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# The beauty of Art will save us

**Federica Napolitani**
Editor in Chief
Istituto Superiore di Sanità, Rome, Italy
Contact: federica.napolitani@iss.it

It is with great pleasure and excitement that I present this December issue of *JEAHIL*. Its monographic section "Medicine and art – science and emotion" edited by Peter Morgan, former President of EAHIL (2011-2012) and Head of Medical and Science Libraries, Cambridge University Library, UK, truly makes it an exceptional issue!

Before diving in, I would like to express my deepest gratitude to Peter for accepting the role of guest editor. When I proposed the relation between art and science/medicine as a possible theme at the Editorial Board meeting in Cardiff, 2018, the first name that came to my mind was that of Peter Morgan. This issue's topic is one I personally feel very close to my heart, and, although I hoped for Peter as an editor, I wasn't sure he would have accepted. On the contrary, he, intrigued and tempted, gladly agreed. What a great honor for *JEAHIL*!
Peter's extensive research allowed him to assess the best route towards examining such a broad and complex subject, and to develop those areas that were most stimulating and inspiring for medical librarians and information specialists. He also managed to gather excellent and original contributions from authors originating from a variety of different backgrounds. In his captivating introduction (Preface), Peter offers a thorough and widespread overview of this vast topic by examining its different aspects and possible readings.

I would also like to thank each and every author for presenting their brilliant contributions for this issue. They have given us the opportunity to reflect upon the role of art, and most importantly reminded us to let ourselves be inspired by its many healing possibilities.
Although art often represents realities of immense suffering and profound sorrow, I believe it is its *beauty* which shall eventually save us all. We shouldn't just meditate upon this, but rather commence practicing and using it as a "medicine" to heal our wounds. Allow it to improve our state of general well-being and health which, as we all know from the WHO definition, is not merely the absence of disease or infirmity.
As most of you probably know, our dear colleague Laura Shane Godbolt left us on the 24th of November. An Obituary, by S. Bakker, is published in this issue, while the Editorial Board is exploring other editorial initiatives to honor Shane's memory and her involvement in EAHIL.

Finally, as this is the December issue, I would like to look back and thank all those who have contributed to the journal this past year. It has been an enthusiastic collaboration by part of the members of the Editorial Board, authors, editors and reviewers of the journal. You have all painted such wonderful pictures for the readers to enjoy! Which brings me to my final thank you of the year: thank you to all those who read the journal and make everyone's hard work worth the while!

*Paint can mend the cracks of a broken spirit.*
*Season's greetings to you all*
*Federica*

# MONOGRAPHIC SECTION

## Medicine and Art – science and emotion

***Edited by***
**Peter Morgan**
(retired) Head of Medical and Science Libraries,
Cambridge University Library, UK
EAHIL President (2011-12)
pbm2@cam.ac.uk

# Medicine and Art – science and emotion

**Peter Morgan**
(retired) Head of Medical and Science Libraries, Cambridge University Library, UK
EAHIL President (2011-12)
pbm2@cam.ac.uk

As medical librarians and information professionals we are familiar with the role of art in our work, through the atlases that line our bookshelves and the illustrations that routinely appear in both printed and digital literature. Why is this role important? There's a clue in the familiar aphorism "A picture is worth a thousand words", which captures the essential truth that art is about communicating information. Since our professional role is also the business of communicating information, there should be obvious benefits for us in studying and understanding how art performs this function.

Of course, "communicating information" hardly begins to convey the full power of art. It is true that in its purest and most scientifically accurate form, medical illustration has to provide objective information to enhance the viewer's knowledge. But art is also subjective and emotional, both in exposing the thoughts of the artist and in seeking to prompt a response from an audience. Every artwork implies a relationship between two participants – between the creator and the viewer, or between action and reaction. The intention of this theme issue is to encourage readers to consider that relationship in a variety of medical settings, for a variety of purposes, and to explore how artists' intentions and viewers' responses can be instructive in acquiring a better appreciation of the process of communication.

We should start by acknowledging at the outset that a small collection of articles on medicine and art, however informative and insightful each might be, can only scrape the surface of what is a huge and complex subject. At a basic scientific level we can consider the neurology and neuropathology of art – how the brain functions during the creative artistic process in both health and illness – and the emerging discipline of neuroesthetics (1). We can similarly explore how the creativity of many artists has been influenced by their own temporary or chronic physical disabilities. Progress in understanding these functions can in turn be applied both diagnostically, by analysing the art produced by patients, and therapeutically, by encouraging patients to create art for themselves; and it extends into the role of psychoanalysis in studying and interpreting works of art and the mind of the artist.

Medicine in a social context has often been the subject of works by some of the world's most acclaimed artists. We think of Rembrandt's "The Anatomy Lesson of Dr Nicolaes Tulp" (2), essentially a group portrait painting that features a dissected cadaver at its centre; or, by way of contrast, William Hogarth's satirical portrayal of a dissection "The Reward of Cruelty" (3). A similar contrast in mood is evident in Van Gogh's "Ward in the Hospital at Arles", reflecting his own sense of isolation (4) set against the humanity of Picasso's early "Science and Charity" (5).

Another rich area for study is that of medical professionals and scientists as artists: this group includes those such as surgeons, obstetricians and pathologists who create pictures – either at the point of action, or later in retrospect – to record their clinical and research observations, as well as artistically-talented practitioners who develop parallel careers as professional artists. The evolution and future direction of medical illustration as a career, the role of libraries in curating collections of medical art … the list of potential topics is almost endless.


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In this theme issue the sequence of articles starts with Pascale Pollier. She takes us on a personal journey that describes her work as a contemporary medical artist and illustrator, and places it within the broader historical context that both starts and ends her account. She produces images and objects in a variety of media and techniques, combining scientific accuracy, technical virtuosity, and emotional engagement. Underpinning everything is her appreciation of the great medical illustrators, epitomised by her regard for Vesalius.

The world of the classical medical illustrator is explored further by Franco Toni in his account of the anatomical drawings made by the celebrated sculptor Antonio Canova, which are housed in the Library of the Istituto Superiore di Sanità in Rome. Like Leonardo three hundred years earlier, Canova produced his drawings purely to improve his own understanding of the human form and to acquire the knowledge that would inform his work as a sculptor. The drawings can thus be regarded as an example of medical illustration in its purest form, in which the creator and the viewer were intended to be one and the same person.

The world of contemporary biomedical art, recorded at a personal level by Pascale Pollier, is explored more fully by Vasia Hatzi. She describes how the international community of artists, moving increasingly away from traditional medical illustration to adopt innovative techniques and materials, are creating a corpus of works that extends the boundaries of conventional medical art. And she explains how the MEDinART network is providing an organisational framework that encourages artists to explore collaborations and public exhibitions.

The focus changes, in the contribution by David O'Flynn and William Schupbach, from the professional artist to the patient as artist. The artists in question are those "outsiders" who produced paintings and drawings while confined in an asylum during the mid-twentieth century, and their surviving output is in the Adamson Collection. The Collection was assembled by the artist Edward Adamson, whose work with these patients is now acknowledged as having made a major contribution to the development of art therapy. The paper also discusses the practical issues faced by the Wellcome Library in curating the major part of the Collection.

Finally, Thomas Walshaw describes the work and objectives of the organisation Paintings in Hospitals, which lends high-quality works of art to care organisations. While art as therapy is the principle around which the organisation's activities are built, the therapy in this case is not derived through the patient's act of self-expression in creating art, so much as from the ability of art to improve the health and well-being of the viewer – in this case patients, their carers, and health care professionals. The paper also discusses the evidence base that confirms the effectiveness of this approach both in improving well-being and in reducing health-care costs.

It seems inevitable that the imaginative opportunities provided by new technologies will stimulate new ways to create medical art, attract new types of "artist" to exploit these opportunities, and find new ways of disseminating the results to audiences via social media. It is likely, too, that we shall see the increasingly political use of medical art to improve the popular understanding of science and to support public health campaigns. At the University of Alberta in Canada, for example, the SCI+POP project explicitly uses images to convey complex health science issues such as vaccination and uses social media to deliver its message to the widest possible public audience (6). Here too, as our contributors have illustrated in their different ways, we see further evidence of how scientific information can be transmitted through art, and how in the process it becomes more accessible through the emotive responses thus evoked.

In conclusion, I am most grateful to the authors of all the contributions in this theme issue for their enthusiastic support, and also to the *JEAHIL* Chief Editor and Editorial Board for the invitation to be its guest editor.

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# Artem Medicalis – My ouroboros journey in art and science

**Pascale Pollier**
Medical Artist MMAA, MIP, AHCS, London, United Kingdom

**Abstract**
*Artistic scientific research is, I believe, one of the ways out of the cul-de-sac that modern art brought us into during the latter part of the twentieth century. By returning to serious scientific and anatomical study, doors opened to a new discipline altogether. My personal journey as a medical artist took me from scientific wonder and intense interest in alchemy, through artistic anatomical research, on to functional medical illustration and back to conceptual art and sculpture. Having completed a course in forensic facial reconstruction I developed the idea of making a reconstruction of Andreas Vesalius's face. Thus, began a quest to find the lost grave of the great anatomist. We have not found it yet but have already changed history.*

**Key words:** medical illustration; medical artist; anatomy; facial reconstruction; Andreas Vesalius.

## The history of medical art and medical illustration

Eastern and Western medicine founded its origins in alchemy which was initially a fusion of chemistry, medicine, astrology, philosophy, spirituality, science and art. Anatomists used analogies of the universe to explain the body. Ancient Chinese illustrations and Arabic illuminated manuscripts might appear a little odd to modern eyes, as they were not based on direct observation, but rather on scholarship, and therefore the representation of the internal structures can have a rather imaginary appearance.

Functional educational medical illustration first appeared in Hellenic Alexandria during the early 3rd century B.C. Created on sheets of papyrus, Hellenic illustration included anatomy, surgery, obstetrics and medicinal herbs and plants. Anatomical figures were often gracefully positioned in landscapes amid pieces of classical architecture, in startling contrast to the clean and bare backgrounds of earlier and later illustrations.

The Renaissance gave us Leonardo da Vinci, the first medical artist in the modern sense. *Homo Universalis*, inventor, artist and scientist, he melded a scientific understanding of anatomy based on observation with his extraordinary artistic talent. Not long after Leonardo died, Andreas Vesalius began his medical career and created and published *De humani corporis fabrica* possibly the best-known book of anatomy of all time. It influenced medical illustration for centuries. While much is known about Vesalius and the printing of the Fabrica, little is known about the artists who illustrated it, even including Jan Stephan von Calcar (a student of the Italian Renaissance artist Titian, who is considered likely to have created some of the illustrations in the Fabrica). In the 19th century, new printing techniques allowed illustrators to work in a variety of media. Colour printing was refined and became readily available, helping to make possible colourful atlases of pathology and anatomy.

In the 20th century, publishing became much easier and more direct with digital files and software editing programs both for text and illustrations. With easy access to the Internet, research is now at our fingertips, much to the great advantage of the medical artist.

*Address for correspondence:* Pascale Pollier, 9 Ladbroke Road, Notting Hill Gate, London W11 3PA, UK.
E-mail: pascale@artem-medicalis.com.

## Medical illustration – Medical art – Sci-art

It is mostly the difference of intent that distinguishes the medical illustrator from the medical artist and the contemporary sci-artist. A medical illustrator's intention is to communicate complex scientific findings through skills learned over many years of study, taking observations directly from cadavers in dissection rooms or taking notes and making drawings during operations or autopsies, working directly, and in close collaboration, with scientists.

As medical illustration is seen as a functional educational art form, with its main aim to be precise and clear and explanatory, the artistic expressive freedom is sometimes a little limited. A medical artist would seek to capture a more philosophic, sometimes even political communication, and must feel free to express these findings in any way found to be suitable. The distinction is made by the philosophy of the activity itself, one has to achieve the opportunity to absorb and relay the impressions of being confronted with one's own mortality. Again, this can only happen when one goes to the source and experiences these impressions directly, a medical artist has somewhat more artistic freedom, although the artistic research is steeped in sound scientific foundations. Having said that, there are many medical illustrations that can be truly called artistic masterpieces and many medical artists also produce beautiful medical illustrations, one does not necessarily exclude the other.

Medical illustration can be found in medical educational books, explanatory surgery books, hospital leaflets, posters, educational medical 3D models, teaching aids, courtrooms, forensics, facial reconstruction, etc., while medical art can be seen in museums, galleries and exhibitions.

Sci-art in the contemporary art world has increased in popularity over the years. Artistic research with the use of scientific tools and biological material is producing interesting and beautiful results. Quite a few art/science labs and research hubs have popped up all over the scene, one example where one can perform such artistic scientific research is in the lab of SymbioticA (1).

Artistic scientific research is one of the ways out of the cul-de-sac that modern art found itself in during the latter part of the twentieth century. By returning to serious scientific and anatomical study, doors have opened to a new discipline altogether. This is enhanced by the arrival of new technologies, breakthroughs in physical science and the wealth of new materials now available. The future is once again very exciting.

## My ouroboros journey

My personal quest as an artist took me from scientific wonder and an interest in alchemy, through anatomical research (in dissection and autopsy rooms and labs and operating theatres) on to functional medical illustration and back to conceptual art.

I wrote the Poem "The Quick and the Dead" in 1998, when I was a medical art student. It was inspired by observing the dissection of cadavers at the University College London.

*The Quick and the Dead*

*Mortal flesh and bone with benign fleeting soul*
*composed grief-stricken structure*
*I doth require your disengaged frame, your relinquished mould*
*before this beautiful perfection mingles moist turf and oak*
*and throwes of graveyard soil*
*many brights have wrought*
*and eyed upon thee*
*and chalked eternal masterworks from thee*
*bequeath therefore your strange intriguing tenements of clay*
*to medic shaman and artist*
*and behold*
*as absolute awaits*

The process that I go through in my work, from casting organs, such as the heart and the brain, through to the finished sculptures is quite complex. It begins with careful planning, many hours of observation and it requires a certain amount of skill and artistry, which can take years of experimentation and experience to acquire.

It is said that the creation of an artwork is 1% inspiration and 99% perspiration, "great accomplishments depend not so much on ingenuity as on hard work" (Thomas Edison).

But the question arises – What is inspiration? I will try and explain my thoughts on this through my own creative process. Most works start off with a thought,

an idea, which might take a few years to mature, but the actual birth of the physical manifestation of this idea could be very quickly realized. Could it be then that the 1% inspiration arises, like the phoenix, out of a lot of hard mental slog in the quagmire of one's brain? My 1% of inspiration found its origin in dissection and autopsy rooms and labs and operating theatres. I have spent many years happily observing and drawing, and being totally immersed, with all my senses, in studying the body. My entire oeuvre consists of the study of both the anatomical mortal body and the nature of consciousness within this body, thus questioning what makes us human.

