"Quack" medicine is the promotion of unproven or fraudulent medical practices. The term typically denotes the peddling of “cure-all” medicines and medical devices. Although more prevalent in the mid-19th and early 20th centuries, quackery continues even today. With rapid communication available through the internet, the unregulated marketing of quack cures in recent years has increased dramatically.

There are many reasons for the acceptance of quack medical procedures and devices. These include the perpetuation of quackery to take advantage of ignorance about conventional medical treatments; the perpetuation of conspiracy theories regarding the suppression of unconventional or natural therapies by quackery promoters; as well as the desperation of those patients with painful or terminal illnesses seeking any available treatment.

Quack medical devices like those in the EHMHF collection gained prominence in the mid 19th century. As electricity became more and more a part of people’s lives, there was a natural curiosity about its curative properties. Some took advantage of this and invented devices that purported to cure a variety of illnesses through a jolt of electricity.

Claims were made that these devices cured everything from impotency to rheumatism, to back pain, insomnia, depression, liver disease, kidney disease, heart disease, indigestion, and even female “nervous disorders”. Powered by electricity, batteries, or magnets, these devices delivered and electric shock, proving to the patient that the device was working.

During the late 19th century and early 20th century, many of these devices were advertised in magazines such as Popular Mechanics where one could mail order a device to cure anything that ails you as well as purchase lessons to fly an airplane or learn hypnosis.

It was not until the U.S. Congress passed the Food, Drugs, and Cosmetics Act of 1938 that there was any regulation on these devices. This new law prohibited the mis-
From the President
By Nikitas Zervanos, MD

I wish to dedicate this column to Mrs. Donna Mann who recently announced her resignation effective January 31, 2016. Her husband Mike recently took early retirement, and she and Mike decided to make New Orleans their permanent home. This will also put them in close proximity to their eldest daughter who lives in Texas.

A. During the past five years since Mrs. Donna Mann has joined our organization, and since the institution of our strategic plan (January 1, 2011 to December 31, 2016), we have made enormous progress and have exceeded most of our goals. Mrs. Mann is given much credit for these accomplishments. I will highlight what I consider the most important:

1. The cataloguing of the collection required updating the past perfect software. A major asset that Donna brought to our organization was her husband Mike who helped with much of the technical aspects of implementing this software.

2. Our collections have grown from less than 10,000 items to more than 11,000 items. This includes all kinds of artifacts and memorabilia. The following is a list of examples:
   a. The huge Raub collection of letters and memorabilia that tell the story of a medical student’s life before the turn of the 20th century.
   b. The Kistler medical books dating back over one hundred years.
   c. The many photos and papers that have accumulated with our Lancaster County Medical Society
   d. Many papers and photos from LGH and the now closed Columbia Hospital
   e. The WWII vintage dental chairs from Dr. Harry Lutz
   f. Many additional copies of the Doctor and the Child, the latest of which is in color by Sir Luke Fildes
   g. The Wax figures of George Washington and Dr. Edward Hand
   h. A number of microscopes dating more than sixty years old to add to our wonderful collection of other microscopes, which range over a period of 150 years
   i. Many pharmaceutical bottles dating over one hundred years old.

3. The opening of the Museum in the spring of 2013 at the Burle Industrial Park
4. A successful grant award from Lancaster General Hospital to institute the Virtual Museum project.
5. Exhibits:
   a. Two major exhibits were conducted at the Willow Valley Retirement Community as part of their annual “fair.”
   b. A medical exhibit at the Rock Ford Plantation
   c. Additional exhibits at LGH including in the Department of Family and Community Medicine, Raub Exhibit at the WLAFHC, & photos of James Buchanan Dr. Carpenter in the med staff lounge
6. Publications
   a. The website has been populated with more than twenty papers, many of which had to undergo further editing and processing, which Donna helped us to accomplish.

7. The student internship program
   a. During the time Donna has been with us she has supervised seven summer student interns as well as a newly instituted approved F and M student program conducted during the academic year.

(Continued on page 3)
From The President (Continued from page 2)

b. These students are required to write papers on a subject related to Lancaster County medical history, which are published on our website.

8. The institution of our outstanding newsletter. This has been accomplished in stellar fashion under the editorship of Mrs. Donna Mann.

