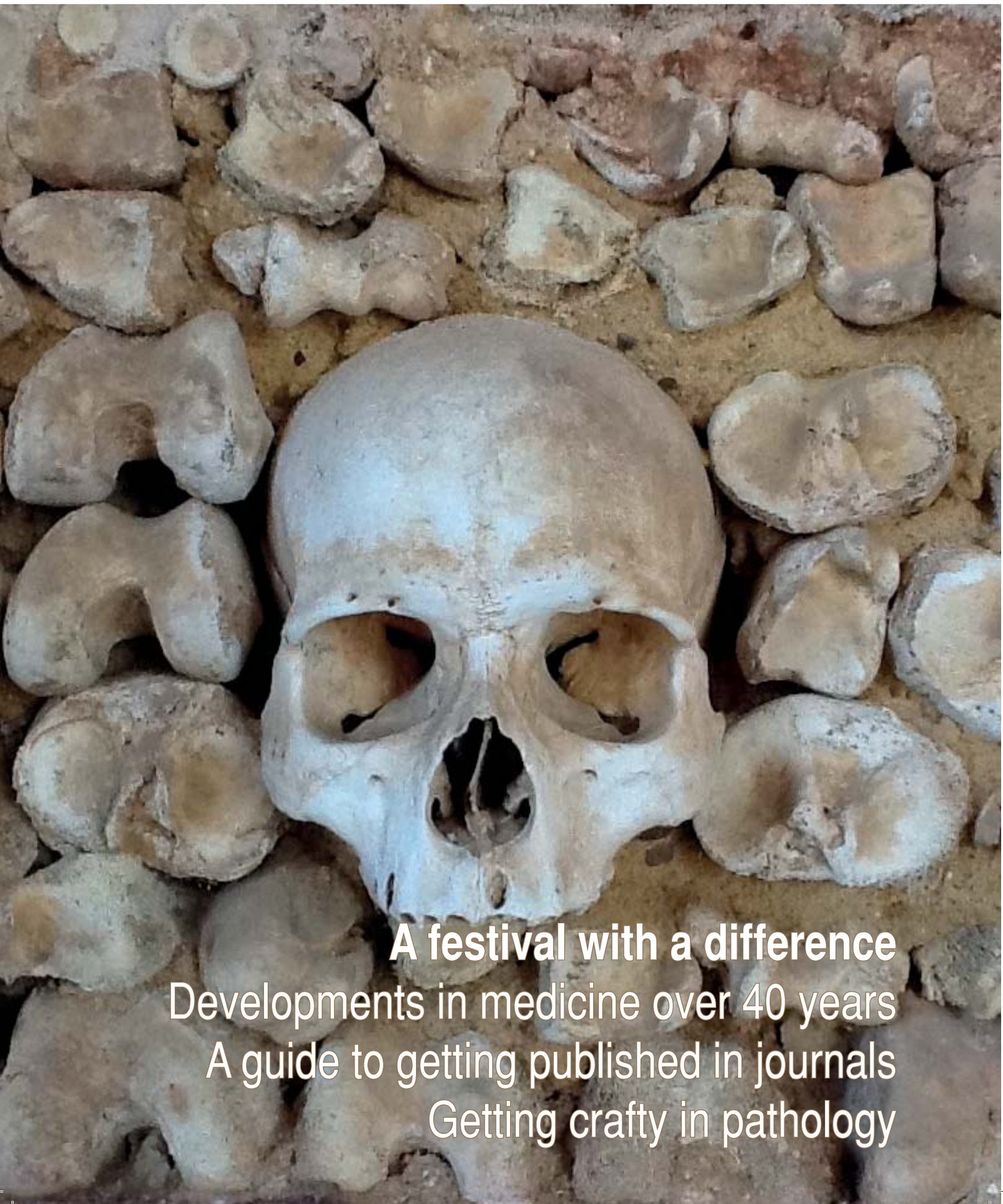
The Association of Clinical Pathologists

Winter 2012

ACP news



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Getting crafty in pathology

Getting Crafty in Pathology – Abbie Pugh

Flicking through old copies of the *ACP news*, I stumbled across Camilla Hilton's article in the Summer 2010 issue. Milly, at that time a 1st year medical student, wrote an excellent article entitled "Medicine in Art" which went on to win 1st Prize in the ACP Awards for Journalism in Pathology. As she says, anatomy, medicine and art have been closely linked for centuries and many of these ancient paintings and sculptures have helped us to understand disease, its treatment and social context throughout the ages.