In 2007 medical artist Dr. Ann van de Velde Hematologist at the University Hospital Antwerp, Belgium and I organized the European Medical Artists, AEIMS (2) conference "Confronting Mortality with Art and Science". For the accompanying exhibition, and in collaboration with anatomist and elbow specialist Prof. Dr. Francis Van Glabbeek, (Orthopaedic surgeon and anatomist at the University Hospital Antwerp, Belgium) I created a wax sculpture (*Figure 1*) of a half-flayed man contemplating his own mortality by observing his dissected arm and biceps. He sits on top of two books representing Vesalius' "Fabrica" symbolizing that the anatomy of man has come to life. In 2010, as a spin-off of the conference, Ann van de Velde, Francis Van Glabbeek and myself founded BIOMAB (3). With this international association we organize dissection drawing classes, exhibitions, collaborative art/science projects, symposiums and conferences. Medics and artists can view the body from their own perspectives and this gives rise to an interesting dialogue and many diverse works of art.

**Fig. 1.** *Pascale Pollier, Confronting mortality, Wax, 2007, Antwerp Belgium; Photo: Ingeborg Van Dooren.*

The following poem was written observing the contrast between life and death during one of the dissection drawing weekends in Antwerp University.

*Still here*

*The man in a white stillness zipped up encircled*
*with nervous energy opponents*
*the motionlessness serene absence of movement,*
*moving us so deeply*
*the non-beating of the heart*
*making ours skip faster than ever.*
*Limb by limb removed brought us together*
*the afterbirth indeed emotions pouring out*
*like the wrinkled soft pink skin curtain*
*dripping clear red yellow orange deep greenish blue.*
*Like the light shining through*
*the melancholic afterbirth lyrical dark hue*
*we are still here*

Medical artists are not only specialized skilled artist, they have to also have the passion of an anatomist, and translate the beauty they see in the human body into 2-D and 3-D artworks.

I know of no other artistic experience that comes anywhere close to the intense emotion one feels in holding someone's heart or brain in one's hands, with the understanding that they were once imbued with the vital spark of life. It is a humbling privilege indeed to witness the beauty of these visceral structures, the textures and colors in all their splendor.

The total involvement of all the senses, i.e. sight, hearing, smell, touch, give rise to strong feelings and emotions i.e.: sadness, fear, aversion, sometimes even anger, but also happiness, wonderment and surprise. These emotions form the building blocks of each work of art that I create. Imbued with such passionate emotions, they are on their way to becoming works of the heart, works of dedication. It is important however that the act of creation is conceived with sincerity, integrity and pure intentions, especially when dealing with the subject of death and the anatomical human body, as one can easily fall into the trap of sensationalism. Each work has to have its "raison d'être"

Having received a commission to sculpt a brain it was very important to me to observe and feel a real brain in order to know its consistency, weight, texture and shape etc. It is not enough just to observe with the eyes, one needs to feel with the hands also. Hands retain the memory of shape, and as a sculptor it is important to feel the subtlety and intricacy of the organ in order to really know and understand it.

On attending an autopsy, a brain was placed in my hands. I was surprised to find that it was very cold, for the body had been stored in a freezer overnight. The shocking realization that this brain had been full of thoughts the day before, and that I was holding somebody's whole life in my hands was a very humbling experience. I can recall that the brain looked pink and that it was healthy in structure. It was quite heavy and the arachnoid membrane held all the blood vessels and capillaries tightly in place. The structure of the cerebellum I found absolutely wonderful and beautiful and when it was cut into a sagittal section, the elegantly designed "arbor vitae" or "tree of life" was revealed. What a perfectly fitting name for a structure in the brain! I made the sculpture "Autopsy in a nutshell" (*Figure 2*) after the incredible experience of witnessing the brain autopsy that had such a profound effect upon me.

My major source of inspiration, however, was, and remains to this day, to be found in medical museums; the beautiful anatomical waxes displayed at La Specola museum in Florence, the Joseph Towne collection at the Gordon Museum in London and the medical collection at the Josephinum in Vienna, to name but a few. You'll often find me in pathology museums (*Figure 3*) and medical history museums. I love to be part of this specialized profession and to continue the long tradition of anatomical wax sculptors.

**Fig. 2.** *Pascale Pollier, Autopsy in a nutshell, mixed media, 2006, Belgium. Photo: Pascale Pollier.*

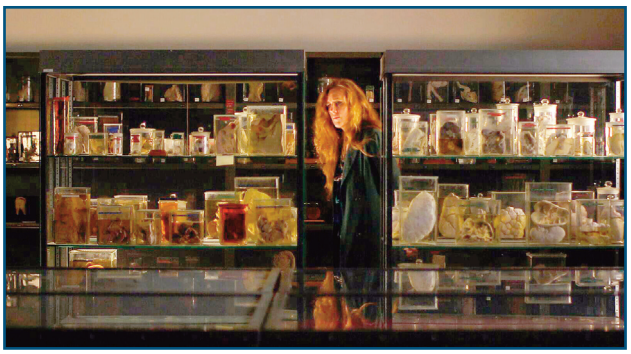

**Fig. 3.** *Still from the film Fabrica Vitae, 2014, Belgium, Andere Wereld films; Jelle Janssens. In the photograph: Pascale Pollier.*

Wax is an excellent material for representing skin, muscles and the texture of other organic structures as it absorbs and reflects light in a very similar fashion. The oil paint on the surface is the finishing touch that brings out the textures, and almost magically, the effigy comes to life.

I also like to carve anatomy into a life cast and continue to anatomize it, very much as if I were dissecting a wax body, the only difference being that I don't have to find the anatomical structures… I have to create them. To do this I use scalpel and dental tools.

The sculpture "Female écorché" (*Figure 4*) is an

**Fig. 4.** *Pascale Pollier, Female écorché, Wax, 2009, Belgium. Photo: Eleanor Crook.*

example of this technique, and began as a life cast taken from my own body. I attempted to convey with this work that as an artist one must dare to rid oneself of the leather skin, the protective layer, the comfort zone and dare to stand vulnerable and alone, for hidden in this stance lies one's strength. For I hold very strongly to the belief that it is not the beauty of the art that is of paramount importance, but rather what the artist wanted to communicate and if and how this goal has been achieved.

## The quest of the grave of Andreas Vesalius

In 2009, I completed a course on facial reconstruction at the University of Maastricht. It was then that the idea developed to make a facial reconstruction of Andreas Vesalius. Not knowing where he was buried, but assuming it was in Brussels, my colleague Ann van de Velde and I went on a quest to find the grave of the great anatomist.

This quest took us to the Ionian island of Zakynthos, where the death of Vesalius has been an unsolved mystery for the last four and a half centuries. The cause and manner of his death and the exact location of his burial site have not been ascertained. We sailed to Zakynthos and embarked upon our quest.

Evidence provided by various researchers, including Belgian researchers Omer Steeno, Maurits Biesbrouck and Theodoor Goddeeris and Greek historian Pavlos Plessas, unquestionably point to the Santa Maria delle Grazie church in the city centre of Zakynthos. The church was completely destroyed by the earthquakes of 1893 and 1953 and any new effort to find the grave must therefore inevitably begin with the identification of the original location of the church.

The project " The search for the grave " was conducted in collaboration with Theo Dirix, taphophile and chancellor at the Belgian Embassy in Athens. First, a historical Geographical Information Systems (GIS), digitally registers, rectifies and analyses contemporary and historical maps, to try to identify the original position of the church that vanished under the rebuilt, contemporary city. In a second phase, we conducted a geophysical approach, employing non-destructive ground penetrating radar (GPR) and electrical resistivity tomography (ERT) methods. Stage three will be excavating the site, we plan to do this as soon as substantial evidence is found as to the exact location of the grave. I do hope we will find him as I have not yet lost hope of creating a facial reconstruction of the skull of Vesalius.

2014 marked the 500th anniversary of Andreas Vesalius birth. I was co-organiser of the conference Vesalius Continuum and the accompanying touring exhibition Fabrica Vitae, "the fabric of life" (5). It was there I met geneticist researcher Vasia Hatzis, the curator of MEDinART (6). Vasia has been documenting and supporting the conference, exhibition and the search for the grave of Andreas Vesalius, my work and the work of many medical artists for several years.

In collaboration with forensic artist Richard Neave we created a new Vesalius monument (*Figure 5*), a two-

**Fig. 5.** *Pascale Pollier & Richard Neave, Bronze, Zakynthos, Greece. Photo: Stelios Pettas.*

meter bronze écorché, holding a skull in one hand, which is representing the search for the grave. To fund this monument, Richard and I made a sculpture of Vesalius's head, half reconstruction and half portrait and sold 15 bronze models to universities and private collectors in Europe, the UK and USA. The monument now stands on the island of Zakynthos facing the sea and is peering into the future with a handful of history.

## ACKNOWLEDGEMENT

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*Submitted on invitation.*
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# Antonio Canova's drawings in the Rare Books Collection of the Istituto Superiore di Sanità Library (Rome, Italy)

**Franco Toni**
Istituto Superiore di Sanità, Library, Rome, Italy

**Abstract**
*The paper aims to promote the knowledge of the extraordinary collection of anatomical subject drawings by Antonio Canova, the most important Italian neoclassic artist, owned by the National Institute of Health Library in Rome. The history of acquisition by the library and the analysis of their importance in the long career of the artist is also treated. A short story about the fortune of the drawings in the last 20 years completes the study.*

**Key words:** art; drawings; anatomy; muscles; neoclassicism; Canova.

## Introduction

The library of the Istituto Superiore di Sanità (ISS) in Rome holds a small treasure consisting of 17 anatomical drawings by Antonio Canova (1757-1822), the great sculptor and master of European neoclassical art between the eighteenth and the nineteenth century. They are part of the Rare Books Collection of the library which has over 1,200 volumes from 1501 to 1830 on its shelves. It is not so usual that a biomedical library, whose aim is to support the needs of scientists doing current research, has a relevant historical heritage which is typical of a conservation library. But the story of the Institute shows us a great president from the early thirties until the beginning of the sixties of the past century, Professor Domenico Marotta. He was a brilliant scientist but also a great bibliophile and the acquisition of books for the rare collection is due to his passion and his purchases over two decades on the antiquarian market, including Canova's drawings. The 17 muscle bundle drawings were purchased in 1943 from a Florentine bookseller (Leo Olschki) in a folder, including also a small autograph notebook by the artist with descriptions of the muscles. In all likelihood the original collection included some extra drawings – two or three – lost over time.

## Anatomical studies and artists

Anatomical studies taken from dead bodies are part of the formative course of artists, starting from the Renaissance. Although we have some rare examples of drawings or small pictures representing studies of human bodies also in the fourteenth century, the first to carry out systematic anatomical studies was certainly Leonardo da Vinci. The Florentine genius (in this year we celebrate the 500th anniversary of his death) made many drawings on this subject, most of which became part of the Royal Collection of Windsor Castle after his death. During the following centuries, many other artists have turned their attention to the study of the human body and of its details, a path that has become mandatory especially for neoclassical artists like Canova.

But what was the purpose of the artists in dealing with these studies? Certainly, the drawings were not made to set up an anatomical atlas or as a *vademecum* for the scientist or to support scientific research. The drawings were made for a purely personal study purpose, namely to acquire knowledge on the functioning of the human machine and of its details in order to transfuse this know-how into the realization of their works, achieving the best possible artistic result in the naturalistic representation of the human body.

*Address for correspondence:* Franco Toni, Istituto Superiore di Sanità, Library, Viale Regina Elena 299, 00161, Rome, Italy. E-mail: franco.toni@iss.it.

Therefore, we must not consider these works from the point of view of their aesthetic results, but rather as an essential intermediate step to attain a fundamental cognitive process in the career of an artist. In conclusion, their historical value exceeds the artistic one, representing an interesting evidence of the apprenticeship period in the life of the artist.

## Antonio Canova and the drawings in the ISS Library

Antonio Canova has been arguably the most important European neoclassical sculptor. Born in Possagno (Veneto) in 1757 he moved, when he was very young, to Venice where he took the first steps of his artistic career before moving to Rome in 1779. In the city of the Popes he remained for the rest of his life, becoming one of the most famous and requested artists of his time and receiving commissions from the principals and most prestigious clients, such as emperors, kings, popes, up to the Italian and Russian nobility. During the Napoleonic period Canova became the court artist, realizing some of his most famous works including the statue of the emperor as a peacemaker, the three Graces and the Paolina Borghese.

His work process started with drawings and sketches of real models, passing through the preparation of small preparatory clay prototypes until the realization of his extraordinary marble sculptures. Canova left many drawings which must be considered solely as sketches and studies for the realization of the sculptures: they have only a creative function.

The drawings of the ISS Library, however, have a different scope: they are not preparatory studies for specific works but generic studies on the human body and on the muscular and tendinous bundles, the result of a direct observation of corpses on a dissecting table, according to an academic practice. We don't have a secure dating for them but it is very likely that they date back to a youthful period, towards the end of the Venetian period or the beginning of his Roman stay, between the seventh and the eighth decade of the eighteenth century.

The 17 tables were made using both black pencil and red pencil (sanguine). In particular the artist realized the muscular bundles in sanguine, while for the remaining parts, such as faces, arms, legs, bones and tendons, he integrated the drawings with the black pencil. The tables have various sizes, from 59x47 cm of the largest to the 41x28 cm of the smallest, and represent the whole human body divided into the following sections:

- a right side view of the neck (*Figure 1*)
- three views of the torso (two right posterior lateral and one left anterior-lateral) (*Figure 2*)
- three views of the thigh (both in extension and in flexion)
- three views of leg and foot (anterior, lateral, posterior) (*Figure 3*)
- two views of the foot (lateral and plantar)
- four views of arm (forearm, internal, two external) (*Figure 4*)
- one view of the hand (both dorsal and palmar)

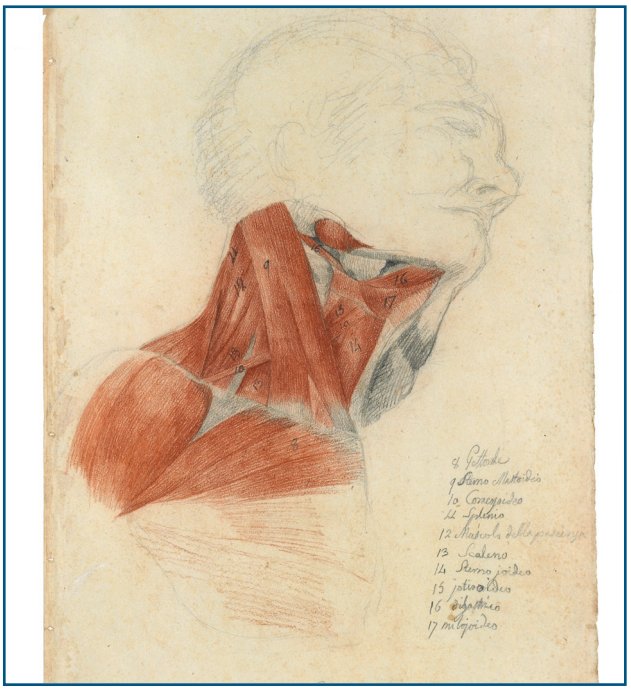

**Fig. 1.** *Antonio Canova, drawing. Plate 1 – Muscles of the neck.*

Some of the drawings present a numbering of muscle bundles with an index shown on the same sheet.