B. Another major development, which bears noting, is the development of a second strategic plan in five years. I believe we met or exceeded every goal that was outlined in the first strategic plan that was implemented on January 1, 2011. This second strategic plan was developed by an ad-hoc committee under the leadership of Mrs. Susan Eckert. The committee consisted of NJ Zervanos, president, Emrie Wood, MD, vice president, Joan Boben, RN, secretary, Myke Rogers, treasurer, Heather Tennes, and the chairs of publications, (Alan S. Peterson, MD), and Exhibit and Display, (Carl Manelius). The strategic plan was presented by Mrs. Susan Eckert and approved by the executive committee on October 14 2015. This plan below will be implemented on January 1 2016 and is geared to advance the organization over the next four or five years.

1. Mission Statement: We adopted the current mission statement with a minor modification: “To preserve and make accessible the rich heritage of the healing arts of the Lancaster County region.”

2. Vision Statement: The vision statement “is to bridge our regional medical history and contemporary healing arts through interpretive exhibits, education and scholarly research.”

3. Our Core values are: Integrity; Responsible Stewardship; Collaboration; & Innovation
   a. Integrity: Values-based leadership and upholding professional standards and museum principles
   b. Responsible Stewardship: accountability and transparency
   c. Collaboration with the larger Community: open communications and partnerships.
   d. Innovation: utilize technology and available resources

4. Strategic Goals:
   a. Develop the Collection and insure it is inclusive (Collection Committee)
      i. Develop a collection management policy
      ii. Assess the collection and Identify gaps; Procure items and Deaccess items
   b. Enhance Educational Tools (Education Committee):
      i. Use social media
      ii. Continue lectures
      iii. Solicit original historical accounts of medical and allied health professions
      iv. Develop Virtual Tools/ Museum
      v. Recruit Interns from regional academic institutions
   c. Create Public Awareness and Market the Museum. (Marketing Committee)
      i. Develop Marketing Plan
      ii. Identify Audiences
      iii. Create and distribute materials for segmented audiences.
   d. Maintain Financial Stability and Sustainability (Finance Committee)
      i. Maintain efficient management of resources
      ii. Procure grants
      iii. Standardize and expand fund raising
      iv. Resource Development
   e. Establish individual institution partnerships (Executive Committee)
      i. Research possible partners
      ii. Outreach and engagement of other organizations
      iii. Review and evaluate strategic plan
   f. Governance and By-laws (By-Laws Committee) (Continued on page 4)
From the President: (continued from page 3)

C. Fund raising efforts have been successful and we raised not only enough money for operations, but continue to build our investment or endowment account, now exceeding $50,000. Our fund raising has been made much easier, by being able to demonstrate our continued progress as outlined in my comments under section A above. The funds were raised in the following manner:

1. The medical community to include the medical staffs of the four major hospitals of Lancaster County
2. The hospitals, especially the Lancaster General whose commitment to the EHMHF has gone beyond its financial support, but the provision of the space for our museum and warehouse at Burle Industrial Park
3. Recent commitment from Franklin and Marshal to support one of its students for our summer internship program
4. The EHMHF board
5. And... For the first time, the EHMHF will be engaged in the Lancaster County Community Foundation End of Year Extraordinary Giving program (Friday, November 20).

Ophthalmology and the Treatment of Diseases of the Eye

Ophthalmology is the branch of medicine that deals with the anatomy, physiology and diseases of the eye.

The invention of the ophthalmoscope in 1850 revolutionized the practice of ophthalmology. Doctors could now diagnose and treat diseases such as glaucoma, infections of the eye and inflammatory eye disease.

Evolving as a separate science was optometry and the use of spectacles. Glasses were used as early as the 16th century with their widespread, general use during the 18th century. It was during the 18th century that Benjamin Franklin invented the bifocals. The wearing of spectacles during the 18th century became so popular that they were often used as a fashionable accessory even when the wearer did not need glasses.

The collection at Edward Hand Medical Heritage Foundation includes many examples of the instruments used in ophthalmic eye care; ranging from a 19th century eye surgery kit, to several ophthalmoscopes, to several early examples of spectacles.

An article on the History of Ophthalmology in Lancaster County, written by Dr. Paul Ripple and Dr. John Bowman, can be found in the Articles section of our website.