But what about today? For a moment I'm going to forget about the more "traditional" art forms and concentrate on crafts that both career textile artists and normal run-of-the-mill hobbyists spend hours enjoying. It is no secret that I love knitting and crochet. A fellow FY1 colleague, Claire, and I once spent a wet and windy winter weekend in the residences of a Welsh hospital with nothing to do and nowhere to go. I had seen Claire knit/crochet (I couldn't tell the difference) quietly on the sofa previously and frankly, I had found it a bit odd. Wasn't that something that grannies did? I had vague recollections of being awarded my Brownie badge for knitting, but suspect that my Mum had rather more input into my achievement than me (shh, don't tell!). "Do you want me to teach you how to knit?" Claire asked. Did I? I wasn't sure. Truthfully, I was scared of being laughed at or teased and wasn't sure if I'd be any good at it or what on Earth I would make. "Um, OK", I found myself replying. Why not? It surely couldn't hurt – could it? Claire and I spent the rest of the afternoon knitting. She taught me how to knit a scarf. Yes it was terrible, but quite good fun to make. Soon, we had a little crowd of FY1 doctors (girls AND boys) making terrible scarves. I will be forever grateful to Claire for opening my eyes to

Figure 1: Karen Norberg's knitted brain

a whole new crafty world, even if she did teach me to knit and crochet left-handedly and I've been trying ever since to re-teach myself the right-handed way.

So, what has this got to do with pathology? I don't have any statistics to bombard you with, but if you ask around there are quite a few members of the medical profession who knit or crochet. There is a craft forum

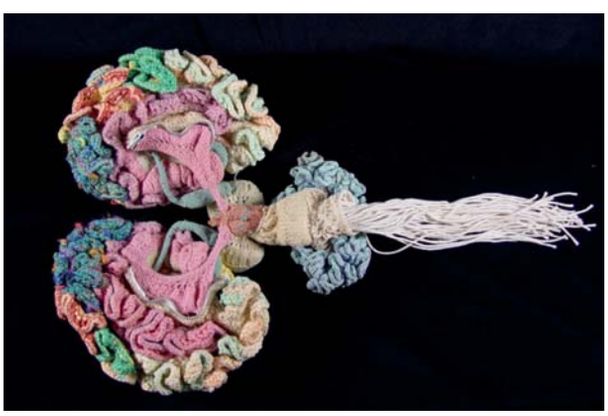

Figure 2: The unzipped brain

on www.doctors.net.uk and hundreds of medical doctors belong to the "Knitting Physicans" group on the knitting and crochet website, Ravelry[1]. It will come as no surprise to you that I am not the first person to probe the link between science and knitting. Indeed, Professor Andrew Maynard – a research scientist turned science policy communicator at the University of Michigan – blogged back in July 2010[2] about the first time he came across a scientist knitting in public at a conference. I'm not advocating knitting at scientific meetings but it is probably less disrespectful than falling asleep! Dr Alice Bell, a senior teaching fellow at Imperial College London has discussed "the way 21st century gender and geek identities have collided"3 but why is it that scientists love these wool crafts so much? Anyone that has ever tried to knit a pattern for lacework, whether in written

Figure 3: Not sure it's to scale, but a fascinating reproduction of the digestive system

or diagrammatic form, will agree that a mathematically orientated brain is useful to interpret the apparently complexly coded formulae. Interest from scientists has led to all sorts of amazing knitted creations – from the double helix structure of DNA to Möbius strips, microbes and anatomically accurate knitted body parts.

It was one of these knitted body parts that gave me the original idea for this article. A few years ago a knitted brain was featured in the BMA News. This brain (Figures 1 and 2) was the handiwork of Dr Karen

Figure 4: Jessica "hearts" crochet!

Figure 5: This brain hat would keep you warm outside, if you're not shy!

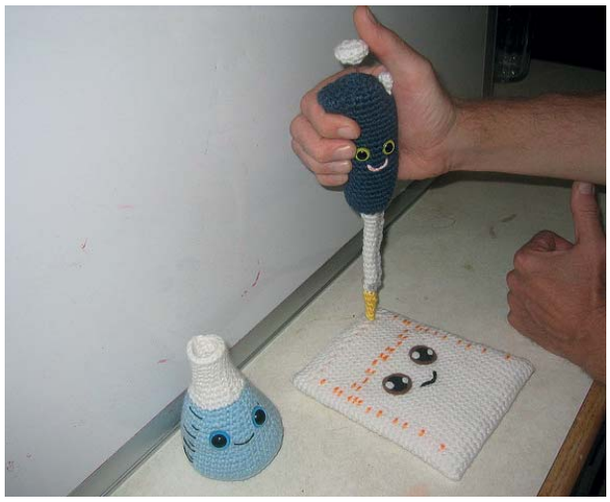

Figure 6: Shanna's amigurumi lab kit

Norberg, an epidemiologist and child psychiatrist at the National Bureau of Economic Research in Cambridge, Massachusetts. She spent a year painstakingly knitting the individual components before assembling them to create the finished brain, which is one and a half times bigger than in real life. My personal favourite part of the construction is the zip connecting the two halves of the cerebellum, which can be opened out to reveal the internal structure.

