The Digestive Disorders Federation (DDF) Meeting:

The DDF was the first combined meeting of the British Society of Gastroenterology, Association of Upper Gastrointestinal Surgeons, British Association for Parenteral and Enteral Nutrition and British Association for the Study of the Liver. This DDF meeting replaced the annual meeting of each of the four organisations.

It was held at the Arena & Convention Centre (ACC), Liverpool. It is one of the most sustainable venues in Europe, designed to produce half the CO2 emissions it would without any environmentally-friendly measures. To date, ACC Liverpool has secured a reputation as one of the leading multi-purpose venues in the UK. I am sure that those of us who attended would agree that there were a variety of relevant and excellent presentations ideally located in the cosmopolitan and vibrant city of Liverpool.

It was slightly disappointing that there were not many of us present for the AGIP symposium 'Reflux Associated Cough' which our AGIP symposium secretary Graham Buckton had gone to great efforts to organise with the following invited speakers:

- Objective Assessments of Reflux & their Association with Cough, Dr Smith, Manchester
- Cough Hypersensitivity Syndrome is an important clinical concept, Dr McGarvey, Belfast
- Gastroenterologists view- Diagnosis of Laryngo-Pharyngeal Reflux By pH & Impedance, Dr Maine, Antrim
- Pharmacological Therapy for GERD-Cough, Dr Birring, London
- Improving Quality in Physiological Diagnostic Services (IQIPS) – Dr Tinkler (IQIPS Programme Manager), London
The two accepted free papers were as follows:

1. Inter-Observable Agreement For Manometry Classification Of Individual Swallows And Diagnoses Using High-Resolution Manometry (HRM) With Esophageal Pressure Topography (Ept): Results Of High Participation Web-Based Studies By The HRM Working Group, M. R. Fox, J. Pandolfino, J. Jafari, D. Menne

2. No Way Back - Irrevocable Alteration Of The Gastric And Esophageal Micro-Environment Following Cholecystectomy, S. N. S. Gilani, G. Bass, T. N. Walsh

There were also seven poster presentations within GI Physiology as follows:

**AMBULANT HIGH RESOLUTION MANOMETRY STUDIES OF THE MECHANISMS OF GASTRO-OESOPHAGEAL REFLUX IN PATIENTS WITH AND WITHOUT EVIDENCE OF HIATUS HERNIA. B T Theron, et al, West Bromwich, UK**

**Introduction:** Recent studies have shown that high resolution manometry (HRM) detects more transient lower oesophageal relaxation (tLOSR) than the established sleeve sensor. Previous studies using the sleeve sensor have suggested that when a hiatus hernia (HH) is present and in patients with more severe oesophagitis, gastro-oesophageal reflux (GOR) more commonly occurs due to mechanisms other than TLOSR. We have developed a unique ambulatory HRM system to study mechanisms of GORD under more physiological conditions in patients with reflux oesophagitis or Barrett's oesophagus, with and without hiatus hernia.

**Methods:** 10 patients with HH and 6 patients without HH (all with an endoscopic diagnosis of reflux oesophagitis) were studied after a fast for at least 4 hours. A 36 channel solid state HRM/impedance catheter was placed spanning the stomach to pharynx. A pH electrode was placed 5cm above the GOJ. Patients were studied at rest and during 15 minutes of standardised exercise on an exercise bike, before and after a meal (sausage or bacon with egg sandwich with 500mls of milkshake – 736 calories). In addition subjects walked for 30 minutes in the post-prandial period.

**Results:** 12 patients were male; median age 60 (range 35-76) years; 6 patients had LA A/B oesophagitis and 10 patients had LA C/D (5) or Barrett's oesophagus (5). Acid reflux episodes in patients with HH were due to tLOSR in 90%, low LOS pressure in 6% and swallowing in 4%, whereas in patients without HH they were due to tLOSR in 88%, low LOS pressure in 4% and swallowing in 8%. tLOSR appeared to be more frequent in patients with HH (13.5 (Interquartile range (IQR) 11.1-18.7) per hour versus 10 (IQR 7.6-15.6) per hour) but this difference fell short of statistical significance (p=0.06). There was no difference in the proportion of TLOSR associated with acid reflux in patients with (59%) and without HH (47%) but patients with HH were more likely to have impedance evidence of gas or liquid reflux during tLOSR than patients without HH (96% versus 83%, p<0.001)

**Conclusion:** Prolonged ambulant studies of the mechanisms associated with acid gastro-oesophageal reflux reveal that tLOSRs are the predominant mechanism associated with acid reflux in patients with oesophagitis or Barrett's oesophagus both with and without HH. tLOSR appeared
to be more common in patients with HH but this difference fell short of statistical significance. Patients with HH were more likely to have evidence of reflux during tLOSR.