The slit lamp biomicroscope is an instrument consisting of biomicroscope along with a high-intensity light source that can be focused to shine a thin sheet of light into the eye. The lamp facilitates an examination of the anterior segment and posterior segment of the human eye, which includes the eyelid, sclera, conjunctiva, iris, natural crystalline lens, and cornea. The binocular slit-lamp examination provides a stereoscopic magnified view of the eye structures in detail, enabling anatomical diagnoses to be made for a variety of eye conditions. A second, hand-held lens is used to examine the retina.
20th Century Vaccine

"Let us Talk About Epidemics of Infectious Diseases in Lancaster County"

Excerpt from "Medical History of Lancaster County." by Dr. Henry Wentz

CHOLERA appeared in Lancaster County I the Almshouse and 12 patients died. The same year in 1854, 127 people died in Columbia and in panic half of the residents left town. Dr. Atlee suggested that a specific poison emanated from the body of the patients causing the spread of this disease (Remember, this is before the discovery of the “germ theory of disease”). There were no intravenous fluids to combat dehydration.

TYPHOID FEVER was epidemic (always present in the community) in Lancaster County and during the first 15 years of LGH (1893-1908) there were 338 patients admitted with typhoid fever and 48 died. Filtered water from the Conestoga River was pioneered by Dr. Charles Stahr which decreased the prevalence of this disease considerably.

On October 7, 1918 over 2500 cases of INFLUENZA were reported in Lancaster City. All of the hospitals were filled and patients were in offices, halls, and sun parlors and Moose Hall was opened as an emergency hospital. 1/3 of the patients admitted to LGH died during the epidemic. Again, Dr. Atlee was in charge. Lancaster had 301 deaths in the month of October, 103 in LGH and 88 in the receiving Ward (Emergency Room) At St. Joseph Hospital there were 235 patients with influenza and 55 died. 21 of 32 nurses in training contracted the disease but all recovered. The State Health Dept. forbade trains or automobiles to stop in Lancaster.

In 1920, 150 people died of TUBERCULOSIS in Lancaster County and during the first 15 years of LGH, 338 patients were admitted with tuberculosis and 60 patients died. In 1925, 150 people died of pulmonary tuberculosis. The treatment consisted of bedrest, fresh air, heliotherapy and a high calcium diet with emphasis on mild and eggs. Lungs were collapsed by pneumothorax—injecting air into the pleural cavity to rest a lung. In 1944 streptomycin revolutionized the treatment of this disease.

From 1944 to 1957 LGH set aside a special area for the victims of POLIOMYELITIS (INFANTILE PARALYSIS) from June to October each year. Pools, theaters and other public places for children were closed. Even school openings were delayed. The POLIO UNIT was designated the unit for all patients in Lancaster and Lebanon Counties with possible polio. Des. Edgar Meiser, Louise Slack and Henry Wentz were selected to care for these patients. The March of Dimes established by President Franklin D. Roosevelt provided all of the financial help for patients with this disease. Edna Schreiber, a nurse was sent to Minnesota to learn the Sister Kenny treatment which consisted of hot packs placed on the backs and affected limbs of the patients and muscle reeducation after the acute symptoms have subsided. (The Schreiber Pediatric Rehabilitation Center was named in her honor) 1954 was the peak year with 118 patients admitted with possible polio and 80 patients diagnosed as definite poliomyelitis. 28 were paralytic, 38 were non-paralytic and 14 had bulbar (brain) involvement. 62 returned home, 4 died, and 14 were transferred. Iron lungs were used for patients who needed assistance with their breathing and at one time 5 of these were in use. In 1955 the killed vaccine discovered by Dr. Jonas Salk was used and cases decreased. It was very humiliating and depressing to watch these youngsters lose the use of some muscles and nothing could be done. In 1962-63, thousands of children and adults were immunized during an organized program at the schools on 3 Sundays (there were 3 different types or viruses of polio) by physicians from the LC & CMS.

In December 1955, 268 patients were reported to have PARATYPHOID FEVER apparently from milk from a local dairy. 36 patients were admitted in isolation in hospitals. Kissing by Santa Clause was considered “off limits”.

Although SMALLPOX was present in people in Lancaster County, there seemed to be no epidemic reported. In 1845 there was a scare of smallpox in Philadelphia and Baltimore. Smallpox vaccination was required to enter school during the early and mid 20th century. Smallpox invites an interesting story in Lancaster County. Dr. H. M. Alexander graduated from Bucknell and from their Medical Department in 1876. He began his practice of medicine in Marietta. Dr. Alexander realized that Dr. Jenner had discovered the smallpox vaccine in England in 1798, but the vaccine was not easily obtainable in the United States. In 1882 he decided to make his own vaccine. He hired a heifer from a local farmer and applied the smallpox virus obtained fro a victim of the disease to the heifer. He used the vaccine obtained from the heifer to vaccinate patients. One heifer grew to two then three and then 500. He was asked to give a talk at a medical meeting in Philadelphia and demand for his vaccine continued increasing.

