home despite only a small percentage being deemed to be in high risk. As the weeks and months progress, those families now are showing early signs of additional anxiety and concern as the longer term impact of social isolation becomes apparent. Demands on our services are increasing during this period and are predicted to increase further.

One of the most worrying trends however is the extent to which we will be able to continue the level of support we currently offer, as our unrestricted income (from donations from the public) have taken a massive hit. Although some government emergency funding is available, it will not compensate fully for our predicted losses. The sad reality of this will be that we are anticipating that we will have to reduce our service delivery by between 20% and 45% during the ensuing months. There is however a glimmer of hope in that our research and development arm is flourishing with particular interest in the potential further development of our myCarepod app which offers a multi-functional easy to use app with both clinical, messaging and robust information and support data available in real time to families to support them in their day to day living whilst they self-manage their long term condition as best they can in these difficult times.

From a Clinical Research Fellow – Albert Isaacs

Like the majority of people, coping with the Covid-19 pandemic has had quite an unexpected impact on my life. During the peak of the pandemic, I had to expediently return to Canada from the United States, where I had been living for the past three years pursuing a PhD at Washington University. Upon return, I had to self-quarantine for 14 days without any physical interactions with the outside world, but that was almost a blessing. It gave me tons of time to sit down, staying locked to my computer screen for approximately 18 hours per day writing my thesis and catching up on papers I had put off for a while. That much uninterrupted time was a luxury I could not afford in “normal” times. One of the ways I coped with the “loneliness” of self-isolation was staying in communication with family and friends, and on Zoom with a colleague who was also writing a dissertation. It is really now that I see the hustle and bustle we were all exposed to prior to COVID-19. It made me think of the necessity of it all; not that I truly appreciate virtual meetings though, they have become quite intense! I am also expecting a virtual thesis defense and commencement in June. This is not what I had expected but watching President Obama give a virtual commencement speech recently has given me something to look forward to. Stay safe and see you electronically in the autumn.

From a postdoctoral research fellow: Leandro Castaneyra Ruiz

One major blessing of this period of confinement for our family has been the arrival of our first baby!

This phase has also shown me the weakness of the scientific community and its role in our society. It is my understanding that the only way to progress and overcome adversities is through increasing our knowledge collectively. Within the scientific community and amongst health workers, there is a global consensus. Epidemiologists are saying loud and clear what should be done. Experts who have spent their lives learning so they can contribute to our society, yet their advice is being disregarded all around the world. As scientists, what are we doing wrong? Why we are not connecting to the people? We see every day how more and more people do not “believe” in vaccines and trust more pseudoscientific methods. More and more people are in denial about climate change, deny that men ever went to the moon or even deny that the earth is a sphere. This COVID 19 situation is making me realize that we have to improve the way in which our knowledge is communicated to society. People need to be given the tools to understand and overcome the challenges that mankind is facing so that they fall prey to conspiracy theories.

From a Paediatric Neurosurgeon in Japan – Takayuki (Taka) Inagaki

We are also in the middle of travel restrictions even it's not legally binding here in Japan. We are asked to keep a distance from others inside and outside of the hospital. We need to use Zoom for in hospital meetings to reduce person to person contact. I am personally getting tired of these requirements, but we need to adapt to this new lifestyle.

As some of you may know, many Japanese traditionally love monstrous beings. It was said an imp-like creature appeared during the Edo period (around 1846) and am told that folks draw its pictures to prevent flu-like diseases from spreading. The name is Amabie. I am not quite sure why and who started but it is getting popular for Japanese people to spread the picture of this creature using SNS. Attached picture is a copy of original drawing.

I do not think this creature has the power to control the new corona virus. However, it was also true that our ancestors tried to build many statues to pray for the happiness of others and to cure someone's illness. It might be a similar kind of heart prayer, I think. We need to control the Corona virus infection or live with it for a long time. I hope all the member of the society will be safe from COVID 19.



From our Honorary Treasurer – Ian Pople

I'm afraid my report is rather short as I am still working as a paediatric neurosurgeon here in Doha, Qatar and all our elective surgical activity has been put on hold since late March. As a consequence, I have been trying to learn Arabic using BBC Arabic DVDs and online learning apps. I have been sadly making very slow progress but my excuse is that Arabic is widely regarded as one of the most difficult languages in the world to learn for English speaking folk.

Another very productive activity during lockdown has been to try to catch up on my 3000+ unattended emails, which are obviously now largely redundant and ready to be deleted in most cases (apologies to any of you have not had prompt responses from me recently!). My limit is about 200 emails in any one sitting at which point my mobile phone beeps telling me that I have been inactive too long and need to do my seven minute home workout urgently!