**IBS IN NIGERIA ; IS THERE A DECLINE IN PREVALENCE?**  
*Onyekwere C A, et al, Lagos, Nigeria*

**Introduction:** Background: IBS is a common functional gastrointestinal disorder that presents in both primary healthcare as well as gastroenterology clinic. Reports of prevalence of IBS vary depending on diagnostic criteria as well as geographical setting. Data from Nigeria reveal prevalence of between 26 to 33%.  
Aim: we set out to determine the prevalence of IBS in Lagos population which is representative of the Nigeria society.

**Methods:** Consecutive patients with recurrent abdominal pain who presented to the general outpatient unit of the 3 big referral hospitals in lagos between 2010 to 2011 were evaluated for the presence of IBS using the Rome 111 criteria

**Results:** 350 subjects were evaluated deuring the study period of which 65 (36 females) met the Rome 111 criteria giving a prevalence of 18.6%. the IBS subtypes were IBS-C (33), IBS-D (18), and IBS-M (14).Occurrence of IBS was significantly associated with consumption of starchy food (rice, yam, potato, spagetti, beans) and citrous foods. Majority of the IBS subjects (75%) were positive for small intestinal bacterial overgrowth using the hydrogen breath test.

**Conclusion:** Conclusion. This study has shown a lower prevalence of IBS (18.6%) than the 3 previous reports from our setting((26%, 30%, 33%)

**VASOPRESSIN CONTRACTS HUMAN ISOLATED STOMACH MUSCLE: POSSIBLE ROLE IN NAUSEA?**  
*J Broad, et al, London UK*

**Introduction:** Circulating levels of vasopressin are raised in association with nausea in humans and in species with an emetic reflex, whereas in rats exposed to emetic stimuli, levels of oxytocin but not vasopressin are raised [Stern et al 2011]. One hypothesis is that vasopressin acts in the upper gut to help signal nausea, but in animals the concentrations which contract stomach muscle are usually higher than the concentrations measured in human plasma during nausea (around 10-200pM). However, extreme species variations in gastric functions and genetics [Sanger et al 2011] means that studies must now be conducted with human stomach.

**Methods:** Human stomach was obtained at surgery following informed consent. After removing
the mucosa, strips were cut parallel to the circular muscle and suspended between ring electrodes in tissue baths for isometric recording (Kreb’s; 5% CO₂ in O₂; 37°C; 2g tension). Electrical field stimulation (EFS) was applied at 5Hz (0.5ms pulse width, 50V, 10s) every 1min, for sub-maximal responses. N = number of patients. All drugs were added non-cumulatively.

**Results:** In the gastric antrum, EFS-evoked contractions were prevented by 1µM tetrodotoxin (n=3), attenuated by atropine 1µM (n=3) and facilitated by the nitric oxide synthase inhibitor L-NAME 0.3mM (by 11±7% n=14). Vasopressin (100pM-100nM) caused a concentration-dependent increase in baseline muscle tension of 230±68 mg, EC₅₀=1.2nM, corresponding to a contraction equivalent to 226±118% of the EFS-evoked contraction (n=1-4 each concentration). However, there was no change in the magnitude of the contractions to EFS (+14±12% change at 100nM). Elevated muscle tension persisted for >30 min in continued presence of the hormone (100nM, n=4). In preliminary experiments with gastric fundus, only 100nM vasopressin has been studied, being found to act similarly (an increase of 128 and 38mg; n=2). Interestingly, oxytocin (100nM) also increased baseline muscle tension in the antrum (by 164±64 mg, corresponding to an increase of 41±11% EFS; n=3), persisting for >30min without affecting the magnitude of EFS evoked contractions (+13±4% change; n=3).

