



# Stephen Girard and the Yellow Fever Epidemic of 1793.

– by Howard Anton –  
©All Rights Reserved

The year was 1793. The British were invading the French colony of Saint-Domingue (roughly present day Haiti), and French landowners, some of their slaves, and many free people of color were fleeing to the port cities of the United States, including Philadelphia. Unwittingly, they brought with them a secret passenger – *Aedes aegypti*, the mosquito that carries and transmits the deadly yellow fever virus. The insects thrived in the standing pools of water, the rain buckets, and the marshy conditions of Philadelphia, and an epidemic was born.

The epidemic spread with lightening speed, the death count mounted, and panicked citizens fled the city in droves. President Washington and other national leaders departed for safer environs, the post office closed, all but one newspaper shut down, citizens stayed locked in their houses, and a pall of gloom descended on the city. The best doctors of the time seemed helpless to stem the rising tide of deaths.

Among those who stayed was the 43-year old merchant Stephen Girard. A successful businessman, he could easily have afforded to flee to comfortable and safe surroundings, but he chose instead to lead the small group of citizens who undertook to provide care for the sick and dying and restore order to the beleaguered city.

To appreciate the full scope of Girard's acts of bravery, one must understand the state of medical knowledge of the period. The germ mechanism of disease was yet to be discovered, and the leading physicians of the day believed incorrectly that the disease was so highly contagious that to touch a victim or to breathe the same air was a death sentence. Many of Girard's fellow citizens felt that his decision to stay and nurse the sick was certain suicide.

This is the story of the heroism of Stephen Girard during the Yellow Fever Epidemic of 1793.

## Pestilence

Hot, dry winds forever blowing,  
Dead men to the grave-yards going:  
Constant hearses,  
Funeral verses;  
Oh! what plagues – there is no knowing!  
Priests retreating from their pulpits!  
Some in hot, and some in cold fits  
In bad temper,  
Off they scamper,  
Leaving us – unhappy culprits!  
Doctors raving and disputing,  
Death's pale army still recruiting  
What a pother  
One with t'other!  
Some a-writing, some a-shooting.  
Nature's poisons here collected  
Water, earth, and air infected  
O, what a pity,  
Such a City.

*Phillip Freneau, 1793*

## What is Yellow Fever?

*Coquillettidia fuscopennata* (“Yellow Fever”, “Yellow Jack”, “Black Vomit”) – A viral infection transmitted by the bite of the *Aedes aegypti* mosquito. It is not contagious, but can be transmitted from an infected person to a well person by a mosquito bite.

## Disease Progression:

- Incubation 3 to 6 days.
- **Stage 1** – Fever, loss of appetite, vomiting, muscle pain, headaches.
- **Stage 2** – Apparent remission after 3 or 4 days.
- **Stage 3** – High-grade fever, yellowing of the skin, abdominal pain, vomiting.

- **Stage 4** – Purple blotches under skin, blackened vomit, kidney failure, and hemorrhaging of fresh and black coagulated blood through the eyes, nose, bowels, and reproductive organs.
- **Stage 5** – Death within ten to fourteen days or gradual recovery with organ damage.

### History

**1793** Dr. Benjamin Rush, Philadelphia's leading physician, believes it to be a contagion (contagious disease) resulting from the bad air produced by rotting coffee on the waterfront.

**1881** Dr. Carlos Finlay, Cuban doctor and scientist, conjectures, but cannot prove, that mosquitoes rather than human contact transmit yellow fever. He later identifies the culprit as genus *Aedes*.

**1896** Italian bacteriologist, Giuseppe Sanarelli isolates bacillus *icteroides* from yellow fever patients.

**1900** Dr. Walter Reed proves that yellow fever is caused by a bite of the mosquito *Aedes aegypti* and is not contagious.

**1930** First vaccine to protect against the disease.

**Today** There exists an inoculation against contraction but there is no known cure once the disease sets in.

### Statistics of the Philadelphia Outbreak of 1793\*

- Philadelphia population 50,000
- 20,000 flee the city
- 11,000 cases among those that remain
- 5000 deaths in three months
- Peak death rate of 119 in one day

The yellow fever epidemic of 1793 may well be the worst disaster to befall a city in our country's history. To put it in perspective, this is how the 1793 numbers would translate to today's Philadelphia.

- Philadelphia population 1,500,000
- 600,000 would flee the city
- 330,000 cases would occur among those that remain
- 150,000 deaths would occur in three months
- Peak death rate would be 370 in one day

\* All numbers are approximate and include the contiguous communities of Northern Liberties and Southwark.

### Philadelphia of 1793

The initial cases of yellow fever occurred close to Stephen Girard's home on Water Street, a narrow, serpentine road bordering the wharves and docks. This is how that street looked to a foreign traveler shortly after the epidemic.