The little autograph notebook (8 pages) that integrates the collection has the heading *Descrizione dei muscoli esteriori del corpo umano* (Description of the external muscles of the human body) and contains 48 annotations by Canova about the name, functioning, action and position of the human muscles, without

**Fig. 2.** *Antonio Canova, drawing. Plate 3 – Muscles of the chest and of the abdomen.*

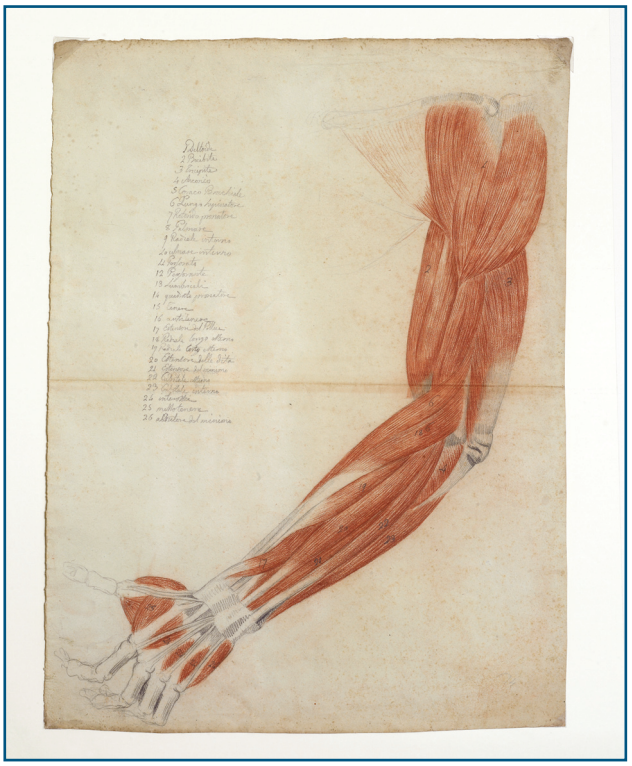

**Fig. 4.** *Antonio Canova, drawing. Plate 14 – Muscles of the arm (lateral view).*

**Fig. 3.** *Antonio Canova, drawing. Plate 8 – Muscles of the leg and foot (lateral view).*

having however a direct relationship with the illustrations. It has also a notation by the artist's friend Giuseppe d'Este who certifies that both the drawings ant the notebook were made directly by the Venetian artist.

Until 2001 the collection was kept in a single folder and presented serious problems of conservation. In that year it was decided to send the drawings to the National Institute for Restoration and Conservation of Books (Rome) in order to ensure the best possible preservation conditions for the documents. Each drawing was cleaned, stabilized and provided with a frame that allowed its use for consultation and exhibitions and this is still their current situation. Now they are stored in the rare books room, in a special dedicated housing and in an environment with constant wet and temperature and humidity.

In the last 15 years the Canova drawings of the ISS have received widespread exposure through their participation in several exhibitions and cultural initiatives. They have also been mentioned and described in many studies and publications.

When the Institute celebrated seventy years since its

foundation in 2004, a great exhibition was set up with the presentation of all 17 sheets. This was the first opportunity to show the complete collection to the public and also the starting point for future opportunities to extend their diffusion and knowledge. In 2015 the Museum of the History of Medicine was inaugurated in Padua and the drawings together with many other reproductions of ISS books gave shape to the so-called "white book", a virtual path that allowed visitors to browse the pages of the volumes and drawings as if in the presence of the originals (https://www.musme.it/en/). In 2017 a section of the new museum of ISS was dedicated to the treasures of the library and one original drawing by Canova is on permanent exhibition (*Figure 5*). Moreover in 2018 a great virtual and multimedia exhibition on Canova was staged in Venice at the Scuola Grande della Misericordia (https://www.magister.art/en/exhibitions_magister/magister-canova-venice/ and https://www.youtube.com/watch?v=sCLX3jUABRk): it was composed of six sections and the first one was dedicated to the reproduction on many screens of our drawings, shown as a key moment in the artist's apprenticeship (https://www.youtube.com/watch?v=94zeYTaCdLI).

Looking at books and other publications, the first important volume to cite is by Marcello Pantaleoni (1), published at the end of the forties. It contains a complete reproduction of the full set of drawings and of the notebook with also a short critical essay by the author on the history of how the collection was acquired by the institute and on the relevant importance of this work in the artist training process. The collection also appears in the book published in 2004 for celebrating the anniversary of ISS foundation (2) and in many other volumes, among which are a prestigious French edition titled *La Leçon d'anatomie. Le corps des artistes de la Renaissance au Romanticisme (Ouvrage prepare avec le concours du Centre national du livre)* (3) and a dedicated box inside the sixth volume of the *Storia della scienza* published by the Istituto della Enciclopedia Italiana (4). The Canova drawings are freely available on request to scholars and art experts and lovers and we hope that this short essay could stimulate the interest of our colleagues for a visit to our library.

*We'll be waiting for you!*

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# Exploring the interface between biomedical sciences and the arts through the global sci/art network MEDinART

**Vasia I. Hatzi**
MEDinART Creator; Biologist at Benaki Phytopathological Institute, Athens, Greece

**Abstract**
*MEDinART (www.MEDinART.eu) is a continuously growing global sci/art network that connects biomedical sciences with technology and arts through the work of more than 170 artists from 30 countries who are influenced by aspects of biomedical sciences. MEDinART aims are to unite the artists who are influenced by biomedicine, to connect different countries and cultures through the universal language of sci/art, and to globalise the biomedical-inspired art movement. Inspired and created by the Author, Vasia Hatzi, MEDinART explores the interface between biomedicine with arts through talks, exhibitions and articles in events, conferences and journals around the world. Here we present the goals of MEDinART, its philosophy and the messages that it delivers to society through its activities.*

**Key words:***medical art; sci/art network.*

## Introduction

Art holds an essential role in the biomedical sciences, starting with its contribution as a tool of education and science communication. The anatomical illustrations of Andreas Vesalius and Leonardo da Vinci, the botanical drawings of John Ruskin and the drawings of Ernst Haeckel are the most representative examples of visualization of scientific results in order to become more understandable. Today, art continues to play a key role in medical education. However, art should not be considered only as a tool of science communication but rather as a lens to confront science, the living world, and the surrounding through a different perspective and also as a vehicle to approach holistically the therapeutic processes in medicine (art therapy practices).

Since the late 1960s, alongside traditional medical illustration, artists began working with scientifically related concepts, and showed an increased interest in subjects emerging not only from the images but also from the discoveries, principles, ideas and technologies of the biomedical sciences. Artworks inspired by sciences have started to appear not only as illustrations in the medical handbooks and moulages in the medical museums but also became exhibits in museums, public premises, universities and hospitals in Eastern Europe, USA and Australia. Since the early 1990s, departments in distinguished educational and research institutions saw the collaboration between science and art as a method to enhance creativity and innovation, and created cross-disciplinary programs. Examples include the Media Lab at MIT, the Art/Sci Center and Lab at UCLA, Johns Hopkins University, Stanford University, University of Edinburgh, Oxford University. The Cleveland Clinic art program hosts artworks to improve the well-being of the patients and the visitors of the hospital. Wellcome Trust and other organizations, including US-NSF, EPSRC-UK, CERN, NASA and ALMA, give funds to science and art collaborations, and in STEAM educational programs artists and scientists join their forces for educational purposes.

However, until today, there was a lack of a free and easily accessible global community that would connect the worlds of biomedical sciences with the arts, and feature specifically the artists who are influenced by the aspects of the bio-medical world. From this necessity MEDinART was born.

*Address for correspondence:* Vasia I. Hatzi, Benaki Phytopathological Institute, 8 Stefanou Delta Street, Kifissia, 14561 Athens, Greece. E-mail: medinartcollide@gmail.com.


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## The global platform MEDinART

MEDinART (www.MEDinART.eu) is a global and continuously growing network that links bio-medical sciences, technology and arts and features the work of 173 artists, from 30 countries, who are inspired by aspects of biomedical sciences. It is an independent and self-funded project, free to the artists and the general public, that was launched at the main stage of TEDMEDLive Athens 2013 (1) (*Figure 1*).


**Fig. 1.** *MEDinART video screening at the main stage of TEDMEDLive Athens 2013, Onassis Cultural Center, Athens, Greece.*

At the very beginning artists were invited via e-mail to submit their work to it. Subsequently, as MEDinART has grown, it has received requests from artists who wished to submit their work. Such submissions are very much welcome, and they are encouraged through the website where there is a contact form. The artists are asked to confirm that the images of their work will not be distributed elsewhere without their consent and will not be used for commercial purposes. They are also encouraged to disseminate MEDinART to their colleagues and to anyone that might be interested in the intersection of medicine and art.

Unique in its content and nature, MEDinART intersects and harmonizes the unfamiliar territory of scientific images, concepts, practices and technologies of more than 25 biomedical fields with an extensive list of visual and performing art forms. Through the universal language of sci/art, MEDinART, explores the interface between biomedicine and the arts, unites the biomedical-influenced artists, increases public awareness of scientific issues through the arts and promotes interdisciplinarity, through exhibitions, talks, articles and interviews in international events, conferences and newspapers/journals in Europe (Belgium, Denmark, Greece, Switzerland), in Kazakhstan, as well as in Saint Louis and Atlanta, USA.

## The artists of MEDinART

The artists of MEDinART approach the complex beauty and functions of the human body through several aesthetic points of view all equally valid: as a universe for art-exploration, a source of inspiration and a vehicle to deliver ideas and messages as a complex structure of interconnected symbols. MEDinART includes professional artists, and/or scientists who have collaborated with artists for scientific purpose and/or participated in sci/art exhibitions. Some of them have received awards and their work has been included in national galleries and museums, while others teach in universities and distinguished organisations and institutions around the world.

In the website of MEDinART (www.MEDinART.eu), which was developed by Vasia Hatzi in collaboration with Christina Dalla and Elina Vaki, every artist has a personal space/profile with details about the CV, works and inspirations of the artists. Sections of relevant museums, books, videos, links to social media, an informative blog, as well as a Google map of MEDinART with the global location of every artist, are also available to the visitors of the platform. Featuring more than 17,000 artworks that are selected in collaboration with the artist, respecting the rules of intellectual property, MEDinART stands as an on-line permanent art gallery and invites in its realm the creative minds around the globe that intersect biomedicine with art.

## The philosophy and activities of MEDinART

### *Uniting people, nations and disciplines through a universal language*

In the era of increased specialization, art, science and technology are perceived as distant disciplines. However, our intellectual exploration and innovation in any topic flourish when we combine various perspectives. Innovation and social progress can arise from those who are able to correlate different disciplines, from those who can find humanity in

technology, beauty in engineering, elegance in anatomy and poetry in biology; from those who can emotionalise science, rationalise art, and from those who have a rebellious sense of wonder that leads them to the beauty of both sciences and arts.

For MEDinART, art and science are not perceived as distant disciplines but as interconnected creative processes of humanity. MEDinART supports the idea that artists, scientists and technologists can work together, invent new languages of communication and new layers to read and approach the reality. Through the universal language of sci/art, MEDinART, unites creative individuals who combine biomedicine with art, different disciplines, but also different countries and cultures.

In this context, from 2013 to 2016, MEDinART collaborated with governmental bodies including the Belgian Embassies of Athens, Copenhagen and Kazakhstan to commemorate the legendary Flemish anatomist and artist Andreas Vesalius (1514-64) who died on Zakynthos, Greece. In collaboration with Theo Dirix, Vesalius scholar, author and at that time Consul at the Embassy of Belgium in Athens-Greece, BIOMAB (Biological and Medical Art in Belgium) (2) and the curators of the touring exhibition *Fabrica Vitae* (3): Pascale Pollier, Elanor Crook and Chantal Pollier, MEDinART has contributed in the realisation of events to celebrate the 500th Birthday of Vesalius. These events took place in Zakynthos, Greece (*Vesalius Continuum*) (4), Andreas Syggros Museum, Athens, Greece (5, 6), and the Medical University of Astana, Kazakhstan (2015) (*Figure 2*).

**Fig. 2.** *Theo Dirix, Chantal Pollier, Vasia Hatzi and Pascale Pollier during the "500th Birthday of Andreas Vesalius" event that took place in Andreas Syggros Museum, Athens, Greece (17/12/2014). Organizers: Embassy of Belgium in Athens, Andreas Syggros Museum, Fabrica Vitae, and MEDinART.*

In the same context, in 2017, an interactive group exhibition took place within the framework of the Athens Science Festival at Technopolis City of Athens (*Figure 3*) (7), hosting the work of the 12 Greek artists of the platform: Mania Efstathiou, Leontios Hadjileontiadis, Keti Haliori, Vasia Hatzi, Christiana Kazakou, Peggy Kliafa, Maria Lambropoulou, Konstantinos N. Patsios, Eleni Petridou, George Vardakis, Sofia Vini and FAME Lab. Curated and designed by Vasia Hatzi, this interactive exhibition has opened up a fruitful dialogue between scientists, artists and the general public (8).


**Fig. 3.** *Flyer of the interactive exhibition of MEDinART: "Where MEDicine and ART collide: the Greek Artists", Athens Science Festival 2017, Technopolis City of Athens, Greece.*

In 2019, MEDinART participated in the group exhibition "Beyond Science", curated by Nora Okka and organized by the Embassy of Cyprus in Greece (House of Cyprus) and the A.G. Leventis Foundation Scholars Association, Greece. In this exhibition a video with 222 artworks of 74 artists from MEDinART (2015) was screened (1) as well as selected artworks from the following artists of MEDinART: FAME Lab, Vasia Hatzi (LaB. Bio-conceptual Creations), Peggy Kliafa and Tolis Tatolas.