**Conclusion:** Here we have shown for the first time that vasopressin and oxytocin have direct contractile effects on human isolated stomach muscle. The effective concentrations of vasopressin are within the range induced by nausea in humans. This indicates a potential direct role of vasopressin in signaling the induction of nausea in humans.

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**A STUDY OF FAECAL VOLATILE ORGANIC COMPOUNDS METABOLOME IN HEALTHY POPULATION ACROSS THE COUNTRIES**

*Ahmed I, et al, Liverpool, UK*

**Introduction:** Faecal biomarkers are emerging non-invasive tools for diagnosing gastrointestinal disorders. Faecal volatile organic compounds (VOCs) have been studied more recently in clinical diagnosis. Pattern of faecal VOCs in healthy population may provide basis for understanding changes in disease conditions. The VOCs within the metabolomes may be different across the countries due to differences in dietary habits and environmental conditions and may have implications in developing their clinical utility.

**Methods:** We aim to study the faecal VOCs of the healthy population from three different countries i.e., England, Belgium and Canada.

A total of 159 health volunteers (English=109, F=69), (Belgium= 20, F=14), (Canada =30, F=17) donated faecal samples. Fresh samples were aliquoted in 18 mls sealed vials. VOCs were extracted using solid phase micro extraction and were analysed using gas chromatography–mass spectrometry. VOCs were identified using NIST library search comparing their fragment pattern.

**Results:** A total of 232 VOCs were identified. Using binary data (presence or absence of VOCs), univariate analysis was used to identify those VOCs which were statistically significant (p<0.05) in discerning differences between the three population groups. Alcohols, ketones and esters were predominantly associated with English volunteers compared to both Canadian and Belgium volunteers while aldehydes and alkenes were predominantly detected VOCs in the Canadian and Belgium groups respectively. A multivariate discriminant function analysis utilizing these VOCs was able to differentiate three groups with a sensitivity of 96% and specificity of 90%.
Conclusion: The observed differences in the faecal VOCs metabolites of the healthy population in different countries may provide important basis in the clinical utility of faecal biomarkers. It may also provide information in studying the differences in disease prevalence and behaviour in different countries. Further studies are warranted to explore this area.

HIGH RESOLUTION ANORECTAL MANOMETRY: FIRST STUDY ESTABLISHING NORMAL VALUES IN HEALTHY VOLUNTEERS
Burke JM, et al, Cottingham, UK

Introduction: High Resolution Anorectal Manometry (HRAM) combined with interpretive software allows for the interpolation of manometric recordings into highly detailed topographical plots of intraluminal pressure events. HRAM has previously been shown to correlate highly with conventional water perfused manometry measurements¹. This preliminary study is the first report establishing HRAM pressures in healthy volunteers. The advantages of the detection of pressure changes over a longer length of the anal canal have already been shown to improve accuracy and the detection of abnormalities in the anorectum².

Methods: HRAM was performed using the Medical Measurement System (Enschede, Netherlands) consisting of an 8-channel HRAM catheter with sensors spaced at 0.8cm intervals. Pressure data is displayed in topographic form using Medical Measurement System analysis software that is integrated into the system. Measurements of anal sphincter pressure at rest, cough, during voluntary squeeze, endurance squeeze and pushdown were evaluated. Volunteers also completed a questionnaire which provided a Wexner score.

Results: A total of 20 healthy volunteers (11 Female, 9 Male) with a mean age of 40 (range 19-60) constituted the study population. The Wexner scores ranged from 0-1 (median 0).

<table>
<thead>
<tr>
<th>Anal sphincter</th>
<th>Range</th>
<th>Median</th>
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<tbody>
<tr>
<td>Resting pressure</td>
<td>30-163 cm H2O</td>
<td>109 cm H2O</td>
</tr>
<tr>
<td>Cough pressure increase</td>
<td>39-305 cm H2O</td>
<td>143 cm H2O</td>
</tr>
<tr>
<td>Voluntary squeeze pressure</td>
<td>50-922 cm H2O</td>
<td>275 cm H2O</td>
</tr>
<tr>
<td>Endurance squeeze time</td>
<td>18-125 seconds</td>
<td>52 seconds</td>
</tr>
<tr>
<td>% of relaxation during pushdown</td>
<td>0-42% (17/20 relaxed)</td>
<td>14%</td>
</tr>
</tbody>
</table>

