EDWARD HAND MEDICAL HERITAGE FOUNDATION

Volume VI | Preserving the History of the Healing Arts | Fall/Winter 2017

From the President

By Susan C. Eckert

I write to you today as the new chair of the Board for the Edward Hand Medical Heritage Foundation. I am very grateful to the strong Board and amazing volunteers who have been assembled and are dedicated to preserving the medical heritage of our county.

Our past Chair, Dr. Nikitas Zervanos laid a strong foundation of support and a well-organized volunteer base. Nik continues to support our interns. He is a remarkable advisor to students with high expectations but a patient demeanor. Dr. Barton Halpern is serving as our Vice Chair. He has embarked on an effort to capture our evolution and is spearheading the development of a video which will describe our history. Dr. Larry Carroll organized our annual lecture at LancasterHistory.org by recruiting Dr. Gerald Rothaker, who assembled an amazing panel of orthopedic surgeons. Dr. Bill Hunt has driven our marketing efforts and prepared us for this new world of social media and updated websites. Dr. Frederick Saunders has come on board as our newsletter editor, with this being his first great edition. Dr. Alan Peterson continues to find physician authors of papers describing their specialties. Myke Rogers is a regular at the Museum as he has handled our finances and directing our development efforts. Joan Boben seems to remember where all missing objects are hiding and she regularly ferrets out opportunities for our speaker's bureau.

But, the biggest change this year is the new leadership of Hannah Lerew. Hannah was referred to us by Dr. Marlene Arnold, Professor of Anthropology at Millersville University, and a member of our Board. Hannah has picked up the responsibilities of Susan Wiley and formerly Donna Mann. She has managed the museum and helped the Board with marketing, branding and other administrative duties. She combines an understanding of museum management with an academic understanding of medical anthropology. We feel blessed to have such a skilled leader part of Edward Hand.

And one final heartfelt thank you to the incredible support of Carl Manelius who completed his term on the Board in 2016, but who has maintained his steadfast and creative leadership. He and Heather Tennis authored the collection policy through endless drafts. He is patient. Carl has found numerous items for our collection through his thoughtful assistance to the physician community. But most of all we value Carl's sense of humor and belief in the mission of our Museum. We enjoy his company and feel blessed that he has offered us his advise and counsel. He is a wise friend. Thanks Carl for all you have done for this organization.

Finally, this little gem is only possible because of the loyal donors who invest in our ongoing passion to preserve the unique historical significance of Lancaster County from General Edward Hand to today's gifted and committed health care leaders. We are all indebted to you for your support.

Should you have suggestions or wish to visit our little gem, please call Hannah Lerew at (717)419-8945.

History of Gastroenterology in Lancaster County

By Frederick C. Saunders, M.D., FACP, FACG

Dr. Edward Hand, Adjutant General for George Washington's Revolutionary army, was a farmer as well as a practicing physician in Lancaster County. Thus, food production became one of the earliest links between medicine, the revolution and nutrition, a key element of diseases that affect digestion and absorption (Gastroenterology).

The history of Gastroenterology (GE) in Lancaster County parallels its development in the western world. The first formal organization that centered its attention upon the GI tract was the American Gastroenterological Association (AGA), organized in 1897. The field languished before WWII, but like most specialties of medicine, grew rapidly thereafter. The specialty was transformed in the 1960's with the invention of flexible fiber optic endoscopy and GI, as we know it today, expanded rapidly thereafter.

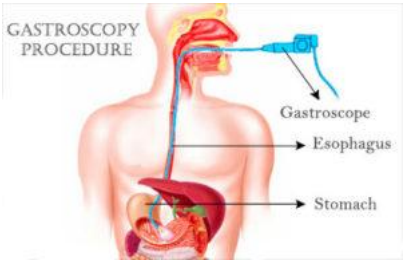
Gastroenterology in Lancaster County

The specialty started In Lancaster County in the 1940's because surgeons in the Atlee group (Drs. John and William and others) hired Dr. Henry Walter to join them. The earliest flexible esophagoscope (from ACMI) used by Dr. James (Fred) Young at St. Joseph's Hospital. Dr. David Weston brought endoscopy* to the Lancaster General Hospital (1972) and performed the county's first colonoscopy** in 1972 and the first colonoscopic polypectomy in 1973. Dr. Rick Altman joined Weston and Young in 1979 bringing ERCP*** skills to the county. Dr. Lazarus started a second group in 1984 and recruited Drs. Elkin and Whitebloom. This group extended coverage to the Osteopathic, Ephrata and Columbia hospitals.