Willing to further enhance the voice of individual artists of MEDinART and share their vision with the scholars of the field and the general public, collaborations with distinguished sci/art magazines through interviews have been realised. These

interviews were presented in Interalia Magazine, UK (9), in collaboration with Richard Bright, editor of Interalia Magazine and founder and director of the Interalia Center. In two issues, entitled "Bio-Med-Art" (Issue June-July 2015) and "The Art in Heart" (Issue June 2016), a total number of 25 artists of MEDinART talked about their works and subjects of inspiration. Other presentations of the MEDinART have been published in Athens Voice newspaper-Greece, Science Views Magazine-Greece (10), Madame Figaro-Greece, SciArt Magazine-New York (11), E-squared Magazine USA (12) and Scientific Inquirer (13).

***Bringing the scientific issues into public discussion through the arts***

Biological scientists provide efficient solutions for a changing world. However, Western medicine and its practices are traditionally regarded around the world as an authoritative discipline and the public has little to no access to participate within its framework of meaning. The artists of MEDinART have entered the scientific laboratory, have collaborated with scientists – or they are scientists themselves – and by means of the images, concepts, discoveries and technologies of science, they pose many profound questions about the complexity, the abilities and limitations of the human body. The artists also highlight new scientific achievements, raise questions about the social role and purpose of science, and present different approaches of the research outcomes.

Bringing into public discussion artworks influenced by medical sciences, especially in spaces relevant to the medical fields (medical museums, hospitals, universities), can offer novel perspectives on health care professionals and medical students and can improve the well-being of patients and their families. It also invites a wide community of people (artists, physicians, medical students, patients and the general public), to confront illness not as a taboo, but as a sensitive subject, open to public discussion. By highlighting ethical, social, religious and political issues of scientific practices including organ transplantation, genetic modification, animal testing and pharmaceutical usage, the artists gain a strong voice in regulatory decision-making and policy, and thus affecting the socio-political realities. Moreover, exhibiting artworks with key medical issues enhances the deeper understanding of the role of science and elevates the work of scientists, whose significant work usually remains unknown. This serves as a kind of reward not only for the artists but also for the scientific community and its work.

***Increasing awareness of medical issues through socially engaged art-practices***

Medical knowledge and practice is primarily focused on diagnosing the disease and selecting the optimal methods of treatment and therapy, often underestimating the impact of the disease in the psychological state of the patient. Socially engaged art practices that include collaborations of artists, scientists and sometimes also the patients, can increase the awareness of key medical issues, including chronic diseases, heart diseases, STDs, mental health issues and organ transplantation.

Artworks that discuss key medical issues from the position of the patients, potentially improve the diagnostic and therapeutic skills of the medical students and enhance their ability to be aware of the emotions of the patient. MEDinART contributes to the rapidly developing field of the humanities in healthcare through articles and talks in organisations and educational institutions. A recent article published in the *Journal of the American College of Cardiology*, highlights how the socially-engaged artworks of Andrew Carnie, Peta Clancy, Helen Pynor, Alexa Wright and John Wynne – also members of the MEDinART community – may increase awareness in the life-changing process of heart transplantation and potentially contribute with significant results to the quality of the healthcare and the recovery of the patient (14).

Furthermore, focusing on the role of art in medicine and specifically in cardiology, invited talks have been performed by the creator of MEDinART in the frame of the following conferences:

1. CardioMED2016 conference, that took place in the National Hellenic Research Foundation, Athens, Greece, organised by Julia Grapsa, Editor-in-Chief of JACC Case Reports (15);
2. CNIC PhDay 2018 conference, organised by the Spanish National Center for Cardiovascular Research (CNIC) (16);
3. 15th Panhellenic Congress of Dermatology and Venereology 2019 in Thessaloniki, Greece. Through these talks, the significant role of art in medicine through specific examples from artworks from the MEDinART artists, was highlighted.

***Creating new visual metaphors of expression through sci/art***

Microscopy methods, molecular genetics, epigenetics, Google Brain, recreational cyborgs, holographic inputs, multi-functional radiology, artificial intelligence, all promise positive future implications not only for the scientists but also for the artists. These novel media of expression provide artists with new images of the living world, new concepts of inspiration and ideas for discussion, that are different from those conventionally encountered in fine arts. The narratives of MEDinART offer to the general public an access to non-visible living worlds, novel experiences, ideas and knowledge, and allow humans to perceive the human body beyond the senses. The introduction of new realities and interpretations of our world, alters the established views about our composition, broadens the visual and lingual limits of our world and stimulates the use of new metaphors of expression. A growing body of literature suggests that the metaphors have the power to shape the mind, structure our experiences and influence the way we perceive the world. The choice of the right metaphors in science and in everyday life, utilising those that better align with contemporary values and goals of the scientific community and society in general, are, therefore, crucial in thinking and communication abstract concepts, in the production of knowledge and in the development of human cognition.

## Conclusion

Scientists and artists share a common goal: to perceive the world beyond the senses and to elucidate the profound mysteries of the human body, and the highly complex world we live in. The collaborative works between biomedical sciences and the arts, as they are presented through the constantly growing MEDinART platform, stimulate scientists, artists and the general public to confront the living world through a different perspective. These works can create new experiences, ideas, knowledge and a metaphorical language of expression that will eventually broaden the answers on the "what is Art" and "what is Science" arguments and will lead to a new understanding of life itself.

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# The art of those with lived experience: excavating the Adamson Collection

**David O'Flynn (a) and William Schupbach (b)**
(a) Adamson Collection Trust, London, UK
(b) Wellcome Collection, London, UK

**Abstract**
*We describe the journey of a British mid-20th century collection of asylum art from the objects' creation, through decades of obscurity, to an influential place among the international collections. Key aspects include the development of a contemporary narrative and ongoing work on the ethics of viewing these collections. We describe how the Wellcome Library is working to understand and catalogue this large collection.*

**Key words:** mental health; psychiatry; asylum art; Art Brut; outsider art.

## Edward Adamson and Adamson Collection

By 2009, the work and collection of the British artist and pioneer of art therapy Edward Adamson (1911-1996) was forgotten. A decade later, Adamson's place in mental health and art history is re-established. 100,000 art objects were created by patient-inmates in Adamson's studios at the British asylum Netherne between 1946 and 1981, of which about 5,500 survive as the Adamson Collection. Adamson left Netherne and most of the Collection behind in 1981. His friend, the entomologist Miriam Rothschild, offered him a cottage and a barn at her estate at Ashton. In 1997 the Collection was moved to Lambeth Hospital in South London. During 2012, the Adamson Collection Trust (ACT) – the charity founded in 1978 – entered into partnership with the Wellcome Library, and Adamson's papers were moved from the basement of his London studio to become the "Edward Adamson Archive". The Collection is now in four parts. Between 2013 and 2016, 2,500 paintings and drawings were transferred to Wellcome as "Adamson Collection/Wellcome Library". ACT still holds both 500 pieces in the "Adamson Collection: Sculptural Objects" including 300 painted flints by Gwyneth Rowlands (c1915-c2005); and the "Adamson Collection: Rolanda Polansky" of over 2,250 drawings and 150 sculptures by the sculptor Polansky (1923-1996) who spent over 30 years at Netherne. Adamson gave 50 paintings and some key sculptures to the American Visionary Art Museum in Baltimore in 1995: "Adamson Collection/American Visionary Art Museum".

## Asylum art and outsider art

The history of the "discovery" of art from the asylums during the 20th century is told through the names of the psychiatrists and artists who mapped it – and not by those who created the works. In 1921 and 1922 the psychiatrists Walter Morgenthaler and Hans Prinzhorn published books recognising that spontaneous works by patients in European asylums should be considered as art. Prinzhorn's "The artistry of the mentally ill" had an impact on modernism, albeit through the problematic notion of "the primitive", positioning this art along with the work of children and pre-modern non-European creators.

During the 1930s – and again in 1950s – there emerged the psychopathological perspective: what could art tell psychiatrists about the "schizophrenic brain". Adamson started working at Netherne in 1946 in an art research studio opened by the psychiatrists Eric Dax Cunningham and Francis Reitman, which was a continuation of research into mescaline, psychosis and art at the Maudsley Hospital in the 1930s (1). From 1951, when Dax went to Melbourne, Adamson started a 30-year career of innovation in art studios on the hospital site, working single-handedly with hundreds of people.

*Address for correspondence:* David O'Flynn, Lambeth Hospital, South London & Maudsley NHS Foundation, 108 Landor Road, London SW9 9NU UK. E-mail: adamsoncollection@gmail.com.

In 1945 the surrealist artist Jean Dubuffet named this art "Art Brut" – raw art – in an opposition to "Cultural Art": "Raw art is creation in process and cultural art is creation already done, creation of the past". He travelled Europe with the Swiss brutalist architect Le Corbusier collecting art by asylum inmates, prisoners, and the homeless, searching for "an art outside of the known languages of art" (Thomas Roeske, Prinzhorn Collection, personal communication). Outsider art was a phrase coined by the art historian Roger Cardinal in the 1970s when, with Victor Musgrave, he brought art brut to UK. "Outsider" has come also to refer to the creators' social exclusion as mental patient, prisoner, street homeless, with the risk of fetishisation of marginalisation. Such a binary distinction of fine/cultural art and outsider/raw art is under contemporary critique in the field.

The viewer's experience is of the strangeness of this art created from the extraordinary private world of each artist, working from their personal experience and psychotic signification. Dubuffet's art brut and Cardinal's outsider art have extended the territory of what is art. Brut/raw is the descendant of the primitive, with madness romanticised as flight and freedom but with celebration of the creator as artist. Outside/outsider is in a dynamic and fluctuating relationship with an inside. The asylum artist is outside culture and society through their detention in the asylum. Yet the asylum becomes a new interior/inside: Adamson's studios becoming a new outside within the interior of the asylum, where this strange art is created (2).

Take the drawings on toilet paper with the char of burnt matches by J J Beegan (*Figure 1*). Known to have been mute, incontinent and living in a locked ward in Netherne, working with his found materials, he was driven by the compulsion to express to survive. He was as marginalised as a human being can be, confined on the outside of the interior of the asylum, in a locked ward in a locked institution, itself on the outside/exterior of the community. His surviving drawings – 17 on 11 pieces of paper – are of lions, people, birds and strange imaginary creatures. They are archetypally art brut – but not as yet on the inside of the recognised art brut canon, only shown twice since 1980s: as a group in 2013/14 at "*Raw Vision*", Halle St Pierre, Paris, and a single drawing at "*Bedlam*" at the Wellcome Collection in 2016/17. Created in the asylum, and after a journey through a medieval barn and a London mental health hospital, they are now in


**Fig. 1.** *JJ Beegan. Graffiti on Lavatory Paper, Paper 6. JJ Beegan, c1946, match char on Izal Medicated Toilet Tissue, 4.5 x 18 ins., 11.5 x 45 cm. Adamson Collection/ American Visionary Art Museum. Image source: AVAM. Copyright holder unknown.*

the Adamson Collection/Wellcome Library. They are inside a major cultural institution – however in their strangeness, they remain outside cultural norms (3).

## Commentaries on Adamson's work

There are four key narratives on Adamson and the Collection. Adamson's ideas about art as therapy emerged from early discussions in 1940's with artists and Jungian analysts, and evolved over four decades. Adamson's 1984 book *Art as healing* – written with his collaborator John Timlin – in its discussion of about 150 objects, is his cypher to the collection (4). In a 1987 interview, Adamson succinctly describes his therapeutic process thus: it is the act of "trying to paint" which is healing, and the only interpretation should be the creators' (5). Ostrowska disputes this anti-interpretation stance and demonstrates the multiple layers of interpretation, including biographical and Jungian, in *Art as healing* (6).

Two British professors of art therapy, Diane Waller and Susan Hogan, provide narratives that bookend Adamson's years in the wilderness. Waller, with colleagues at Goldsmiths London, was instrumental moving art therapy towards psychoanalysis and object relations from the mid 1980's, a direction Adamson disagreed with. In her 1991 institutional history of art therapy as an emerging profession she dismisses Adamson repeatedly (7). Hogan (2000) reports on her primary research on the Adamson and the Netherne research studio (1946-51), and gives Adamson back a central place in art therapy history (8).

The fourth iteration by O'Flynn emphasises the context of the post war asylum, and the emergence of medical and psychosocial innovations in the 1940's and 1950's. O'Flynn attributes political intent to Adamson and Timlin's project:

*Adamson was an educator, who saw the sociocultural intervention of showing these people's works to the public who had excluded them – and showing it as an important contribution to their culture – as a way to change public opinion (9).*

Written at a time when the future of the Collection was at considerable risk of loss, strategically he positions the Collection as one of outsider art. O'Flynn draws on work from the Dax Centre in Melbourne published in *Framing marginalised art* arguing that these objects need a multi-dimensional understanding, and are simultaneously documents of therapeutic experience, historical artefacts and art. He uses the creators' names for the first time (10).

### *ACT ethical position*

O'Flynn, drawing on his training as a psychiatrist, developed an ethical framework, outlined in 2011 article and revealed in 2013 at the first presentation on the Collection since the 1980's at *Outsider art under analysis* at Wellcome during *Souzou: outsider art from Japan*. His decision to use the creators names, not pseudonyms, emerged from the intersection between ideas about ownership, capacity and confidentiality, copyright and exhibition. ACT obtained a legal opinion in the 1980's that the objects were "abandoned chattels/goods". The Trustees regard themselves as caretakers and not owners, and ACT is therefore committed to ensuring that no works enter the art market. We have no information on the mental capacity and consent of the creators. Given the inaccessibility of medical records, there is no way to trace potential copyright holders so the objects are "copyright orphans".

ACT considered it important to carry on the tradition of exhibiting the collection rather than letting these issues bury it out of sight. Primarily naming was about acknowledging people's identity: this was denied in their lifetimes, and to continue to anonymise them is to repeat the insult. Naming at exhibition would allow potential copyright holders to come forward. ACT was of the view that it would return work to families if requested. In the era under discussion, people were in asylums for many reasons which would be seen not now as mental disorder (being an unmarried mother could attract the diagnosis of "moral imbecility") – the ACT uses "compelled to live at Netherne" and avoids diagnoses. Adamson was an artist not a clinician, the studios were art-making, not a treatment location. Naming allows a celebration of the individual artists. This ethical position was interrogated at Wellcome during a series of public engagements events in 2018 and published in Lancet Psychiatry which are informing ethical discussions within Wellcome and across international asylum art collections (11).