Conclusion: These preliminary measurements of HRAM pressures in healthy volunteers could serve as a valuable resource of normative data when performing HRAM studies in disease specific groups such as incontinence and constipation.
DIAGNOSTIC YIELD AND CLINICAL OUTCOME FOR DEFAECATING PROCTOGRAPHY AND ANORECTAL MANOMETRY IN PATIENTS WITH CHRONIC CONSTIPATION

Bhalme M, et al, Salford, UK

Introduction: Defaecating proctography (DFP) and anorectal manometry (ARM) are both used to investigate chronic constipation but their relative clinical performance is unclear. Our aim was to investigate the diagnostic yield and clinical outcomes of DFP and ARM in chronic constipation.

Methods: Patients who had undergone both DFP and ARM over a 3 year period were studied retrospectively. Demographics, treatment and clinical outcomes were recorded. The diagnosis was recorded as ‘mixed’ if investigation showed evidence of both anismus and anatomical problems such as rectocele, intussusception or prolapse. The clinical outcome was defined as positive if the test resulted in treatment with symptomatic improvement, or resolution at follow-up. To determine whether there was a selection bias in those undergoing both DFP and ARM we additionally looked at the 2 groups having solely DFP or ARM from the same period.

Results: DFP and ARM group: 43 patients (40 female, 58% surgical referrals; age range 17 to 85 years; median 46) underwent both DFP and ARM. The diagnostic yield for DFP was higher at 98% (anismus 44%, anatomical 40%, mixed 14%; normal 2%) versus 47% for ARM (anismus 26%, mixed 21%; normal 53%). There was diagnostic concordance in only 11 (26%), partial concordance in 9 (21%) and discordance in 23 (53%) patients. Although the diagnostic yield of DFP was much greater than ARM in this combined group, both tests led to similar positive outcomes regardless (47% in DFP versus 45% in ARM) when tests revealed a pathology. Single investigation groups: 10 patients had DFP alone (8 female, 60% surgical referrals; age range 22 to 73 years, median 55) with a diagnostic yield of 90% (anismus 30%, anatomical 50%, mixed 10%; normal 10%). The positive outcome in those with a detectable pathology was 33%. 15 patients had ARM alone (14 female, 27% surgical referrals; age range 19 to 75 years, median 50) with a diagnostic yield of 67% (anismus; 33% normal). The positive outcome in those with a detectable pathology was 70%.

Conclusion: DFP had a higher diagnostic yield than ARM, but concordance was poor. Greater diagnostic yield did not translate into more positive clinical outcomes either. The clinical impact of additional DFP-based diagnoses is therefore questionable. The single test cohort data suggest that patients having DFP alone are a different clinical population from those who accessed both tests, since diagnostic yields and clinical outcomes were higher for ARM alone. The latter group were predominantly medical gastroenterology referrals. Further study is required to design optimal investigation strategies for chronic constipation.

PARACRINE PROSTAGLANDIN-E SIGNALLING MODULATES CANINE GASTRIC EPITHELIAL CELL MIGRATION

Hollins R, Liverpool, UK

Introduction: Gastric ulceration is a limiting complication of therapy with cyclooxygenase (COX) antagonists, widely used anti-inflammatory/analgesic drugs in both humans and dogs. COX-derived prostaglandin E (PGE) has an important role in gastric defense and cytoprotection via promotion of blood
flow and mucus secretion and inhibition of gastric acid secretion. Given the importance of gastric epithelial cell migration in reestablishing epithelial integrity following gastric damage, we have investigated whether paracrine PGE signalling has a role in the modulation of gastric epithelial cell migration.