Dr. Frederick Saunders brought advanced ERCP skills to Lancaster county when he joined Dr. Weston. Dr. Mark Johnston invented the technique of transendoscopic cryotherapy and brought this technique to Lancaster in 2005 when he joined Dr. Weston's group, Lancaster Gastroenterology, Inc. Endoscopic ultrasound (EUS)**** was developed in the early 1980's but first introduced into Lancaster by Dr. Kilkarny in 2010. David Horwhat brought additional advanced EUS therapeutic methods in 2014.

The groups divided with subsequent merger of the osteopathic physicians, Drs. Lazarus, Elkin and Whitebloom, joining Young, Foley, Altman and Rosenberg and Lomby to form Regional Gastroenterology Associates of Lancaster (RGAL). Dr. Weston recruited Dr. Frederick Saunders joined by Dr. Steve Chen to form Lancaster Gastroenterology, Inc. (LGI). From the mid 1990's through 2014 RGAL added Drs. Gibas (the first female gastroenterologist), Colton, Connell, Devenyi (Pediatric GI), Kulkarni, Lalani, Smith, Cheshty and Shih. During the same interval LGI added Drs. Parikh, Johnston, Allegretti, Harberson, Farrell, Morgan, Horwhat and Betteridge. So currently, there are 28 boarded GE's with three having retired (Drs. Weston, Young and Saunders). LGI pioneered the use of specialty midlevel providers in GI beginning in 1997 but this is now common in most GI practices.

The two groups, LGI and RGAL merged into a single practice in 2017.



The Impact of Gastroenterology Research and Development

There have been many remarkable advances in the practice of gastroenterology in the past 50 years that have revolutionized GI practice throughout the western world as well as that of Lancaster County. These include flexible endoscopy and its various derivatives such as gastroscopy, colonoscopy, ERCP, laparoscopy, EUS, studies that visualize the gastrointestinal tract. In addition, these modalities permit tissue biopsy, ablation, aspiration, excision, ligation, and device insertion for various therapeutic reasons. Colonoscopy and polypectomy has impacted more lives than any other GI technique. Routine colonoscopy for cancer screening for persons over age 50 became the standard of care fueling a rapid acceleration in the number of GI providers.

Pharmacologic research with an emphasis upon double blind clinical trials has led to a revolution in management of GI diseases. H2 blockers and PPI's (acid reducing medications) revolutionized the treatment of reflux esophagitis and peptic ulcer, with marked reduction in frequency of bleeding and other complications, nearly eliminating the need for surgical intervention in these diseases. The marked reduction of recurrent ulcer risk with antibiotics used to treat gastric H. pylori further revolutionized GI medicine. Drs. Marshall and Warren received the Nobel Prize in medicine for this discovery. Inflammatory bowel disease can now be managed successfully with laboratory-generated antibodies against antitumor necrosis factor (antiTNF), Other cell-mediated therapies are also available or in development.

The treatment of liver disease in Lancaster has followed the national trends. Now Hepatitis B and C can usually be cured with antiviral therapy, but Hepatitis C remains a leading cause of end stage liver disease and the reason for liver transplantation.

The major change in the practice of gastroenterology resulted with the shift from a specialty centered on diagnosis with limited choices of medical options to one characterized by many therapeutic endoscopic procedures with a wide variety of pharmacologic interventions. Finally, even the less remedial disorders such as irritable bowel syndrome (IBS) are often improved by dietary and pharmacological protocols.

Expectations for Future Development

The challenges for the future are many and include: finding a cause and cure for inflammatory bowel disease and GI malignancies, understanding the "microbiome" of the gut and its contribution to systemic and GI disease and the effect of diet and environment upon our health and diseases. Medicine, including GI, is on the verge of revolutionary genetic and epigenetic modifications that will manage and/or prevent illnesses. Rapid change remains inevitable. From its earliest history as a "bread basket" in colonial times to present day, Lancaster County has supported GI health and well being of its population. When diseases of the intestine threaten, we have an expert range of gastroenterology talent and methods available to restore GI health in order to continue enjoying the culinary gifts bestowed by our Lancaster home.