## The Netherne artists

As reflections of life in the asylum, one can point to paintings of the buildings of the asylum itself. The thirteen paintings produced in 1968 by Hugh Campbell are so proficient that one might guess that

he was a professional draughtsman. A depiction of a Volkswagen Beetle about to drive over the top of a cliff is an allegorical painting by Martin Birch ca. 1972 representing the possible demise of Edward Adamson's studio at Netherne (catalogue no. 2848128i). In August 1967 Mary Lorraine painted a watercolour of the art studio at Netherne with her fellow-participants painting at easels and Edward Adamson himself standing and observing (catalogue no. 3001760i). Several artists painted portraits of Adamson, the one person who was always in the studio during their art sessions.

Memories of life outside the asylum are often happy ones, enabling the artists to escape, at least mentally, from the confines of the hospital. A painting from 1968 by Elizabeth Beatty shows a park in England with notices saying "Please be happy" and "Walk on the grass. Swing on the swings. Pick the flowers. This park is for you." (catalogue no. 2846785i). A watercolour by E. Candy from 1966 shows Litlington White Horse at Hindover Hill in East Sussex, with the river Cuckmere in the foreground, possibly copied from a photograph taken on a walk in happier days (catalogue no. 2921341i). In May 1967 Mary Lorraine painted two lovers embracing under a tree, by the light of a full moon (catalogue no. 3001875i).

Some of the artists look back to the happy days of childhood. A painting by H. Sennitt from 1949 is one of a dozen showing a child's memories of a Victorian or Edwardian Christmas (catalogue no. 2948664i) (*Figure 2*). Isobel Croney, in nine paintings dating from between 1966 and 1968, chronicles a happy childhood in a secure middle-class home: children enjoy watching cows in a field, they fish or pretend to fish in a pond in a public garden while a double-decker bus goes by. Their mother sits on a sofa with a dog in her living room from which a picture window shows a view through to a garden, and the well-appointed furnishings include a television set (catalogue no. 2922231i). On 18 January 1968, Muriel Lewis painted children with their parents looking at the shop window of Constance's toy shop at Christmas (catalogue no. 2998137i)

**Fig. 2.** *H. Sennitt. A Christmas celebration. Gouache by H. Sennitt, 1949, on paper 45.1 x 55.4 cm. Wellcome Collection catalogue no. 2948664i. Copyright holder unknown.*

For some of the people living at Netherne on the other hand, unhappy thoughts, suffering and private demons dominated the paintings that they produced in Adamson's studio. For Mary Bishop, the most prolific artist in the collection with at least 630 paintings, subjects include screaming heads, grave-markers of those who died in the battle of the Somme, and the indignities of examination by psychiatrists and students. In March 1976 she produced a painting of a person stranded on the peak of a mountain being attacked by snakes (catalogue no. 2858610i). Two drawings by Ronald Hampshire from 1961 show devils dragging a man to hellfire. The antics of the devil also appear in three paintings produced by David Thomas Meredith between November 1975 and January 1976. A watercolour by Hazel Edwards, dated 1961, shows a man flagellating his back under the threats of a clawed devil, while a gallows stands nearby (catalogue no. 2925123i).

The collection includes a painting which is a remarkable compendium of the horrors of life. In 1953-1954 the subsequently famous Canadian-Ukrainian artist William Kurelek (1927-1977) produced a gouache painting (catalogue no. 3025695i) showing incidents of human life in the cells of an underground grotto. They illustrate the reasons for the suicide shown in the lowest cell, labelled "I spit on life", including family disputes, the difficulty of making a living, lack of freedom and the demands of education.

The examples given above show that a certain amount of information is now available about the Adamson collection of paintings and drawings: who produced what, how many works are available by each artist, when the artists were active, what subjects they depicted, which media they favoured, what sizes of paper they used, in what languages they wrote their inscriptions, and how many works are available in the catalogue (2,094 as of September 2019).

## The role of the Wellcome Library

When the collection was in Adamson's studio, or subsequently in Lambeth Hospital, it would not have been possible to obtain answers to these questions (a watercolour in the Wellcome Collection is shown in *Figure 3*). One of the reasons why the ACT transferred the Adamson Collection to the Wellcome Library (Wellcome Collection) in 2015 was that the library, being a curatorial institution, would be able to catalogue the collection to standards that would enable such information to be searchable. How and to what extent have the Trust's expectations been satisfied?

**Fig. 3.** *Thea E. Hart. Two sides of a ravine: left, a woman walks away towards the left; right, a man in a white laboratory coat. Watercolour by Thea E. Hart, 27 September 1967, on paper 45.8 x 55.6 cm. Wellcome Collection catalogue no. 2948663i. Copyright holder unknown.*

Clearly the cataloguing of the collection has been essential to this aim, but cataloguing is rarely the first task that can be carried out in respect of large historical collections; in fact, it is often the last. The collection must first be made catalogue-ready. Fortunately, much of the grouping and organizing had already been done by Edward Adamson and ACT; for instance, works by the same artist were for the most part physically together, and therefore required little sorting. To Wellcome fell two other preliminary jobs: identifying storage, and making it possible to handle the works securely in order to avoid damage to them in the course of cataloguing and research.

Storage was provided in metal drawers (height 5cm x width 96cm x depth 68cm) in mobile shelving stacks: the collection filled 210 such drawers. The handling provisions were made by placing each unframed painting or drawing in an acid-free folder either A2 size (59.4 x 42cm) or A1 (84.1 x 59.4cm). The folders were necessary because most of the works are on paper that was produced during post-war British paper-rationing (1945-1953) or (after 1953) low-cost acidic paper that can very easily be torn in handling. Only in the relatively few works produced after Adamson retired from hospital work and became a teacher in private practice did his artists use recognized art-papers. However even works on good quality paper need to be kept in individual folders in order to minimise handling of the paintings themselves.

Once the collection had been physically stabilised and stored, it was ready for cataloguing. There is no universally accepted standard for the cataloguing of paintings, prints, photographs and drawings. Institutions tend to use for this purpose the predominant standard already chosen for the materials and formats in their collections. Thus, library cataloguing standards are used for visual media in the Library of Congress in Washington, DC, the British Library in London and Yorkshire, and the Bibliothèque Nationale de France in Paris: the predominant standard is currently MARC, though there have been for many years plans to replace it by a new standard. British and American libraries use the version of MARC called MARC21 (http://www.loc.gov/marc/), while the Bibliothèque Nationale de France makes its catalogues available in Unimarc (https://www.ifla.org/unimarc). Museums on the other hand use a wider range of formats, reflecting the character of their holdings. For example, the British Museum uses an in-house format that is suitable for drawings, coins, cuneiform tablets, and the colossal marbles of the Mausoleum at Halicarnassus.

The Wellcome Library used a version of MARC21 for the paintings and drawings in the Adamson Collection. This format has several advantages. Controlled indexes for artists' names, genres, media and subjects allow the catalogue user to navigate from one record to another with the aid of hotlinks embedded in the index terms. A virtually unlimited range of free text fields are available for contextual explanation. Clearly demarcated subfields for physical descriptions are invaluable for determining storage, conservation, and exhibition. Codes for countries and languages allow browsing and selection from dropdown menus. Finally,

it is easy to obtain a front-end for MARC records in which searches lead to numerically accurate retrievals: hence it is possible to discover that the Adamson Collection contains 134 works by Martin Birch (active 1968-1973), but only one work by Phyllis Overy Mayes (1894-1969).

The dry details of storage, conservation and cataloguing should not obscure the fact that the Adamson Collection tells stories of human triumphs over adversity. Let us end therefore with the inscription which Phyllis Overy Mayes left us on her single work in the collection (no. 3001132i: original spelling retained):

"*Dear readers, I hope you enjoy reading my life story. I am going to enjoy writing it to you. I was born on January 25th, 1894, in Bolingbrook Road, S. Kensington, London, on a very wintry day. My father was an actor, my mother a lady's companion. My childhood was a happy one. When I was 5 years of age we removed to Streatham, & stayed there 7 years. When I was twelve years of age, I went to live with an aunt & uncle in Chatham, Kent, for 1 year. They were Salvation Army members so I lived a riotous [i.e. righteous] & sober live. Uncle had an allotment at Walderslade, so we grew all our vegetables, & flowers. When I was fourteen years of age we moved to Epsom, in Surrey. There were four children, 2 boys & 2 girls. I left schooll when I was twelve years of age. Then we all went hop-picking in Kent for a few weeks. I remained at home 4 years, helping to keep house, then I went selling Hoovers for 3 years. At twenty-one years of age I met my sweetheart. I went to his people to live in Cecil Road, Hale, Cheshire. We were married on Easter Saturday, April 3rd 1916, & my husband joined the army for 2 years. When he returned we went on the stage together, in a revue called Rapid fire. My husband was stage manager, & I was in the chorus, doing the major towns of Wales for 2 years. Then we went to Leeds as clerks in the Anglo-American Oil Co. Ltd. for 4 years. We visited Roundhay Park at the week-ends. I went Hoover selling for 4 years in Leeds, Yorkshire. Then we went to Bexhill-on-Sea in Sussex to live. Then we went to live in Sale, Cheshire. Then we went to Epsom, Surrey. I had a nervous breakdown and I have been in hospital ever since. Yours truly. P. Mayes.*"

The catalogue of the Adamson Collection/Wellcome Library is currently available at http://catalogue.wellcomelibrary.org/

## ACKNOWLEDGEMENT

Figure 1: © American Visionary Art Museum; Figures n 2 and 3: © The Wellcome Collection. They are available under a CC-BY licence (meaning that they can be used for any purpose provided due credit is given). The original paintings are of course "Orphan works" in copyright terms, hence the authors have put "Copyright holder unknown" in each caption.

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# The healing presence of art

**Thomas Walshaw**
Paintings in Hospitals, London, UK

**Abstract**
*The arts offer a broad range of historically-documented benefits to mental, physical and social health. UK-based charity Paintings in Hospitals was a pioneer of the modern "arts in health" movement and has provided arts services to willing healthcare partners for 60 years. Despite a large and continually-growing body of clinical evidence supporting the health benefits of the arts, and a recent parliamentary report suggesting that the arts could alleviate structural and financial stresses on health and social care services, resistance to nationwide integration of the arts with healthcare remains. The majority of this resistance stems from misunderstanding and misinformation that must be properly addressed before the "arts in health" sector is able to fulfil its potential.*

**Key words:** art; public health; patient engagement; health facility environment; environment design.

Founded in 1959 at the National Hospital for Neurology and Neurosurgery (NHNN), London, by Social Work pioneer Sheridan Russell, UK charity Paintings in Hospitals celebrates its 60th anniversary this year. Paintings in Hospitals is the only national art collection in the UK specifically dedicated to improving health and wellbeing. The charity's approach consists of lending museum-quality artworks from its collection to care organisations and, in order to facilitate this process and maximise benefit, hosting practical art workshops with both patients and carers.

Although appropriate at the time of the charity's founding, the name "Paintings in Hospitals" is now somewhat of a misnomer. The charity's art collection holds approximately 4,000 artworks, many of which are not paintings but prints, drawings, textiles, sculptures and digital pieces by artists such as Bridget Riley, Antony Gormley, Ian Davenport, Maggi Hambling, Andy Warhol, Anish Kapoor, Howard Hodgkin, Patrick Caulfield, Helen Chadwick, Sonia Boyce, Alexander Calder, and many more. The way in which people receive care has also evolved since 1959 with much of it now taking place in community settings. Paintings in Hospitals recognised this and no longer limits itself to working solely in hospital environments: the charity is currently partnered with 180 health and social care organisations across the country, including GP practices, dental surgeries, hospices, care homes, prison infirmaries, mental health units and Special Educational Needs (SEN) schools.

Paintings in Hospitals' approach to improving health and wellbeing was, at first, based on anecdotal evidence: Russell observed the improved moods of patients and care staff at NHNN after he had installed artworks in the waiting rooms and corridors. Nevertheless, through his passion and connections, many other hospitals, artists and national museums took note of Russell's work. The Paintings in Hospitals programme grew to encompass over 40 hospitals in its first few years. The Victoria and Albert Museum has worked with the charity for over 15 years to utilise unseen parts of its own collection in care, while the Arts Council Collection formalised their partnership with Paintings in Hospitals in 1978. Most recently, Paintings in Hospitals captured the UK media's interest by working with the National Gallery, London, to take a £3.6m masterpiece by 17th century painter Artemisia Gentileschi to a general practice in Yorkshire. Yet, despite the charity's successes, Paintings in Hospitals still regularly encounters resistance to the idea of utilising art in medical contexts. Much of this resistance stems from misinformation: supposition that art will somehow replace a lifesaving piece of equipment and the framing of 'arts in health' as a new-fangled trend.

In reality, a cursory glance at history shows us that art

*Address for correspondence:* Thomas Walshaw, Paintings in Hospitals, 51 Southwark St, London, SE1 1RU, UK. E-mail: t.walshaw@paintingsinhospitals.org.uk.

was inseparably linked to health and wellbeing for millennia. The ancient Greeks valued art's contribution to their asclepieia: early hospitals that comprised not only medical spaces but also areas to promote self-care, including relaxation lounges, libraries and theatres (*Figure 1*). In Britain there were initiatives to introduce the visual arts into medical environments over 280 years ago: the English artist William Hogarth painted a large mural on the staircase of St Bartholomew's Hospital, London, in 1735. During the Victorian period, there were multiple attempts to introduce art into hospitals, such as the decorative tiles at the Royal Berkshire Hospital, Reading. In fact, arts and health were inextricably connected right up until the late Victorian era, when art was unceremoniously demoted to a tool for illustrating textbooks and capturing the likenesses of eminent physicians.

In 1860, in her seminal Notes on Nursing, Florence Nightingale shared advice on hygiene, ventilation, heating, nutrition, noise/light levels and bedding to help her fellow nurses, at home and in hospitals, to better care for their patients. Ground-breaking in her time of extreme poverty, poor sanitation and shockingly high infection and mortality rates, Nightingale's relentless campaigning for better public health saved millions of lives. However, in the same pages of Nightingale's handbook for nurses, she also wrote about the profound benefits to patient health of introducing art into the care environment:

"The effect in sickness of beautiful objects is hardly at all appreciated (…) People say the effect is only on the mind. It is no such thing. The effect is on the body, too (…) Variety of form and brilliancy of colour in the objects presented to patients are actual means of recovery" (1) (*Figure 2*).

Almost 160 years later, after Nightingale transformed healthcare in countless ways, we have yet to see this particular advice put widely into practice. While there are some wonderful examples, many health and social care organisations still favour Victorian bleakness: easy to clean but also devoid of all other benefits to patients, carers and visitors.