**Methods:** In order to retain paracrine signaling between different cell types, we isolated intact gastric glands via collagenase digestion of canine gastric mucosal tissue. Isolated glands spread *in-vitro* to form islands of cells. The rate of gland spreading over 48h was measured as a surrogate for cell migration speed. Lamellipodia protrusion was analysed as an index of spreading activity. A value for lamellipodia area was calculated by measuring spread area minus area bounded by nuclei of cells at the edge of spread glands. Spread glands, when serum-starved, exhibit a reduction in area. We added both a selective and a non-selective COX antagonist and PGE2 to serum-starved glands to assess their effects on migration. All treatments were added blindly to eliminate bias. Statistical significance was assessed using univariate analysis of variance. Expression of COX-2 and PGE receptors (EP-3 and EP-4) was assessed by RT-PCR and immunohistochemistry.

**Results:** RT-PCR confirmed COX-2, EP-3 and EP-4 expression in our samples. COX-2 immunoreactivity was present in the majority of gland cells. The COX 1/2 antagonist indomethacin (50μM) decreased spreading (0.85 fold, p<0.05, n= 5-9 for all experiments) and lamellipodia area (0.3 fold, p=0.05). The COX-2 selective antagonist NS-398 (10μM) caused similar decreases to indomethacin (0.8 fold and 0.65 fold respectively, p<0.05). PGE (1μM) prevented a 0.7-fold reduction in island area elicited by incubation in serum free medium (p<0.05).

**Conclusion:** This data shows a role for COX-2 derived PGE in the promotion of gastric cell migration and cellular lamellipodia formation. A reduction of mucosal PGE via COX-2 antagonism may therefore inhibit gastric epithelial cell migration contributing to COX-antagonist elicited gastric ulceration in both humans and dogs.

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**Oesophageal Physiology Study Day**

**Hexham Northern Skills Institute**

**Friday October 5th 2012**

Speakers include; Professor Stephen Attwood, Professor Andrè Smout, Dr Jackie Smith, Dr Chris Haigh & Dr Jo Barlow

This day will provide a comprehensive guide on how to interpret and maximise the results from oesophageal physiology testing, including HRM, impedance and 24 hour pH techniques. The course is suitable for gastroenterology physicians & surgeons, respiratory physicians and ENT surgeons including trainees, nurses and physiology measurement technicians in these disciplines.

Please contact us on 01494 721820 or email Charlie@ardmorehealthcare.com for further information. Please note that places are limited so don’t delay contact us today for a registration form.

In association with:

[Logo of Durham University School of Medicine and Health]

[Logo of Ardmore Healthcare]

[Logo of NREG]
PRACTICAL WAYS TO HELP PATIENTS WITH CHRONIC COUGH
Peta Watson-Smith, Principal Speech & Language Therapist in Voice Disorders
Castle Hill Hospital, Hull and East Yorkshire Hospitals NHS Trust

Introduction: I see patients regularly in my outpatient treatment clinics with voice problems either caused or aggravated by continually loud or irritating coughing which can be annoying and distressing to everyone, including the person with this chronic condition. It is important to understand the difference between a productive cough and an unproductive cough. A productive cough is one that shifts phlegm or mis-swallowed food or liquid out of the airway in order to allow us to breathe normally. An unproductive cough can be caused by dryness or a sensation of ‘something in the throat’ that does not shift with coughing but, equally, does not affect a person’s ability to breathe normally. Sometimes, the larynx continues to be ‘irritated’ after the major symptoms of a throat or chest virus/infection have resolved.

If a cough persists after phlegm, food or liquid have been shifted or infections have resolved, it is important to inhibit the cough otherwise it can develop into a vicious cycle that may end in fits of choking, retching or vomiting. Once the larynx becomes irritated, there usually follows an urge to keep coughing. At this point, or even before the cough starts, it is essential to start inhibiting it. If not, continual coughing can damage and harden the delicate lining of the vocal cords or rupture tiny blood vessels causing haemorrhages or vocal nodules. Both conditions can affect the quality of the voice, making it sound hoarse or gruff or lower in pitch. Constant coughing can also cause painful soreness or tenderness in the throat or the upper chest, stomach or abdominal muscles.