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Cardiology

Since the evolution of man, he has been both enthralled and intimidated by the human heart. For centuries, it has stood as a symbol of love while, at the same time, it has also been at the base of some of the vilest human activities, from Aztec sacrifices to fights ending with a dagger through the heart.

Since British physician William Harvey's determination in 1623 that the heart was the force which circulated the blood throughout the body, physicians and scientists worldwide have sought out the underlying anatomy and biochemistry of the heart, and have attempted to develop diagnostic tools and treatments to detect and combat heart diseases. The history of cardiology can be constructed around a series of breakthroughs in the important areas of anatomical discovery and treatment development, from the first description of the heart's chamber and vessels by a French physician in 1706, to recent developments, such as the invention of the permanent, implantable, artificial heart in 1982.

With the objects in this exhibit, we are attempting to provide some concrete pieces of the evolution of the ever-changing field of cardiology.

Like much of our collection, the items in the EHMHF cardiovascular exhibit have been donated by Lancaster County doctors, historians, and collectors.

In the late 1700s, William Withering, a British physician, conducted a scientific investigation into the therapeutic effects of digitalis (also known as the foxglove plant), focusing specifically on its effectiveness for the treatment of heart failure. Well before Withering's time, digitalis had been documented by the ancient Romans as an herbal remedy, and had been used for the treatment of heart defects in 10th Century Europe. However, after Withering's discovery that digitalis was effective at combating heart failure in his patients, digitalis became one of the most widely used drugs in the 19th century, and was listed in the first addition of the Pharmacopeia of the United States, in 1820.

Pictured at the left is a white ceramic jar of digitalis from the early 19th century.

An electrocardiogram (also called ECG or EKG) is a noninvasive test that records the electrical activity of the heart. This examination is useful because, with each heartbeat, an electrical signal spreads from the top to the bottom of the heart. As this electrical signal travels, it induces the heart to contract, and to pump blood throughout the body. Since the heart's electrical signals determine the rhythm of the heartbeat, an EKG can be used to show how quickly the heart is beating, whether the heart's rhythm is steady or irregular, and how strongly the electrical signals pass through each part of the heart. Based on these readings, a physician may discover a number of conditions, such as arrhythmias or recent heart attacks, and may also monitor the functioning of implanted pacemakers.

The earliest electrocardiogram was designed in 1901 by William Einthoven, a scientist from the Netherlands. In Einthoven's design, currents from the heart's electrical signals were carried down a silver coated glass conducting wire which was suspended between two electromagnets. The fluctuations of the wire as a result of the changing electrical currents were transcribed onto a photographic plate and produced readouts similar to those given by modern EKGs (although Einthoven's machine weighed 600 pounds, took up two rooms, and needed five people to operate).

EKGs remain one of the most important diagnostic tools today, and in 2011, 82,707 EKGs were performed at Lancaster General Hospital (or affiliated healthcare institutions), which amounts to a staggering 226 per day.

The Cardiotron pictured at the right was the first direct-writing electrocardiograph, developed by Paul Traugott, President and Chief Engineer of Electro-Physical Laboratories, Inc., a division of Electronic Corporation of America. This model was sold by L&B Reiner, Eastern Representatives out of New York as well. The machine is in a wooden box with a leather-covered handle. The inside face of the model along with many of the dials are black plastic. This ECG machine recorded the activity of the heart on paper. It is a PC-1A model and has a serial number of A-3076, dating it the 1940s.
Carter’s Spanish Mixture!!

The Pharmacy collection at EHMHF includes several samples of “Quack” patent medicines in addition to the “Quack” devices. One is a bottle of Carter’s Spanish Mixture. The bottle dates to about 1854. The maker of Carter’s Spanish mixture makes many claims to its remarkable curative powers.

It is a mid 19th century mouth blown green glass medicine bottle labeled Carter’s Spanish Mixture. The bottom of the bottle has a deep pontil.

Carter’s Spanish Mixture was a patent medicine sold during the mid 19th century.

Label reads Carter’s Spanish Mixture for the removal and permanent cure of all diseases arising from an impure state of the blood or habit of the system.