Earlier arguments against utilising art in the medical environment revolved around the lack of clinical evidence demonstrating that art could provide a tangible improvement to health outcomes. Nightingale's advice on sanitation, while lifesaving for millions, was based on incorrect theory since debunked by biochemistry. Modern health science demands that the complexities of the ways in which art influences our physical and mental states are distilled into statistics and infographics: ironically, something Nightingale also pioneered.

**Fig. 1.** *One of the wards in the hospital at Scutari. Credit: Wellcome Collection. Reproduced under a CC BY license.*

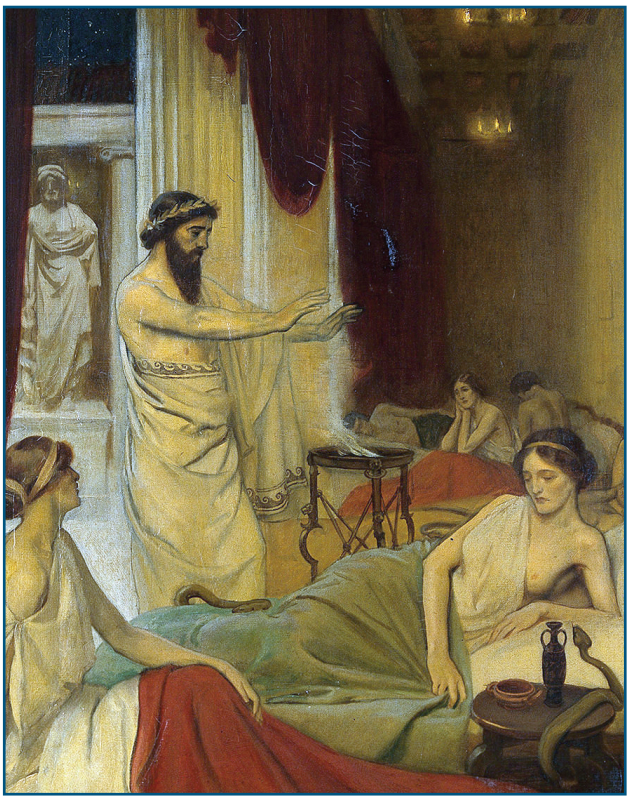

**Fig. 2.** *Patients sleeping in the temple of Aesculapius at Epidaurus. Oil painting by Ernest Board. Credit: Wellcome Collection. Reproduced under a CC BY license.*

Those working in "arts in health" have spent many years providing this evidence. Since the 1980s, there has been a constant, steady flow of studies and reports demonstrating the abundant beneficial effects of art on our health and wellbeing.

The 2010 literature review *The connection between art, healing, and public health* found that visual arts interventions had been shown to offer a number of benefits via numerous studies. These benefits included: decreasing negative emotions and increasing positive ones in patients with breast cancer; reducing levels of depression in haemodialysis patients; reducing stress and anxiety for cancer patients; and reducing stress and fatigue for trauma patients (2). Additionally, a landmark 2003 study by Dr Rosalia Staricoff found that incorporating visual art into the care environment was highly effective in diminishing levels of depression in Medical Day Unit patients. Visual art also significantly lowered levels of anxiety and depression for Day Surgery patients, when compared to those prepared for surgery in the absence of art (3).

However, the benefits relating to art in care do not end at reducing stress, anxiety and depression. Staricoff's study in 2003 also found that length of stay for patients on a trauma ward was one whole day shorter on average when art was integrated into their care. Additionally, the same study found that patients' pain levels were decreased by visual art, resulting in patients requiring 70mg less analgesic medication per day when art was merely present in their care space. Similar effects were previously found in a 1999 study and again in 2018 (4, 5).

Art has also been found to help create better doctors. The path through traditional medical training has often focused on biology and chemistry and has failed to provide the human and emotional skills doctors, nurses and other carers need in their everyday practice. In recent years there has a been a growing view that medical schools need to better equip their students to become more confident, capable and humane doctors. Many in the medical profession believe that the key is to integrate arts into healthcare studies. A study published in January 2018 confirmed that medical students with more exposure to the arts have significantly better empathy and emotional intelligence. Vitally, they are also far less likely to develop symptoms of burnout (6). Art training has also been found to improve medical students' practical skills. In a 2017 study by University of Pennsylvania School of Medicine, researchers found significant improvement in observational skills among students who took part in an extensive art course. The study shows that art training can help teach medical students to become better clinical observers (7).

Finally, and perhaps the most important point for some, art has been found to have the potential to save a significant amount of money for the health and social care services in the UK. A large number of patients are known to visit primary healthcare, such as GPs, for problems that do not require a medical intervention but a social solution: loneliness is just one example of this. These visits to primary care are estimated to cost the National Health Service the equivalent of 3,750 GPs' salaries every year. According to a report from the All-Party Parliamentary Group on Arts, Health and Wellbeing in 2017, an "arts-on-prescription" pilot project in which patients were referred to group arts activities rather than into the health service demonstrated a 37% decrease in GP visits and a 27% reduction in hospital admissions (8).

For sixty years, Paintings in Hospitals has strived to make it straightforward and affordable for care organisations to benefit from art (*Figure 3*). The charity aims to remove all barriers by offering to partner with any type of health or social care organisation in the UK and working directly with patients and carers to empower them to make informed, democratic decisions about their own care spaces. Paintings in Hospitals insures, transports and installs artworks securely and in line with infection control guidance.

**Fig. 3.** *"Firework"' by Sarah Borrett at Peterborough City Hospital. Part of the paintings in Hospitals collection. © Paintings in Hospitals.Reproduced with kind permission*

Paintings in Hospitals' approach to improving health is based on the definition provided by the World Health Organisation in their 1948 constitution: "Health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity". For six decades, the charity has challenged the perceived wisdom behind the austere care environment. While the austere environment and purely medical approach to care undoubtedly assist the absence of disease, they do very little to support mental and social wellbeing. This is something art is proven to do particularly effectively. Art and medicine were linked for so long not because of some primitive conflation but because they are two sides of the same coin. Art and medicine together allow us to stop simply treating patients and instead to care for whole human beings.

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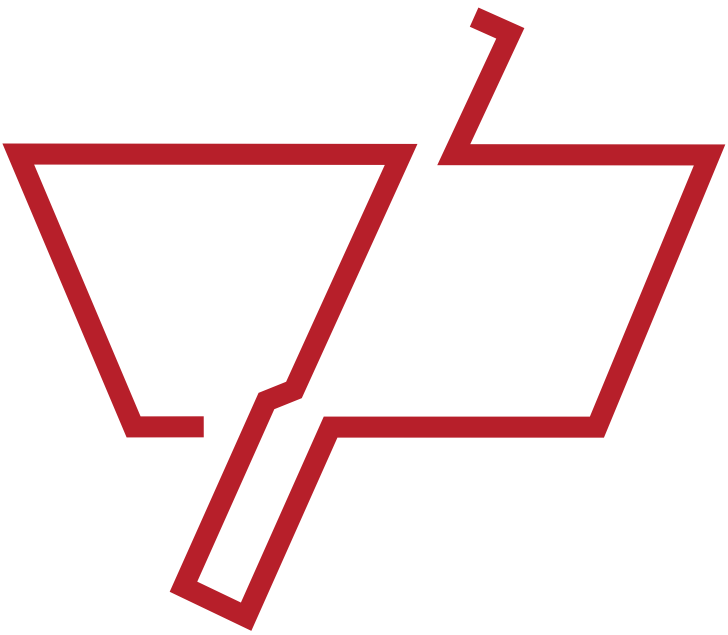

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MEDICAL UNIVERSITY OF LODZ

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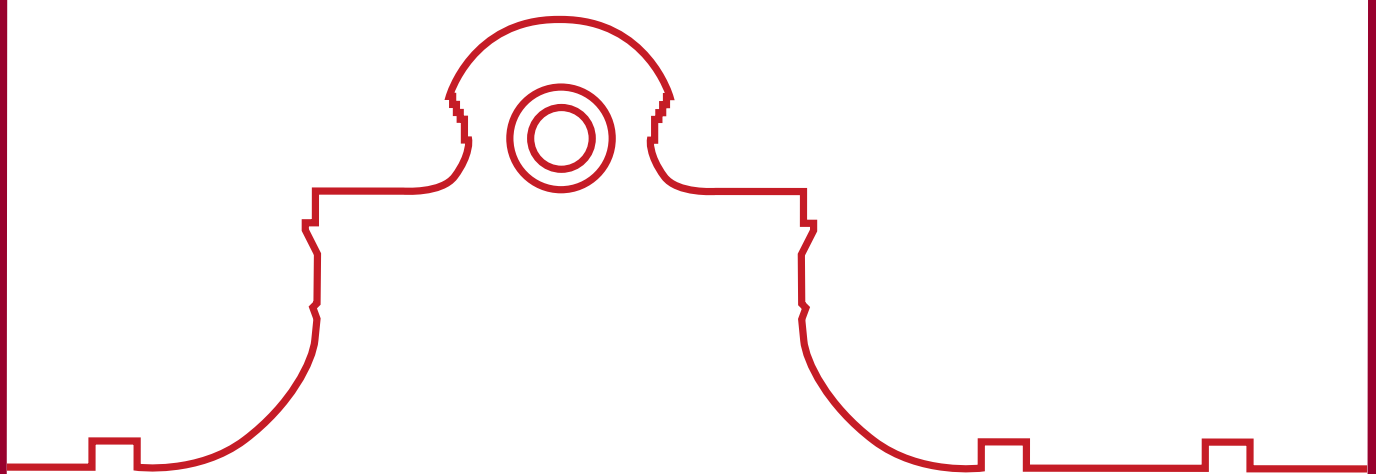
NOFER INSTITUTE OF OCCUPATIONAL MEDICINE



# Letter from the President

**Maurella Della Seta**
Knowledge Service/Documentation
Istituto Superiore di Sanità
Rome, Italy
Contact: maurella.dellaseta@iss.it

Dear EAHIL Colleagues,

I would like to start this letter with some important information about the life of our association. As you probably remember, in my last President letter in September, I expressed the Board and my own personal concerns about not having received proposals to organise the next EAHIL events, in the years after 2020. We asked, with the involvement of our Council members, to submit expressions of interest within the month of September, otherwise, it would not have been possible to have the 2021 Workshop. It is with great pleasure that I inform you that, during the last two months, we received some interesting and reliable proposals.

The EAHIL Executive Board, in its online session of October 30, approved two bids for organizing the next two EAHIL Workshops.

- Marmara University, Istanbul, Turkey, submitted a proposal for organizing the EAHIL Workshop in 2021. The venue of EAHIL 2021 Workshop will be the Rectorate of Marmara University Building at Sultanahmet Square, in the centre of the city of Istanbul. Marmara University is one of the oldest educational institutions in Turkey, with close to 3,000 academic staff and more than 70,000 students. Prof. Güssün GÜNEŞ, who already took part in the organization of the 2011 EAHIL Event in Koç University, Turkey, will be the Chair of the International Programme Committee.

- The Norwegian University of Science and Technology, Medicine and Health Library, submitted an expression of interest to host the EAHIL 2023 Workshop in Trondheim, Norway. The Workshop will be held in the second half of June, within the premises of the University. The venue is located centrally in Trondheim and within walking distance from most relevant hotels in the city. Trondheim is situated in the middle of Norway, with direct flights from both Amsterdam, Copenhagen and London, and good connections to other destinations in Europe and overseas. Katrine Aronsen, NTNU University Library, supported by our EAHIL Board member Karen Johanne Buset, will chair the Local Organizing Committee.

On behalf of the Executive Board, I wish to express my gratitude to both institutions. **Applications for the 2022 EAHIL conference are still open. I hope to receive soon bids from interested institutions.**

In the last month of August, CNKI (China National Knowledge Infrastructure) kindly invited me to give a presentation of EAHIL activities at the 2019 CDPDL Conference. CNKI is the major online publishing platform and the most comprehensive gateway of knowledge of China. It is an important project, devoted to the mass digitalization of China knowledge resources, as well as to the creation of a platform for global dissemination of Chinese academic resources. It was started and first launched in June 1999 by Tsinghua University, and has now over 1,500 institutional customers overseas in 53 countries and regions. CNKI net end-users are over 120 million, website visits account for over 16 million daily[1]. CDPDL is the International Conference on Integrated Development of Digital Publishers and Digital Libraries: CNKI, in conjunction with Tsinghua University Library and The University of Hong Kong Libraries, has hosted CDPDL for nine years in China since 2009. The 2019 edition was in the city of Changchun, Province of Jilin, in a Chinese northeastern region once known as "Manchuria". The 2019 CDPDL Conference themes were Knowledge innovation, Knowledge service and Knowledge management[2]. The topics ranged from Knowledge innovation

services for Universities, Decision Making and application in Medical Industry to Collaborative Knowledge Innovation for Scientific Research Institutions and Enterprises, including International Publishing.
I gave a first speech in the main session about Medical Librarians Professional Challenges in a European Perspective, giving an overview of EAHIL activities, focusing on EAHIL conferences and interactive workshops, and on education and training initiatives. I gave my second speech in the context of a workshop devoted to Intelligent Application of Medical Data. I was asked to talk about Transfer of Knowledge from Scientists to Citizens and Patients, and about how this transfer takes place in my Institute. My colleague and EAHIL Executive Board Member Witold Kozakiewicz talked about the "InterscienceClou" – integrated information platform for scientific activities at Medical University of Lodz. As you all know, Lodz will be the venue of the 2020 EAHIL Conference: CDPDL gave us a good chance to invite new colleagues to take part in this event.

The social and cultural programs were both rich and interesting. We had the opportunity of tasting Chinese cuisine in the various social dinners and lunches. We visited the eight floor Changchun University Library, technologically advanced and with huge spaces and large meeting halls for students and University staff. During our visit to the Library, I was particularly impressed by the presence of electronic totems, showing the covers of the textbooks more consulted by the students. By touching the e-book cover, it is possible to download the full text on one's tablet.
A guided visit to the Jilin Provincial Museum gave us an idea of the history of "Manchuria", since the prehistoric times. Finally yet importantly, Changchun was the official residence of the last emperor of China, during the Second World War, and the Japanese occupation. We could visit the Puppet Emperor Museum, the palace of the last Chinese emperor, as seen in the famous movie by the Italian director Bernardo Bertolucci. Over the weekend, we were able to visit the beautiful Changbai Mountains and the Heaven Lake, a volcanic crater lake, near to the North Korean border, at about a five-hour drive from Changchun.

I really hope that our Association will enhance international exchanges among librarians, giving them the opportunity to visit other countries knowledge infrastructures, and deepen their personal experiences about different cultures.
I take this opportunity to send my best wishes for the upcoming holidays to all EAHIL members.