Common triggers of chronic cough:

1. **Cold air:** Cover mouth and nose, if necessary, with a scarf
2. **Physical exercise:** Start rhythmic breathing through the nose as you exercise
3. **Pollen, dust:** Cover mouth and nose with a scarf or dust mask
4. **Aerosol sprays, strong cleaning substances:** Avoidance or cover mouth/nose
5. **Dryness, central heating, hayfever, medication:** To help this breathe in through your nose over a mug of boiling water for a minute for 2-3 times a day, sip water, suck boiled sweets, drink at least 8 glasses of water/cordial a day, avoid too much tea and coffee [limit intake to about 2 to 3 cups a day] or see your GP about medication for allergies
6. **Viral infections:** Colds/flu
7. **Bronchitis, Chronic Obstructive Airways Disease (COPD), asthma
8. **Medication,** eg some tablets for high blood pressure, heart disease, etc can cause dry cough and some asthma inhalers can cause husky voice
9. **Acid or non-acid reflux from the stomach, especially at night:** Research shows that some chronic conditions such as asthma and otitis media can be caused by gastric reflux

Cough suppression techniques:

There is no ‘quick fix’ to stop a chronic or persistent cough. It is in the patients hands to find out what triggers the cough and which cough suppression strategies work best for them. It is essential to practice the chosen technique(s) regularly and use them consistently in order to self-manage cough.

The following techniques can be used in combination or rotation. The only way to break the cycle is to keep working at suppressing the cough for as long as each bout of coughing continues.

1. Swallow hard several times
2. Cough as ‘pathetically’ as possible in order to reduce high impact (loud) coughing as soon as it
starts and prevent croaky voice, vocal cord nodules or throat tenderness or soreness

3. **If you feel a cough coming on** - Sniff in quickly through the nose 2 to 3 times in succession and then blow out gently through pursed lips. Breathing in through the nose warms and moisturises the air. Blowing out through the lips channels the air and ‘cushions’ the vocal cords to help reduce irritation

4. Inhale through a straw and exhale through pursed lips (eg gentle blowing out through mouth) or make the sound ‘sssss’

5. As the throat feels calmer, take a sip of water or cordial but only if confident it will not trigger the cough again

6. If a patient is suffering with asthma or other breathing difficulties, does their inhaler reduce the desire to cough? If so, seek medical advice about using it as often needed

7. Slow panting with tongue out

8. Sucking an ice cube or sipping very cold water before cough starts can sometimes prevent it

If the patient has a chronic cough it is important to get them to:

1. **PRACTICE THESE TECHNIQUES EVEN WHEN THEN PATIENT IS NOT COUGHING** - This will remind them to use the techniques when they do start coughing again

2. **KEEP WORKING AT SUPPRESSING THE COUGH for as long as each bout of coughing continues** - It is the only way to break the cycle

3. **SEEK ADVICE FROM THEIR GP** regarding any medications that may be causing the cough or could be prescribed to improve it. Cough may be caused by several different factors. If it is due to gastric acid or non-acid (‘silent’) reflux, then this condition will require treatment or further investigation

I advise patients that if their cough persists, they should seek advice from their GP.

Patients with chronic cough often end up on the SLT’s doorstep having presented through ENT with a voice problem. I think it is fair to say that the longer a patient has experienced chronic cough and the less successful the drug therapy, the more motivated they are to respond successfully to a behavioral approach. I always explain to patients that densensitisation of the larynx is paramount in preventing voice problems and improving the quality of life for the sufferer and those around them even if the main trigger(s) of the cough do not resolve. I also tell them that If they reach the point of retching, they have left it far too late to inhibit the cough!

I am aware that one or two Trusts around the country are funding SLT posts to treat patients with or without a voice problem who have chronic cough or PVFM. This is a major step forward in preventing associated physical and psychological problems and improving quality of life for those suffering from such a debilitating condition.

References:

Science Council - Chartered Scientist Information

**URGENT RESPONSE NEEDED FROM ALL AGIP MEMBERS PLEASE**

Over the last few months AGIP via their RCCP representatives have been discussing registering with the Science Council who give Chartered Scientist (CSci) registration. They are a large body with Professional Bodies such as Association of Biochemistry, British Academy of Audiology, Association of Neurophysiology, Institute of Biomedical Science, Institute of Clinical Research, Institute of Physics and the Royal Society of Chemistry to name but a few as part of their membership. There are 32 member bodies within the Science Council

RCCP has approached the Science Council with the proposal that the member bodies of RCCP apply for CSci status as a cluster group, but we need some input from our members. AGIP council feel that applying to the Science Council as a member professional body is a good thing, but we need to know from our members if you would apply to be a Chartered Scientist (CSci). Below is a brief summary on CSci.