Serafula, or Kings Evil, Rheumatism, Pimples or Postules on the face, Blisters, Biles, Chronic Sore Eyes, Ring Worm or Tetter, Scalp Head, Pain of the Bones or Joints, Dublin Ulcers, Syphilitic Disorders, and all diseases arising from the use of Mercury, Exposure or Imprudence in Life. It invariably cures indigestion or dyspepsia, neuralgia, general and nervous disability, palpitation of the heart, liver complaint and inflammation of the kidneys. Ladies of pale complexion and consumptive habits, and
Educating our Community
Through our Collection

EHMHF has initiated an effort by Lancaster County medical practitioners to document and preserve the history of the medical specialties and allied health professionals. These stories will be featured on our web site, edwardhandmedicalheritage.org. The first of these included the histories of ophthalmology, the history of Lancaster General Hospital, the First 100 Years, and the History of Contact Lenses. Our collection of published articles has grown to over twenty, all of which can be viewed on our website. The following is an excerpt from these articles.

A History of Psychiatry in Lancaster County, Pennsylvania
by S. Kendrick Eshleman, III, M. D.

Mental illness was recognized and treated by general physicians in Lancaster County from the earliest days. According to John W. W. Loose 1, the defense in the celebrated murder trial of John Haggerty in 1847 used the "not guilty by reason of insanity" plea for the first time in Lancaster County. The Newspaper, Lancaster Examiner & Herald in its issue for January 27, 1847 reported the trial in detail. 2 I will quote extracts from this report which are of special psychiatric interest.

"The trial of John Haggerty for the murder of Melchior Fordney3 and Catharine Tripple, in October last, commenced on Thursday morning. The courthouse was densely crowded during the trial. Benj. Champneys, Esq., Attorney General and Wm. Mathiot, Esq., Deputy appeared for the Commonwealth, and George Ford, Esq. and John L. Thompson, Esq., for the prisoner."

"About an hour and a half were occupied in calling a jury; about sixty persons having been called before one was empanelled (sic). The jury was composed of the following persons: Jon. F. Shroeder, George Lefever, John S. Manning, Henry Brimmer, George H. Bomberger, Isaac Sowers, Michael Muselman, Benjamin Hershey, Jacob Neaveling, George Leaman, Henry W. Hess, and John Shuck."

"Mr. Mathiot opened the case for the prosecution, and then proceeded to call witnesses. "The witnesses for the prosecution reported more or less the same information; that is, that John Haggerty came to Mr. Fordney's shop and asked him to shoot his (Haggerty's) horse, which Mr. Fordney declined to do and said he would rather give him "a couple of dollars for to help you out of the scrape", which he had gotten into with another man (Woehr)

Haggerty then went in the shop, took a gun out and loaded it. The Fordneys then tried to get Haggerty to give it up "before you hurt someone." Haggerty shot at his horse twice but the gun did not fire so he went into his house nearby and brought out an axe with the gun, which, this time, he did fire at the horse. This was on South Queen Street. Haggerty then handed the gun to one of the Fordneys and picked up the axe and ran after Mr. Fordney. He struck Mr. Fordney, as well as Mrs. Fordney (when she went in the shop to assist her husband), and one of their daughters. Earlier Haggerty ran outside behind a passing wagon, looking in to see if a man (Woehr) was there, who he had been looking for since they had had a disagreement. Catharine Tripple came out of the house and tried to disarm 3 Haggerty. He handed her the gun but then struck her with the axe. A witness, Isabella Gibson, reported that she "saw the bodies after the blows", and said "the back part of Fordney's head was entirely cut off, his legs were both broken, and marrow stuck in his pantaloons when taken off, one arm was broken, blood over the floor, wall and ceiling and the front part of Catharine's head; I saw it was cut with the axe; I saw nothing more; I saw the child; it was cut open on the top of the head, it's brain stuck out I dare say about an inch."

The Fordneys had four children...the one hurt was six years old. Nothing else was said about Mrs. Fordney. Additional testimony indicated that after people in the neighborhood realized what had happened they started throwing stones at Haggerty. He chased and threatened some of them and fell and the axe was taken from him and a rope put around his neck and he was dragged away and then taken to prison. Evidently he had been in prison some years before following an altercation with a man who consequently died. Also Haggerty told another witness three months before that he blamed the Fordneys "for medling (sic) a good deal with his business and that he'd kill them if they would not quit it." There were two medical witnesses for the prosecution. The first was Dr. George B. Kerfoot who said he and Dr. Henry Carpenter had been called in to examine the wounds and their record was "submitted to the court."

The full article can be viewed on our website: edwardhandmedicalheritage.org.