*Maurella*

**Fig. 1.** *EAHIL President Maurella Della Seta Presentation at 2019 CDPDL in Changchun, China*

**Fig. 2.** *Witold Kozakiewicz and Maurella Della Seta visiting Changchun University Library, August 2019.*

<http://new.oversea.cnki.net/index/Support/en/project.html>
<http://gb.oversea.cnki.net/Seminar/2019Seminar/en/index.html>

**Francesca Gualtieri**
Rottapharm Biotech s.r.l, Monza, Italy
francesca.gualtieri@rottapharmbiotech.com

**Cinzia Bussolati**
Chiesi Farmaceutici SpA, Parma, Italy
C.Bussolati@chiesi.com

The Pharmaceutical Information Special Interest Group (Pharma SIG) met in Basel on Tuesday 18th June, in the Counsel Room of the University, during the EAHIL Workshop (17-20 June 2019). It was nice to see new colleagues, like Manielle Wagner attending the meeting. Peter Field (secretary) apologised, and we missed him and all the other colleagues who could not take part in the meeting. Francesca Gualtieri (chair) invited everyone to share their ideas, thoughts and interests in order to discuss them within the group. Cinzia Bussolati from Chiesi Farmaceutici (Italy) expressed interest in COUNTER 5 statistics. COUNTER is a non-profit organization supported by a global community of library, publisher and vendor members, who contribute to the development a Code of Practice that enables publishers and vendors to report usage of their electronic resources in a consistent way. This enables libraries to compare data received from different publishers and vendors. Cinzia also led the discussion on Copyright issues, on Open Access and on Artificial Intelligence (AI) applications in Pharmaceutical Industry. The members agreed about the relevance of these issue and on the opportunity to organise a workshop on AI during the next EAHIL Conference in Poland (2020). Cinzia described the new global document delivery service recently launched in her company (Chiesi Farmaceutici, Italy) and promised to show the new service tool to the next meeting, Manielle expressed interest too. Further discussion on this item will be conducted later on through a Skype meeting. The Italian colleague took also the opportunity to describe her job on patient care.

Francesca and Cinzia suggested to improve the group's visibility and reach all Pharma colleagues in order to develop a collaborative network, particularly for people working in pharmaceutical companies. If you are interested in the matter please send us your suggestions and proposals and be part of this network!

Action points (AP)

1. E-mail EAHIL-PHARMA list to check participants interest
2. Skype meeting to be scheduled at the end of march 2020 about The New Global Document Delivery Service launched by Chiesi Farmaceutici;
3. Evaluate the possibility to organise a workshop or a round table within the next EAHIL Meeting on Artificial Intelligence in Pharma

**Next meeting: Lodz, Poland, 2020**

# Report to the EAHIL Board on TrEDMIL meeting and activities 2019

**Sabine Buroh**

University of Freiburg, Faculty of Medicine, Medical Center, University of Freiburg, Freiburg i. Br., Germany
Contact: sabine.buroh@uniklinik-freiburg.de

The meeting took place at the University of Basel (Kollegienhaus, Petersplatz 1, Room 111), Basel, Switzerland, on 19 June 2019, Co-Chaired by Gerhard Bissels and Kate Kelly; secretary: Sabine Buroh.

Sixteen members from nine countries attended the SIG meeting in Basel 2019. Lotta Haglund attended as official representative of the board, alongside other board members. After a short run through the history of the SIG for the benefit of new attendees, reports on membership, last year's plans, activities and developments followed. The meeting continued with the clarification of the remit of TrEDMIL with respect to the newly approved "EAHIL SIG Evidence-based Information" and ended with an outlook on the SIG agenda for 2019-20:

- as of May 2019, the TrEDMIL mailing list counted 176 subscribers from 40 countries;
- information for a list on new competencies and content for the website was gathered.

**Report by Gerhard Bissels, HTW Chur and discussion on the developments around a prostgrad programme:**

- the plan by ZB Med and Cologne Technical University to launch a distance-learning CAS in Medical and Health Librarianship, led by Gerhard Bissels, has been put on hold as no working agreement between the two Cologne institutions and Chur University of Applied Sciences has been reached;
- instead, Chur University of Applied Sciences has decided to establish an English-language, online-only CAS (15 ECTS) in Medical & Health Librarianship. This course will be offered both as a stand-alone, or as an optional module within Chur's general LIS MAS (Master of Advanced Studies) programme. Gerhard Bissels presented a poster reflecting the content and development of this course (*Figure 1*);
- the syllabus of the programme will be based on the MLA's Competencies Framework, but also incorporates additional competencies recommended by an informal survey of NHS regional library managers;
- a list of colleagues interested in teaching or willing to contribute to advisory panels on structure and organization and the further development of the curriculum was gathered;
- the course in Chur was calculated to start with a minimum of 17 participants to keep the costs at an affordable level;
- the Chur distance learning course is planned to be launched in early 2020;

- due to his changed professional role (Lecturer in Library Innovation, University of Applied Sciences HTW Chur) and involvement in the course in Chur, Gerhard Bissels offered to step down as co-chair of the SIG in case concerns about conflict of interest should be raised. There was agreement that the SIG as an advisory body should have a critical distance to the course in Chur and that the SIG is well aware of possible conflicts of interest. The SIG states clearly, that the SIG and EAHIL are not endorsing particular programmes;
- in situ versions of the programme in development could be realized together with different partners, for example with the Swiss Graduate School of Public Health;
- the new Staff Academy of the WHO may have an interest to re-use the programme. They would also require French and Spanish versions.

**Report by María García Puente and discussion on the development in the field of CPD:**

- the CPD pilot projects second phase is about to begin (this means adding value to recorded webinars and videos by allowing discussions on the materials uploaded on a new online training platform);
- a freely available platform was set in place but content is still missing. The idea of putting up content for the new "Evidence-based information SIG" was not followed up yet because that SIG had first to be launched;
- for the start of the second phase there are modest ambitions: 1 new webinar per year;
- the content of future webinars and materials for the platform should be discussed within TrEDMIL SIG and with the Evidence-based information SIG.

The SIG clearly stated, that TrEDMIL SIG and Evidence-based information SIG should work together knowingly in overlapping areas. The emphasis of TrEDMIL being on standards and the delivery of CPD, not on content.

**SIG agenda for 2019-20:**

- a structure for recording new competencies and training requirements should be found. Research data management was named as an example of a competency that had clearly become relevant, and for which on-line training materials had been created (Research Data Management Librarian Academy https://rdmla.github.io/), but that was not yet part of the MLA's competencies framework;
- the new programme should be carefully monitored and content put on the website;
- students research projects could be used for "outsourcing" the analysis of trends spotted for example through surveys, job descriptions and literature on health competencies. The results of this competencies monitoring group could be published on the website, clearly stating from which dissertation or thesis the results came from;
- there exists huge diversity in different countries on education of, and CPD for, medical and health librarians. The EAHIL Board held a fishbowl session at EAHIL 2018 in Cardiff, discussing training/education and CPD of medical and health librarians. With the help of the SIG, the Board will prepare a list of core competencies of medical librarians and information professionals which will then be sent out to Universities and Library schools by the Board.


**Fig. 1.** *Content and development of the CAS in Chur (Gerhard Bissels – own work)*

**Fig. 2.** *Attendees of the TrEDMIL SIG Meeting 2019 in Basel (photo by Silvia Mahler)*
*Left to right: Martina Semmler-Schmetz, Ann Ritchie, Evamaria Krause, Gyöngyi Karaksony, Helge Knüttel, Tom Roper, Justyna Zawada, Gerd Bissels, Maria Garcia-Puente, Igor Brbre, Iris Reimann. Sabine Buroh, Carol Lefebvre, Marshall Dozier, Kate Kelly*

# National Library of Medicine report for EAHIL

**Dianne Babski**

Deputy Associate Director, Library Operations
National Library of Medicine
National Institutes of Health
US Department of Health and Human Services
dianne.babski@nih.gov
http://www.nlm.nih.gov/

## The Collection and Preservation Policy of the NLM

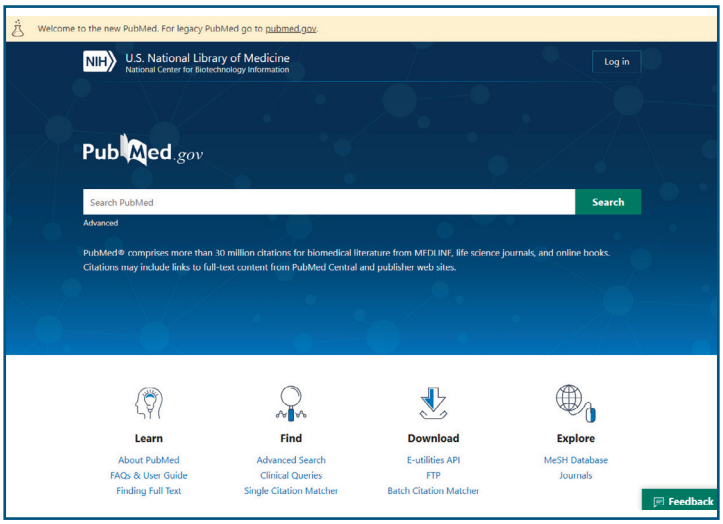
In September 2019, the National Library of Medicine (NLM) Board of Regents (BOR) approved the NLM Collection and Preservation Policy. This updated policy supports the purpose for which NLM was established, "to assist the advancement of medical and related sciences and to aid the dissemination and exchange of scientific and other information important to the progress of medicine and to the public health..." (42 U.S.C. 286). Central to our mission is the development of a collection that supports contemporary biomedical and health care research and practice as well as future scholarship. We attempt to aggregate and to maintain for permanent access library materials that:

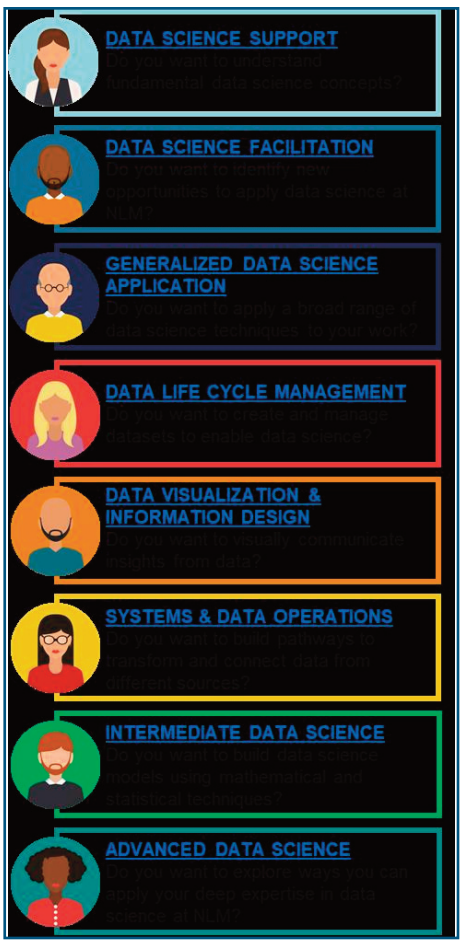
- record progress in research in biomedicine and the related areas of the life sciences;
- document the practice and teaching of medicine broadly defined;
- demonstrate how health services are organized, delivered and financed;
- chronicle the development and implementation of policy that affects research and the delivery of health services, and
- illustrate the public perception of medical practice and public health.

The 2019 policy provides the framework for our collection and preservation activities and acknowledges the changing landscape of scholarly communications and growth in electronic publishing. It aligns with the NLM Strategic Plan 2017-2027: A Platform for Biomedical Discovery and Data-Powered Health, recognizing the interconnected nature of the biomedical and scientific literature with data and other research objects in a digital landscape. Other considerations include funder policies for public access; the development of several heavily used NLM databases including PubMed; changes in the volume, formats and expectations of research outputs; and the overall increase in data and digital objects. The policy recognizes that the scope of the collection may change over time, and that our collecting efforts must be flexible to support a variety of NLM, National Institutes of Health (NIH), and other federal policies, initiatives, and programs.

## PubMed Labs the new PubMed

In September 2019, PubMed Labs transitioned to the default PubMed. Users are encouraged to use the new site, however, there is a link to the legacy PubMed system at the top of each page. We expect to maintain this link until the end of December 2019. We encourage your feedback, just click on the Green FeedBack link at the bottom of each PubMed page. And in case you missed it, PubMed added its 30 millionth journal citation in August!




## Building a workforce for data-driven research and health

Workforce development is a cornerstone of NLM's mission. Propelled by Goal 3 of our NLM Strategic Plan 2017-2027: A Platform for Biomedical Discovery and Data-Powered Health, we embarked on a plan to build a workforce for data-driven research and health. In order to realize this vision staff would need to develop their own data science skills and expertise. To accomplish this goal, we launch a Data Science @NLM Training Program, a year-long initiative to provide staff opportunities to enhance their skills and knowledge related to data science.

The program's main goal was not to turn all NLM staff into data scientists, but to provide a common vocabulary and understanding of data science principles regardless of job title. As not everyone needs to be a data scientist, but everyone should be conversant and have a basic understanding of data science concepts.

The Program included NLM-wide activities, including a Data Science Basics training session, individual training plans (ITP) for all staff, and a pilot intensive training course for selected staff. Staff members selected one of eight personas developed to cover the skills needed in various roles.

The ITPs were developed by identifying gaps between a staff member's knowledge as self-reported in a Data Science Readiness Survey and the skill level of the selected persona. Staff members were then provided a list of courses tailored to their unique needs from a catalog of nearly 250 courses. The year-long initiative culminated with a Data Science Open House, where staff shared how they had used new data science skills and considered how they could continue applying data science to NLM's work. The breadth and coverage reflected in the 77 research posters and data visualizations provided a snapshot of the many ways that NLM staff apply data science to their work. NLM Director, Dr. Patricia Flatley Brennan, commented that the Open House was the high point of her time at NLM, it was great to see so many NLM staff sharing their work and engaging in stimulating conversations about innovation.

# Conference report for TMLA 2019: Changhua, Taiwan
# 5-6 September 2019

**Tzu-heng Chiu**
President, TMLA
Professor & Director, Taipei Medical University Library, Taipei, Taiwan
tzchiu@tmu.edu.tw

This year the Taiwan Medical Library Association (TMLA) annual conference was held in Changhua, Taiwan. This conference is held in rotation by major medical libraries in northern, central, and southern Taiwan. This year, the library of Changhua Christian Hospital in central Taiwan, which is affiliated with one of the 19 medical centers, was in charge of organizing this event. The 2019 TMLA annual conference incorporated the 41th Medical Library Personnel Seminar and attracted the participation of more than 90 delegates from 66 medical and hospital libraries in Taiwan as well as 26 suppliers of book and information-related products. In addition, three representatives from the Medical Library Branch, Library Society of China as well as scholars from libraries in the Southern Medical University, China and the Chinese University of Hong Kong, Shenzhen attended this conference.