**Why do we need to be Chartered Scientists?**
It is a personal choice and by no means compulsory. It would be in addition to your HPC regulation or RCCP registration.

Being a Chartered Scientist would give you additional protection as well as the additional kudos associated with the title of Chartered Scientist.

**What qualifications do I need to be a CSci?**
The Science Council request that applicants have a Masters or work at M level (evidence based application), as well as 4 years in post at career framework 6+ (AfC band 6/7 or above). Applicants must also be members of their Professional Body in our case this is AGIP.

**How much will it cost?**
It will cost £20 per year (correct at the time of producing this document) for individual applicants. AGIP will incur costs with regard their application to the Science Council as well as the yearly costs associated with the RCCP cluster. When you apply this will be done via RCCP (you can apply for the M level RCCP register at the same time) and they charge a one off administration fee of approximately £75 (correct at time of producing this document). You do not need to be a member of RCCP to apply for CSci.

Please answer the following question and send responses to elisa.wrightham@srft.nhs.uk

**If CSci was available to me I would apply**

Yes □ No □

For further information go the Science Council website: www.sciencecouncil.org
Or contact Elisa Wrightham on the above email address.
Forthcoming Events:

We hope to publicise forthcoming meetings and educational events. We would like to invite interested parties to contact the NewWave editor (warren.jackson@hey.nhs.uk) to have their details included in future issues.

11th Sept 2012  Sheffield Anorectal Ultrasound Course:  
http://www.shu.ac.uk/faculties/hwb/medical/anorectal.html

26th-28th Sept 2012  European Society of Coloproctology (Annual meeting – Vienna) 
Messe Wien Exhibition & Congress Centre

Oct – Nov 2012  Medical Measurement Systems (MMS) web seminars for 2012:

  2nd Oct 2012  Impedance-pH studies
  16th Oct 2012  Anorectal manometry (HRAM) & Colonic manometry
  24th Oct 2012  Paediatric Impedance-pH studies
  8th Nov 2012  High Resolution Manometry (HRM)
  28th Nov 2012  Paediatric High Resolution Manometry (HRM)

Each session has a limited enrolment and is FREE of charge; see their website for further information:  
Oct 2012  Synmed Ltd are holding a variety of training events taking place in October 2012:

2nd Oct 2012  High Resolution Anorectal Manometry (HRaM)
3rd Oct 2012  High Resolution Impedance Manometry (HRIM)
4th Oct 2012  Impedance/pH Reflux Testing (Advanced - Adults)
5th Oct 2012  Impedance/pH Reflux Testing (Advanced - Paediatrics)

For more information, please email: Eleni.Kyriacou@synmed.co.uk

5th Oct 2012  Oesophageal Physiology Study Day (Hexham)
For more information / registration form please email: charlie@ardmorehealthcare.com

20th - 24th Oct 2012  United European Gastroenterology Week (UEGW)
Amsterdam RAI Convention Centre, Netherlands
Website: www.uegw12.uegf.org

GOSH we’ve been to Denver! May 8th – 13th 2012

Following the SynMed Training Seminars of October 2011, Lucy Park, Senior Sister, Pediatric ICU Dept, Great Ormond Street Hospital, has recently returned from her Scholarship Win to Denver, Colorado, with her Colleagues, Claire Steele and Paula Scully, Lucy gives a brief report:

After a long flight and a quick cab ride we arrived at the Staybridge Suites. As it was 3am our time we had an early night ready to explore Denver the next day which was a free day of exploring and shopping!

We were then ready for full on study with the fantastic Paulette at Sandhill. As there was only the 3 of us on the study days the programme was tailor made to our needs. We are new to the process of impedance and pH studies so starting from scratch and going at our pace was fantastic. Paulette was very helpful and answered all our questions. We learnt so much during the study days and all our new found knowledge will be taken back to GOSH and disseminated to the rest of the pH team and it will hopefully improve the patient’s journey. We had an amazing few days in Denver all made easier by Paulette and Susan at Sandhill.
Impedance/pH Reflux Testing & High Resolution Impedance Manometry Seminar at The Grosvenor Hotel (Victoria, London) from 28th February – 1st March 2012, which was attended by 45 Clinicians from the U.K. and Europe.