***Colonoscopy** consists of passing a flexible lighted optic device into a previously cleansed colon in order to visualize and often treat lesions within the reach of the endoscope.

****Gastroscopy** uses a similar device to examine and treat lesions in the esophagus, stomach and duodenum.

*****Endoscopic Retrograde Cholangiopancreatography (ERCP)** uses a similar device modified with a side-viewing lens that permits visualization of the bile and pancreatic ducts. **Sphincterotomy** consists of passing an electrified wire into the circular muscle in order to cut the sphincter muscle and gain access to treat lesions in the ducts.

******Endoscopic Ultrasound (EUS)** employs a gastroscope modified with an added ultrasound device that creates a computerized image of the internal anatomy within as well as exterior to the wall of the intestine. Lesions can then be targeted for immediate biopsy, aspiration, or drainage as required.

The History of Anesthesiology in Lancaster County

by Melissa Lee

The history of anesthesiology begins in the ancient world with the use of plants, opium, cocaine, and alcohol to ease pain, along with other methods. Many attempts at pain relief had been made, but it was not until 1846 when William T. G. Morton performed the first successful publicly used anesthesia. Anesthesia progressed into the 20th century with the increased use of ether and chloroform as the main methods of anesthesia. The creation of anesthesia revolutionized surgery and medicine. Today, the main anesthetic is propofol, which is run through an intravenously into a patient's system. Pain management, along with anesthesia, has been sought after by humans since ancient times. Many methods of pain management have been attempted, including acupuncture and trepanning of the skull. Today, pain management comes in the forms of over the counter drugs, such as aspirin and ibuprofen. Anesthesiology in Lancaster has changed over time. At the opening of St. Joseph's Hospital in 1883 and Lancaster General Hospital in 1893, no anesthesiology department existed with most anesthesia being administered by nurses at Lancaster General Hospital. This practice lasted until the 1960s with the creation of the Department of Anesthesiology. The Anesthesia Associates of Lancaster County began on September 1, 1958, making them one of the first outside anesthesiology practices in the area. Since its creation, the Department of Anesthesiology has progressed and is consistently improving their anesthesiology practices to improve for the well-being and safety of the patient.

Read more at https://edwardhandmedicalheritage.wordpress.com

Summary of "A Historical Overview of The Lancaster County Almshouse and Hospital"

By Kendall Seigworth

From 1800 to 1969, the Lancaster County Almshouse and Hospital was among the first documented places in the county, and even in the country, to provide public healthcare and social services within an institutional setting.

The founding of this institution in Lancaster was spearheaded by a group of local citizens called the Directors of the Poor and House of Employment and funded by the local taxpayers. The exact date marking the beginning of its operation is unclear, but what is certain from original records is that it was open for residence at least as of the fall of 1800. Taking note of the founding dates, such institutions began to emerge throughout the Mid-Atlantic region of the United States from 1790 through 1820 in large numbers. A notable shift had been made from small-scale, community-rented homes and boarding at the community's expense to a larger, more institutional setting prone to over-crowding. [1]

In a report on the History of Medicine in Lancaster County provided in the Lancaster City and County Medical Society, the Lancaster County Almshouse and Hospital was the county's first hospital. [2] This report also stated that the Pennsylvania Hospital in Philadelphia, founded in 1751, was the oldest hospital in continuous service in the United States. The middle of the 18th century saw considerable growth in the building of hospitals and Almshouses in response to the plight of the impoverished across the east coast. Other hospitals founded shortly after the Pennsylvania Hospital include the New York City Hospital (formerly known as Bellevue Hospital) in 1771, the Edward Hand Hospital of Pittsburgh in 1777, and the Baltimore, Maryland Hospital in 1797, and then the first Lancaster Almshouse building, which was completely constructed sometime between 1799-1800. The Lancaster County Almshouse and Hospital was considered the second oldest continuously running hospital in the United States, just after the Pennsylvania Hospital. However, the Almshouse no longer holds this title, as all institutional buildings were repurposed for non-hospital needs or torn down by the year of 1969. [3]