Here in Qatar I have recently been appointed Associate Prof of Clinical Neurological Surgery at the Weill Cornell College of Medicine here in Qatar and my role will be to teach the medical students here, examine them and try to stimulate some of them into choosing a career in neurosurgery. There are very few local Qatari neurosurgeons around the world and only two here in Doha.

It was obviously sad for our spina bifida MDT here when Covid-19 took hold of the world and it became obvious that hosting an adventurous conference in Doha was not going to be possible this year. However, the lockdown measures will give us an opportunity for building a new online method of holding our annual scientific meetings, which may ultimately make the Society more sustainable in the long-term. When the world does return to some kind of normality in terms of social interactions being allowed at less than 2 m (or 1.5m if your German) I'm sure SRHSB will once more return to its' usual valuable role of promoting face to face collaborative networking and fostering friendly research discussions and ideas.

From our Editor - Antonio J Jiménez

Dear members, this is what I have learned in my confinement as a person and a scientist. First, how much I miss to see (in person) friends and colleagues, and second, the possibility of performing experiments in the laboratory. How great are the whole hospital staff and a robust Health System! And how much are needed politicians that recognize it! As a scientist, I have observed that it has astonished the response of the scientific community. Possibly, never has so much information been gleaned about a new disease in such a short time. However, we now realize that a lot of the information is contradictory and confusing. A lot of papers have been published about the disease without proper peer review! Perhaps rushes are not so

good for science. Thus, as a member of this Society, I have realized the importance of sound scientific communication, discussion, and human interrelationship. I wish you the best for your health and scientific progress, hoping that we will eventually win the disease. I am looking forward to seeing you (online or in-person) soon.

From an Honorary Senior Research Fellow - Jo Glazier

Every day is a blessing and, when I wake up and greet the day, I try and remember this and am grateful for it. The coronavirus has disrupted our daily routine and denied us our freedom and liberty, but we can reclaim a newly defined routine at home and so I think this is important. So, I set my daily tasks and try and complete them, although I have to confess the wonderful weather has been somewhat of a distraction. But as well as being kind to others in these strange times, we also have to be kind to ourselves, and not get too frustrated or disappointed if we don't achieve all that we wanted in a day – staying healthy and well physically and mentally is very much an achievement. Indeed, trying to stay fit, when you are used to exercising by running between University laboratories and offices then rushing to attend student meetings is difficult, especially as so much time is now spent in front of the computer. So, I've done something that I thought would never happen – I've bought myself an exercise bike!! And yes, I've been using every morning, incorporating my bike time into my daily routine. Then I settle down to some e-mails, work and writing, and we are very blessed to have a lovely garden, so I often work outside in my 'outside' (garden) office when the weather permits, which I very much enjoy. Indeed, I didn't know that we had so many garden visitors: frogs, squirrels, birds frisking about in the birdbath, watched eagerly by our resident cat! So somehow the days pass all too quickly and I've stopped wearing a watch – after all I don't have to be anywhere at a specified time! So, let's embrace this slower pace of life, give thanks for what we have, and share kindness whenever and wherever we can.

From our folic acid spokesperson - Jaleel Miyan

With lockdown we seem to be working rather more than usual fielding student tutorials and one to one meetings. With Manchester opting for some form of examination for final year students we have been tutoring in how to do open book exams and running mock exams through zoom. Exceptionally, our medics graduated early, without final exams, to go to front line work in the NHS. It was a relatively smooth transition to online except for lectures for which last year's podcasts were used – not very interactive. We have been told that the first semester of the new academic year will be on-line teaching so it may evolve into more interactive sessions. So, my home office is thus in constant use. Plans to convert manuscripts to submitted papers remain on hold for the moment until exams are over. The garden has had much needed attention after some neglect and we even have a vegetable plot now on one side.

With regard to Covid-19 there are 2 interesting papers coming out suggesting that folate can interfere in the entrance of viruses (ebola and covid-19) to cells. A chemistry hypothesis paper suggests that folic acid or folinic acid can block furin 2, part of the docking mechanism along with ACE-2. For zika virus folic acid was found to reduce/inhibit virus replication in cells as well as decreasing placenta pathology, stillbirths and fetal resorption. Folic acid supplementation reduced viral load in rodent models of zika transmission (Simanjuntak Y,etal

(2020) Preventive effects of folic acid on Zika virus-associated poor pregnancy outcomes in immunocompromised mice. PLoS Pathog 16(5): e1008521. <https://doi.org/10.1371/journal.ppat.1008521>). Together with vitamin D deficiency as a risk factor, it seems then that micronutrients may be a key to protect and prevent infections. This does not explain the massive loss of elderly people, particularly in Italy where a Mediterranean diet would presumably have all of these. There is a need for research to follow pregnancies that have passed through the pandemic to look at outcomes