Due to the success of this event, further dates have been identified for the next training events (TBC):

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>Tuesday, 2nd Oct</td>
<td>High Resolution Anorectal Manometry (HRaM)</td>
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<tr>
<td>Wednesday, 3rd Oct</td>
<td>High Resolution Impedance Manometry (HRI M)</td>
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<tr>
<td>Thursday, 4th Oct</td>
<td>Impedance/pH Reflux Testing (Advanced - Adults)</td>
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<tr>
<td>Friday, 5th Oct</td>
<td>Impedance/pH Reflux Testing (Advanced - Paediatrics)</td>
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If you would also like to benefit from the FREE 24 hour on-line Sandhill University (which includes training for oesophageal and anorectal manometry, as well as acid (pH) and impedance/pH reflux testing and a very systematic step-by-step approach from set-up through performing and analyzing the study) please click here to take a test run through two of the on-line programs.

To register your interest in training events taking place October 2012, or for more information, please email Eleni.Kyriacou@synmed.co.uk or contact us on 01992-782-570.

SYNMed Limited
Synmed House, 7 The Pavilion Business Centre, Innova Park, Enfield, Middlesex, EN3 7FJ.
Tel: 01992-782-570 Fax: 01992-667-010
Email: sales@synmed.co.uk Web: www.synmed.co.uk

Post Graduate Qualifications:

We have started the process of listing approved degrees and individual modules to set up a precedent list for future submissions to: M-level register, Chartered Scientist Register & Higher Scientific Training (see table below)

We know that there are other degrees and modules out there and would encourage anyone who has or is undertaking a post graduate degree to send us details of dissertations and modules. Topics of dissertations may also fall out of the list in the table but we are working with what we have on record and this can be expanded as required.

It may be that some of our members in senior posts are not intending to apply for any of the above registers but any information at this time will be useful in setting up precedents.

It also may be important for those members aspiring to reach Consultant Clinical Scientist level that their specific qualification is approved as it is envisaged that future appointments at this level will be through the Higher Scientific Training pathway or Equivalence.
We are also woefully ignorant of M – level nursing qualifications and would appreciate any input from nursing or medical staff.

**Please reply to:**
Kathy Noble  katherine.noble@heartofengland.nhs.uk
Patricia Vales  patricivales@hotmail.com
Elisa Wrightham  elisa.wrightham@srft.nhs.uk

**Degrees and Modules under consideration for Approval**
Required for admission to, M – level Register, Chartered Scientist Register & Higher Scientific Register (Consultant level):

By dissertation only. In House GI/Urodynamics/Physiology/Physiological Science dissertations:

<table>
<thead>
<tr>
<th>University</th>
<th>Faculty/College</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hull</td>
<td>Surgery</td>
<td>PhD</td>
</tr>
<tr>
<td></td>
<td>Medicine</td>
<td>MPhil</td>
</tr>
<tr>
<td>London</td>
<td>UCL Medical School</td>
<td>PhD (2)</td>
</tr>
<tr>
<td>Manchester</td>
<td>Medicine</td>
<td>PhD (3)</td>
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<tr>
<td></td>
<td>Medicine</td>
<td>MSc (1)</td>
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</table>

Taught Modules with GI/Urodynamics/Physiology/Physiological Science dissertations:

<table>
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<tr>
<th>University</th>
<th>Faculty/College</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hull</td>
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<td>MSc</td>
</tr>
<tr>
<td>Sheffield Hal-</td>
<td>Health and Social Care</td>
<td>MSc</td>
</tr>
<tr>
<td>lam</td>
<td>Science and Technology</td>
<td>MSc</td>
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<tr>
<td>Manchester</td>
<td>Medical Science</td>
<td>MSc</td>
</tr>
</tbody>
</table>

We welcome any suggestions for improving this e-newsletter for future publications. We would also welcome from all our members any articles, interesting case studies, any relevant information obtained at recent conferences etc, which would count as a publication and contribute towards your CPD and KSF portfolios. Please contact (via email) the NewWave editor warren.jackson@hey.nhs.uk. We look forward to hearing from you.