The Lancaster County Almshouse and Hospital institution once included five large buildings, four of which were residential, and a variety of support structures surrounding them, such as barns. Men and women were often placed on separate floors, and racial segregation led to residents of different races being placed in separate buildings. [4] The first building was known as The Lancaster County Poor and House of Employment, with its construction completed in full sometime between 1799 and 1800. This is the oldest Almshouse building and it remains standing as of 2017. [5] This first Almshouse building had provided medical care for its residents before the erection of the second building, the hospital. The second building erected on institutional grounds was the Lancaster County Hospital built sometime between 1805 and 1806 and razed in 1960. The building of the hospital functioned as a means of separating the poor with physical and mental health issues from those who were healthy and could, therefore, readily take up work to maintain their keep at the Almshouse. [6] Other buildings built on the grounds were known as the New Insane Asylum, built between 1898 and 1899 and razed in 1969, the New County Home which was built between 1874 and 1875 and razed in 1969, and the new and current Conestoga View, a long-term care facility which was built in 1969 and is still standing in 2017. [7]

The Lancaster Almshouse is an important historical landmark, as it was an institution which provided services from some of the most prominent physicians both locally and nationally. Numerous, but presumably not all, physicians who served at the Almshouse were listed in the original minute books for the Directors of the Poor and House of Employment. These physicians included John D. Perkins, Edward Hand, Frederick Kuhn, George B. Moore, Samuel Humes, John Light Atlee, Washington Lemuel Atlee, and George B. Kerfoot. I will provide brief descriptions about the work of these physicians in the following paragraph.

Perkins is notable for the use of metal tractors in medical treatment, a procedure invented by his father. This procedure,

known as "*tractoration*" or "*perkinism*," involved the drawing of two different metal rods across an affected area of the body to reduce symptoms of inflammation and rheumatism and is not practiced by allopathic medicine in the modern age. [8] Hand (1744-1802) is arguably one of the most prominent historic medical and political figures in both the history of Lancaster and the history of the founding of the United States. Hand had a medical, military, and political career, notably having worked directly with George Washington and served as his Adjutant General. [9] Kuhn (1742-1816) was a prominent physician from a well-known family of medical doctors who served in the Lancaster and Philadelphia area. [10] Moore served at the Lancaster Almshouse in the early 1800's. In June of 1802, he announced to the public that he would begin inoculating against Smallpox, ran a drugstore in Centre Square, and had a close relationship with many local doctors in Lancaster. [11]

In 1848, Humes became the first president of the Pennsylvania Medical Society, whom were primarily concerned with protecting potential patients from receiving medical treatment from untrained individuals, cultivating medical ethics, promoting public health initiatives, and drafting legislation that protected the patients and physicians it represented. [12] The Atlee's are members of a prominent family of doctors who have served in Pennsylvania. John Light Atlee (1799-1885), along with the assistance of his brother Washington Lemuel Atlee (1808-1878), are particularly famous for performing the first successful double ovariotomy in 1843, a procedure in which the cysts were surgically excised from the both the ovaries of a patient. [13] Finally, Kerfoot (1808-1868) received his medical training at the Lancaster Almshouse and Hospital, while being trained by prominent attending physicians like Samuel Humes and John Light Atlee. [14] He was particularly famous in Lancaster for giving medical lectures to the public in his very own anatomical hall, which opened its doors on south Queen Street in 1833. [15]

The Lancaster Almshouse and Hospital was critical in forming the modern landscape of healthcare and social services in the county. Despite being an imperfect system that could not provide all residents with the resources to promote long-term sufficiency, the institution served hundreds and thousands of Lancastrian people in its time, providing some means of food, shelter, work, and healthcare for those in great need of it.

Read more at https://edwardhandmedicalheritage.wordpress.com

Dr. Atlee's Surgical Kit

by Chris Marks

Bones Saw
Manufactured by Snowden of Philadelphia beginning around 1840, this bone saw was primarily intended for use in amputation procedures. Its handle is made from wood and the saw blade is fashioned from steel.

Surgical Knives
Manufactured by Snowden of Philadelphia around 1840 and 1855 respectively, these three surgical knives were intended for use in amputation, alongside the bone saw. The knives would be employed first to create the initial incision before a surgeon would engage the saw for the grim task of cutting through bone. The knives are made from sharpened steel, while the handles are made of wood.

Wire Saw Handles
The two handles are made of Bakelite and were designed to be used in conjunction with a wire or chain-style saw. The complete Gigli Saw, named after its inventor and Italian surgeon Leonardo Gigli, was manufactured in the early 20th century by Luer and was used in place of a traditional bone saw.