From our septuagenarian past president – Pat McAllister

The COVID-19 pandemic has provided many mixed feelings for me. I am reminded that I am “old”. Washington University has been very strict in their regulations, and when the lab shut down around March 20, I was respectfully reminded that, at 72 years old, I am vulnerable. Fortunately, I am healthy but I am definitely working hard to be “safe”. My “shelter at home” approach has also had professional benefits; I have been on a campaign to catch up on all the paperwork that has fallen so far behind. So, between lots of Zoom calls and emails, we have pushed out 2 large grant applications and 2 manuscripts, and I have reviewed grants for NIH. I am certainly anxious to get back into the lab, but mostly I am worried about all of my professional and personal friends who have or could be impacted by this horrible virus. Stay safe, everyone, and especially make time to communicate with all of your friends and loved-ones.

From your Honorary President - John Pickard

Like Pat, I am too old and vulnerable to volunteer to return to clinical work – a liability, not an asset. Covid has struck one of my daughters (staff nurse in a nursing home) and one of my doctoral students, both now recovered and back in the clinical front line. Hence, we are only just emerging from social isolation with our grandson, helping with his home schooling and screen time. Outdoor exercise whilst maintaining social distancing is not difficult in East Lothian – Gullane Golf Course is in the foreground and anchored cruise ships on the Firth of Forth can be seen in the distance.



Local businesses and restaurants are being innovative with deliveries and takeaways. Our garden is blooming and almost weed free. Reading and collaborative writing continue - no excuses.

When we become satiated with catch up TV and dismal news, there is time to reflect on some lessons from history that resonate with some present behaviours. Apparently, the bubonic plague first ventured north of Hadrian's wall in 1349 – putting paid to the fallacious belief of many Scots at the time that it had been sent to the British Isles by the Almighty purely to punish the transgressions of the English (David McLean, *The Scotsman* 24 March 2014). The Edinburgh epidemic of 1645, ten years before that in London, killed up to half its population. Even more were lost in the nearby Port of Leith - a reflection of the influx of ships from all over Europe.

Samuel Pepys' Diary for 1665 and Daniel Defoe's fictional Journal of the Plague Year included references to some extraordinary mortality statistics that should be the envy of some nations' current epidemiological efforts. Patients still died of other diseases. Self-isolation was crucial but only affordable by the rich. The poor living in overcrowded housing bore the brunt. Mass gatherings at funerals were frowned on. Bad air was held to be responsible and hence smoking or chewing tobacco was recommended.

<i>The Diseases and Casualties this Week,</i>			
A Bortive	5	Imposthume	11
Aged	43	Infants	16
Ague	2	Killed by a fall from the Bell-trey at Alhallowes the Great	1
Apoplexie	1	Kingfevil	2
Bleeding	2	Lethargy	1
Burnt in his Bed by a Candle at St. Giles Cripplegate	1	Pallic	1
Canker	1	Plague	7165
Childbed	42	Ricketts	17
Chrlomes	18	Rising of the Lights	11
Confumption	134	Scowring	5
Convulsion	64	Scurvy	2
Cough	2	Spleen	1
Dropie	33	Spotted Feaver	101
Feaver	309	Stilborn	17,
Flox and Small-pox	5	Stone	2
Frighted	3	Stopping of the stomach	9
Gowt	1	Strangury	1
Grief	3	Suddenly	1
Griping in the Guts	51	Surfeit	49
Jaundies	5	Teeth	121
		Thrath	5
Males	95	Timpany	1
Christned	81	Tifick	11
Females	81	Vomiting	3
In all	176	Winde	3
		Wormes	15
Buried	4095		
		Males	4095
		Females	4202
		In all	82973
		Plague	7165
Increased in the Burials this Week			
Parishes clear of the Plague	4	607	
Parishes Infected		126	
<i>The Asize of Bread set forth by Order of the Lord Maior and Cours of Aldermen;</i>			
<i>A penny Wheaten Loaf to contain Nine Ounces and a half, and three half-penny White Loaves the like weight.</i>			

Much has been written about Newton's remarkable productivity during his isolation at Woolsthorpe Manor in Lincolnshire around 1665. However, this was preceded and followed by equally intense 'continual thinking'. For those lamenting closure of their access to their labs for a few months, just imagine what it must have been like for Hodgkin and Huxley as they worked on radar during WW II. In 1939, they had just discovered that the membrane potential of the squid axon overshot during an action potential. They did not return to their Nobel winning research until 1945.

Stay safe, productive and looking forward to our meeting by Webinar in November.

All best wishes,

John