Shortly after seeing this brain one of my supervising consultants at the time, herself a keen knitter, decided she wanted to knit a gastrointestinal system to assist in educating fumbling ST1s with cut-up – complete with anatomically correct peritoneal relationships. I'm not sure if she ever started it, let alone finished it. This got me thinking, had anyone actually knitted body parts? Some hours of Googling and Ravelry searching later I had been on an impromptu tour of the intertwined world of yarn and pathology. Many of these creations are not made by artists or medical professionals, but by everyday people with great skill and an interest in the human body. The first knitted pathological specimen I came across was Laura Markey's digestive system (Figure 3). Although undoubtedly time consuming to construct, the finished article looks great and would be a great teaching aid for science in schools. Jessica from Michigan made a detailed crochet heart for her anatomy and physiology class (Figure 4) and I just might have to coerce her into teaching me how to make one as it would look fab on my desk! (*Can she make me one too? - Ed*.) I'm not so sure about the recent US trend for giving your gynaecologist a knitted uterus but Alana Noritake's brain hat (Figure 5) certainly has function as well as style (!). Alana wrote the pattern herself and is selling it to help fund her through medical school so please check out her pattern page on Ravelry[4]. Not to be left out, other pathological specialties are creating everything from knitted microbes to pipettes, including this one crocheted by Shanna (Figure 6).

Figure 7: Shanell Papp's crocheted skeleton, complete with organs

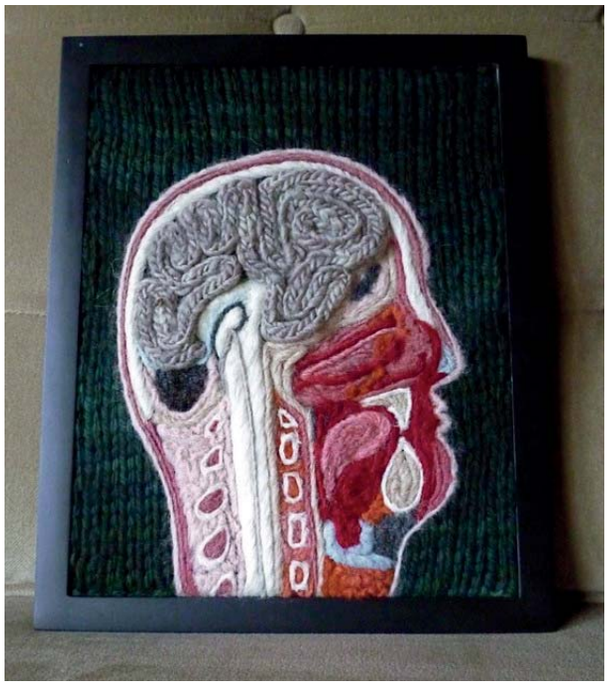

Figure 8: How do you fancy a bisected head to adorn the wall of your office?

Figure 9: One of Emily's autopsy creations – a dissected lab rat

Artists throughout time have always been drawn to the more morbid and sinister side of the human body and have often focused on the human body in death. Shanell Papp is an artist who grew up in Southern Alberta who doesn't paint but creates with textile, video, drawing, printmaking and photography. Inspired by Mary Shelley's Frankenstein and the Romantic era/rise of science in the early 1800s, she has created a piece of art entitled LAB – which she describes as "a reverse autopsy of sorts" (Figure 7). Her "body", which does not have a specific sex or race, includes many intricate parts that aren't visible to the observer, such as bone marrow, the pituitary gland and even food in the stomach. The complexity of the piece and the scene in which it lies are best appreciated in the photographs on her website[5]. From serious autopsy art to more light-hearted crafty fun – Emily Stoneking, who has no scientific background but a "layman's love of science" and is studying at the University of Vermont, sells her anatomical creations online[6]. These include everything from a bisected human head (Figure 8) to knitted dissections of frogs, aliens, lab rats (Figure 9) and even the Easter Bunny!

Although often mocked, knitting and crocheting takes skill and can be used not just to make works of art, but also to make valuable educational tools. A hands-on knitted body that young students can take apart and reconstruct is much easier for them to handle and has greater value than a two dimensional diagram in a book. I wonder how many crafty pathologists out there will one day combine their love of craft and art with their eagerness to educate and inspire others into the wonderful world of science?

Thank you to all the science craftsters who allowed me to use their photographs in this article. Special thanks to Dr Karen Norberg and Prof. Bill Harbaugh, curator of the Museum of Scientifically Accurate Fabric Art for allowing the reproduction of the knitted brain.

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