Lithotomy Scoop
Manufactured by P. Rorer in the 1840s, this scoop was an intricate part of the lithotomy procedure intended to remove kidney and bladder stones. The scoop is made of steel with a serrated edge and a dark wooden handle.

Tenaculum
These three, curved tenacula are made of steel and manufactured in the 1840s by P. Rorer. Tenacula are a type of forceps and are employed in surgery to life and hold arteries. The ends of the forceps have pointed hooks to better manage the arteries.

Metacarpal Saw
These saws, manufactured in the 1840s by P. Rorer, are similar in look and design to the larger bone saw previously mentioned. Like their larger counterpart, the metacarpal saws have a steel blade and were used in amputation. However, as their name alludes, the metacarpal saws were used for cutting smaller bones, such as fingers.

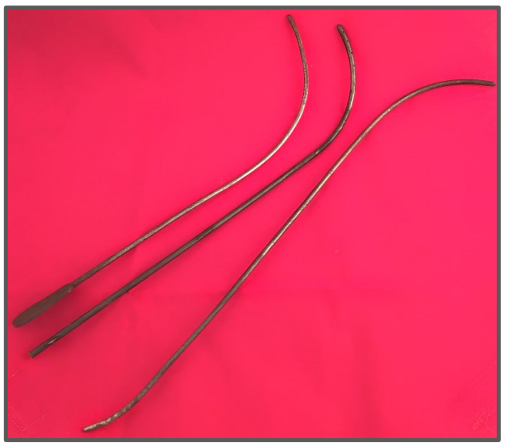
Gorgets
Like the Lithotomy scoop, gorgets aided in kidney or bladder stone removal. These light and dark colored gorgets were manufactured as early as 1819 by either Shively or P. Rorer. It has three interchangeable steel blades and a screw. The sharpened blades indicate that this gorget is a later model. Early 19th century instruments, such as the Lithotomy scoop, quickly rendered the gorget obsolete.

Tourniquet
This tourniquet, possibly manufactured by G. Tiemanns in the mid-19th century, was used to constrict the venous and arterial circulation to extremities. This stopped blood loss and helped to dull pain.

Lithotomy Forceps
These forceps were engineered as a replacement or substitute for the lithotomy scoop. They were used after the initial incision to extract the kidney or bladder stone. The forceps photographed are 11.5 inches in length.

Small-Bladed Scalpel
Manufactured by Hernsetin in the mid-19th century, this small-bladed scalpel was used to make incisions during surgery and medical procedures. Scalpels were cleaned and reused with a non-removable blade. They were normally made of steel and are very sharp, providing the most accurate incisions.

Surgical Scissors and Clamps
These surgical scissors and clamps were manufactured before 1890 and made of steel. The scissors were used to cut during surgery and the clamps were used to hold blood vessels and other organs during surgery.



Ureteral Sound
Also known as a stone searcher, this device is inserted into the urethra. It is made of steel and used to probe for foreign objects, mostly kidney stones. The sounds were used in the first phase of the lithotrity procedure with the goal of finding, crushing and removing the kidney stone before further irritation occurred.

This surgical set was donated to the Edward Hand Medical Heritage Foundation by Elizabeth Jones, with special thanks to Ann Weber and the Atlee family. Originally believed to have belonged to General Edward Hand, the manufacturing dates provided by the research above leads us to believe that this surgical kit belonged to Dr. John L. Atlee. Dr. Atlee was the first of a long line of Lancaster physicians, specializing in surgery and obstetrics. He lived from 1799 to 1885 and was president and one of the founders of both the State Medical Association and the American Medical Association.

Museum Operating Hours:

Tuesday: 9am - 3pm
Thursday: 9am - 3pm
Friday: 9am - 3pm

Other times by appointment

Physical Address:
1004 New Holland Ave, Lancaster PA 17601
Mailing Address:
PO Box 10302, Lancaster, PA 17605

Call us at: (717) 406-0265
Email us at: curator@EdwardHandMedicalHeritage.org

@lancastermedicalmuseum

@edwardhandmedicalmuseum

Hello EHMHF!

I wanted to introduce myself as your new Executive Director. I have been with the Foundation since January of 2017, having recently graduated from Millersville University with a Bachelor's Degree in Anthropology, with a concentration in Archaeology. I am excited to bring my experience with the National Parks System and various research assistantships to the museum and hope to meet you all soon!

Hannah Lerew