The opening ceremony of the conference was held in the Changhua Christian Hospital International Education and Training Center in the morning of September 5, where the TMAL President Tzu-Heng Chiu gave a welcome remark and thanked related personnel for their effort in organizing the conference. Chin-San Liu, the vise superintendent of the Changhua Christian Hospital, served as the local representative to welcome all attendees. This year's conference included five keynote speeches, eight practical reports by library delegates, six information sharing sessions by suppliers, and one Ovid-Flysheet breakfast session. The conference also comprised several social events, namely a gala dinner, tea breaks, and a library visit and exhibitions. In order to encourage interactions between suppliers and attendees, a stamp collection card was designed, which allowed attendees to receive a stamp for every exhibition they have visited. A NT$200 convenience store gift card could be exchanged using 10 stamps, and a lottery ticket could be exchanged using 15 stamps. Many attendees enjoyed this activity.

The five keynote speeches provided rich content. Specifically, one physician and one pharmacist were invited to share their thoughts on the role of libraries in medical education and pharmacy intern practice. This allowed attendees to understand how medical librarians can collaborate with other hospital units and provide education. Chi-Shiou Lin, the Dean of the Department and Graduate Institute of Library and Information Science in National Taiwan University, gave a speech on how to help medical researchers avoid predatory journals. Foster Zhang, the University librarian of the Chinese University of Hong Kong, Shenzhen, discussed how libraries have become community hubs in the university campus and library space arrangement and services that should be conducted in response to this change. Hui-Man Nui, an editor from the National Central Library, gave a speech on the effect of Functional Requirements for Bibliographic Records (FRBR) and Resource Description and Access (RDA) on information services provided by libraries.

Another highlight of the conference was the poster session held by the TMLA Education Committee, which was first held in the previous year's conference. In this event, scholars and experts are invited to select 10 of the research abstracts submitted to this conference. The authors of the selected abstracts then create posters that are showcased during the conference. On the conference day, three professional judges are invited to select the top three posters, and conference attendees are invited to vote for the most popular poster. The first-place winner of this event can choose to submit the abstract of poster to the 2020 Medical Library Association (MLA) or European Association for Health Information and Library (EAHIL) conference. If the poster is accepted in one of the conferences and the first author of the poster participates in it, he can receive a grant from the TMLA and International Federation for Information Integration (IFII), which helps cover the round-trip plane fare and conference registration fee. The first-place winner in 2019 was Chi-Ju Chiu from the Knowledge Service Division of the Taipei Medical University Library, who serves as the first author of the poster entitled "Medical Library Consortium Service Satisfaction Survey: Using the Taipei Medical University Library Consortium as an example." The popularity award winner was Chin-Wen Chou from Kun-Yen Medical Library of National Cheng Kung University Library, who serves as the first author of the poster titled "Medical reference librarians as research partners of international graduate students in the systematic review process: a case study of Kun-Yen Medical Library, NCKU".

The closing ceremony was held at 4:00 pm on September 6. During the ceremony, five TMLA executive directors and attendees engaged in comprehensive discussion and exchanged their opinions on the TMLA professional certification examination for medical librarians and the new launched digital learning platform. Subsequently, President Chiu hosted the stamp collection lottery draw and issued the certificates and awards to the winners of the poster session. Finally, she announced that next year's conference will be held by the Kaohsiung Chang Gung Memorial Hospital Library. This drew a perfect conclusion for the 2-day TMLA conference.

**Future TMLA annual meetings – dates for your diary:**

Kaohsiung Chang Gung Memorial Hospital, Kaohsiung, Taiwan, 20-21 August 2020.

# Publications and new products

**Letizia Sampaolo**
Istituto Superiore di Sanità, Rome, Italy
letizia.sampaolo@iss.it

*Dear friends,*

*Let's talk about famous inventions that have become part of our history and culture. For example, let us ask ourselves: What do I do when I only like one of the two most popular sodas, and they do not sell it? Do I nod and say "…I'll choose something else like tea or lemonade" or say "I will have... the other one available"?*

*In her captivating post, Mary Bellis tells about the humble origins of the original formula that, invented in 1893 by pharmacist Caleb Bradham of New Bern, NC, USA, would later become Pepsi Cola.*

*Bellis, who died in March 2015, was an experimental artist, film producer and director. Nevertheless, most of all she was a self-employed writer for about 18 years, specialising in writing about inventors and inventions, and a former writer for ThoughtCo, the website from which I pulled out this story, to use it as an opening of the column.*

*Like many pharmacists at that time, Bradham ran a soda fountain in his drugstore. There, he served drinks he himself created. His most famous was "Brad's drink," namely a mix of sugar, water, caramel, lemon oil, kola nuts, nutmeg, and other additives. When he started selling it, in a blink of an eye, the beverage caught on; therefore, Bradham decided to give it a smart name. He chose Pepsi-Cola. At first, it had been advertised as a digestive aid, attracting consumers with the slogan, "Exhilarating, Invigorating, Aids Digestion." Then…*

*Well, I would go on indeed, but I prefer to let you have the pleasure of reading by yourselves its whole story that is about success, bankruptcy, revival, postwar rise and the new generation. Enjoy!*

## JOURNAL ISSUES

*Health Information and Libraries Journal: Contents of December 2019 (36:4)*

### Review Articles

**Impact of pharmacy medicine information service advice on clinician and patient outcomes: an overview.**
Rutter J, Rutter P

### Original Articles

- **Potential of technology to improve the availability and use of health information on cancer subjects for clergy from rural communities.**
  Wallace R, Behringer B

- **Exploring the research culture in the Health Information Management profession in Australia.**
  Kemp T, Finlayson L, Chan J, Lackey G, Richards D, Rupnik C, White H, Butler-Henderson K, Low S

- **Network analysis of intra-hospital tranfers and hospital onset Clostridium difficile infection.**
  McHaney-Lindstrom M, Hebert C, Miller H, Moffatt-Bruce S, Root E

- **Teaching information literacy skills to medical students: perceptions of health sciences librarians.**
  Ullah M, Ameen K

- **Extending medical librarians' competencies to enhance collection organisation**
  Bass MB, Allen TS, Vanderpool A, Capdarest-Arest N

- **Pre-requisites, barriers and advantages of clinical informationist participation in grand round: a qualitative study**
  Zare-Farashbandi E, Zare-Farasbarandi F, Adini P, Rahimi A

- **Health information behaviour of rare disease patients: seeking, finding and sharing health information.**
  Stanarević Katavić S

- **Fulfilling information needs of patients in online health communities**
  Chen D, Zhang R, Feng J, Liu K

- **Optimal search strategies for identifying moderators and predictors of treatment effects in PubMed**
  Tummers M, van Hoorn R, Levering C, Booth A, van der Wilt GJ, Kievit W

### International Perspectives and Initiatives

- **Medical library services in Switzerland: catching up with EBM.**
  Bissels G, Klein SD, de Kaenel I

## FROM THE WEB

- **Keep your look, books!**
  **All about leather bindings conservation.**

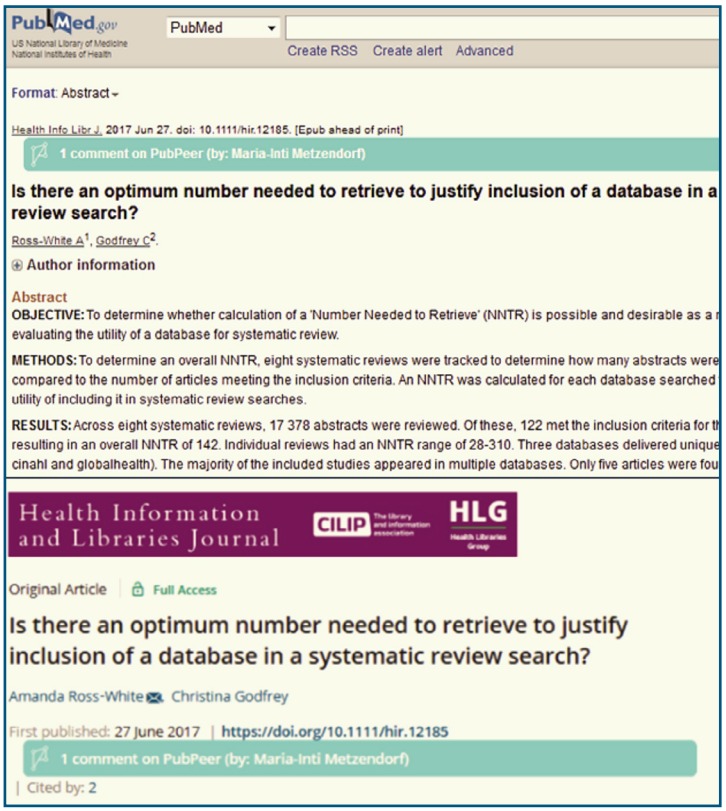
  Why do books bound before the mid-19th are in better condition than those bound after the mid-19th century? What are the causes dyes fade on leather bindings? The answer relies on tanning processes, type of dyes, leather degradation and time-lapse. The Leather Discussion Group formed to look for an answer and determine the most appropriate products to pursue leather book conservation. Holly Herro, Senior Conservator and Kristi Wright, contract book conservator at NLM; plus Katie Wagner, Book Conservator at the Smithsonian Libraries and William Minter, Senior Book Conservator at the Pennsylvania State University Libraries are the permanent members of the Group, and present regular updates, including in 2018 in Houston as part of a symposium titled, "The Current Use of Leather in Book Conservation" and a poster titled "A Group Effort to Understand the Material Properties of all Leathers Both Old and New" at the 2019 annual meeting in Connecticut.  Read the full post; it is very engaging.

## HEARD FROM OUR MEMBERS

*Maria-Inti Metzendorf, from Germany, has sent us the following useful resource to explore.*

After last year´s phasing out of PubMed Commons (see Jefferson T, Joshi, P: RIP Pubmed Commons. BMJ Opinion, Feb 2018) we would like to draw your attention to PubPeer. This website, established in 2012, enables post-publication peer review and is being maintained by the PubPeer Foundation, a California-registered public-benefit corporation with nonprofit status in the USA. PubPeer took over all comments published to PubMed Commons, but in contrast to PubMed Commons, it allows anonymous commenting.

PubPeer has highlighted shortcomings in several high-profile papers, in some cases leading to retractions and accusations of scientific fraud. Of course, the platform is not only valuable for discovering negative scientific practices but is mostly being used for fruitful discussion of published articles, therefore its byline "the online journal club".




You might wonder how you can stay alert of comments published on this platform, without actively having to search for them. PubPeer offers a handy browser plugin which automatically alerts you to a PubPeer comment on a published article, e.g. while accessing the article on a journal´s website or PubMed. Look at the screenshots!

## NOT ONLY BOOKS

**View life without and with personal success skills**
IEBSCO library education series suggests how to help your library patrons to acquire life skills and achieve personal and professional success. Learn more about this specialisation.

## SOME INTERESTING FORTHCOMING EVENTS:

**January 24-28, 2020, Chicago, IL, USA**
**American Library Association 2020 Symposium on the Future of Libraries**
Info: http://www.ala.org/news/member-news/2019/05/2020-symposium-future-libraries-opens-call-session-proposals

**…. and many more to come!**

*Please feel free to contact me (letizia.sampaolo@iss.it) if you have any further suggestion about events you would like to promote.*

# Remembering Laura Shane Godbolt

## (9 December 1943 – 24 November 2019)

During summer this year the sad news was spread among friends and colleagues about the serious cancer that struck Shane. The first round of chemotherapy seemed to bring some relief, but unfortunately not for long. It was typical of her dedication and sense of duty that, having decided to decline further therapy and instead opt for palliative care, she should then use her remaining months to liaise energetically with colleagues who could pick up the threads of her work, thus helping to ensure continuity and secure her legacy.

It was in my early years in medical librarianship that I first met Shane. It was during the British Council Course for medical librarians end of January 1991 in London. Shane was hosting and co-chairing the course in her institute with Tony King being the Director of Studies. It was a whole week very full program, but Shane seemed indefatigable. With this course started our friendship and professional cooperation and we would meet regularly either in London (in relation to the Editorial Advisory Board meetings of HILJ/HLR) or elsewhere at MLA, ICML or EAHIL meetings. Shane contributed to most of the EAHIL meetings as a speaker but also as a course leader in one or more of the Continuing Education Courses. Many times she took the opportunity to introduce a colleague from the African continent in EAHIL meetings, always active in connecting people and promoting international collaboration. She played a crucial role in EAHIL's developing relationship with AHILA and was the driving force in the discussions that in 2015 led the EAHIL Board to establish the EAHIL-AHILA scholarships.

In 1978 Shane took on editorship of the Newsletter of the recently merged UK Medical Health and Welfare Libraries Group Committee (MHWLG) and in 1984 was the founding editor of Health Libraries Review till 1999, when Judy Palmer took over as editor-in-chief. Ever since there was a representative of EAHIL in the International Editorial Advisory Board of HLR/HILJ.

Shane was a founding member of EAHIL participating in almost all meetings since Brussels 1986. She was very much involved in library networks in the UK and even more in reaching out to the colleagues on the African continent. Her contributions to EAHIL had a more scientific and strategic character than serving in the executive board or organizing committees.

While it is impossible in this brief tribute to do full justice to the broad and complete range of Shane's interests and achievements, a short list of references in EAHIL Proceedings will give some indication of the areas in which she was influential during her career. Many of her initiatives meant creating networks among (medical) librarians and promoting professional cooperation. The UK colleagues will certainly include references to these when paying tribute to her (1, 2). At most, if not all, EAHIL meetings Shane was attending, she spoke about her views and activities and led workshops to support colleagues in developing their libraries and organizations, e.g.: about editing and the responsibility of professional organizations to publish a professional journal (3, 4); about restructuring the library training module for medical students (5); about the Network of medical libraries in the UK NHS, especially the Regional Librarians Group (6, 7); and about the strategic planning of a professional journal (8).

Many, many thanks to Shane for her work, time and energy spent into our profession; many of us, all around the globe, have gained and learned from her knowledge, leadership, vision and friendship.

*Suzanne Bakker*
*former President of EAHIL*
*suzanneb@planet.nl*

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**Fig. 1.** *A photo taken at the 2017 ICML+EAHIL Conference in Dublin of Shane Godbolt (third from the left) with Tzu-Heng Chiu, the President of the Taiwan Medical Library Association, Prof Maria Musoke, past President of AHILA, and Patti Biggs from the UK (The Francis Crick Institute).*

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