*"Behind these wharfs, and parallel to the river, runs Water-Street. This is the first street which you usually enter after landing, and it does not serve to give a stranger a very favourable opinion either of the neatness or commodiousness of the public ways of Philadelphia. It is no more than thirty feet wide, and immediately behind the houses, which stand on the side farthest from the water, a high bank, supposed to be the old bank of the river, rises, which renders the air very confined. Added to this, such stench at times prevail in it, owing in part to the quantity of filth and dirt that is suffered to remain on the pavement, and in part to what is deposited in waste houses, of which there are several in the street, that it is really dreadful to pass through it. It was here that the malignant yellow fever broke out in the year 1793, that made such terrible ravages, and in the summer season, in general, the street is found extremely unhealthy. That the inhabitants, after suffering so much from the sickness that originated in it, should remain thus inattentive to the cleanliness of Water Street is truly surprising; more especially so, when it is considered, that the streets in the other part of the town are as much distinguished for the neatness that prevails throughout them, as this one is for its dirty condition."*

– Isaac Weld,

*Travels Though the States of North America,*  
1795 to 1797

### Colonial Philadelphia



Photo credit: © Image Courtesy of the Library Company of Philadelphia

## **The Medical Debate**

### **1793, August through November**

The leading physicians in Philadelphia disagree as to the cause and treatment of the epidemic that was sweeping their city. Dr. Benjamin Rush, former Surgeon General of the Continental Army, signer of the Declaration of Independence, and one of the city's most prominent physicians argues that the illness is contagious and originated with a miasma (bad air) from rotted coffee on Ball's wharf above Arch Street. He prescribes purges using calomel (a toxic mercury compound), castor oil, and salts to accelerate the discharge of bile. He follows this with repeated radical bleedings of 10 to 12 ounces.

Other doctors, some with experience in the West Indies, disagree with Rush's methods and his theory about the cause. They argue that the disease arrived on boats from the West Indies and should be treated less aggressively. They advocate a quarantine of the arriving vessels and passengers.

Among the doctors opposing Rush's methods is Dr. Jean Devèze, a former medical officer for the French army in Sainte-Domingue. He has had experience with the disease and does not believe it to be contagious. He treats patients by keeping them comfortable, administering quinine, sweetened wine, broth, and creamed rice.

Lay people have their own theories for preventing the disease: set bonfires and fire off guns in the streets (smoke and the smell of gunpowder will purify the air), sprinkle vinegar throughout the house, carry a tarred rope in a pocket, hang a bag of camphor or dried frogs around the neck, chew garlic, or smoke cigars (women and children included).

Cold weather arrives in October, the disease-bearing mosquitoes begin to die, and the epidemic gradually fades away. Nobody has a clue why, and in the end it is hard to tell whether more victims were killed by the disease or by the treatments used by their doctors.

### **Panic Grips Philadelphia**

#### **August 23, 1791**

Slave uprising occurs in the French colony of Sainte-Domingue.

### **Spring and Summer, 1793**

A second slave uprising occurs, war breaks out between Britain and France, and British forces invade Sainte-Domingue. French landowners, some of their slaves, and free people of color flee to port cities in the United States.

The spring in Philadelphia is exceptionally wet, the summer is hot and dry, the wharves are littered with rotting cargo, and the port entry is jammed with vessels of every sort. Philadelphia is swamped with arriving immigrants. The annoying buzz of mosquitos can be heard everywhere. Stephen Girard gives financial assistance to destitute immigrants.

#### **August 3, 1793**

Drs. Philip Syng Physick and Isaac Cathrall are dispatched by the "Guardians of the Poor" to Richard Dennie's North Water Street Boarding house to attend to a man and woman who had fallen ill. The former, an Englishman, dies on August 4 and the latter, an Irish lady, dies on August 6. A French sailor at the same rooming house becomes ill and dies a few days later. In the same week, two next-door neighbors and five more boarding house residents also die.

#### **August 5, 1793**

Dr. Rush is called to the home of fellow physician Dr. Hugh Hodge. Hodge's young daughter is jaundiced, suffering from a high fever, and vomiting blood. She dies within two days.

#### **August 19, 1793**

At 77 Front Street, one block north of Stephen Girard's residence and business offices, doctors Benjamin Rush, John Foulke, and Hugh Hodge deduce that yellow fever is the cause of illness in 33-year-old Catherine LeMaigre, a merchant's daughter. It is the first case specifically attributed to yellow fever.

#### **August 21, 1793**

After treating numerous patients who die, Rush advises Mayor Matthew Clarkson that unsanitary conditions in the city are causing a yellow fever epidemic.

#### **August 25, 1793**

Mayor Clarkson convenes the sixteen member College of Physicians, which issues a report the next day that advocates marking the houses of the ill, ceasing the tolling of bells to announce deaths, keeping the streets clean, and burying the dead quickly. Rush advises "all that can move, to quit the city".



*Image Courtesy of the Library Company of Philadelphia.*

**Court House, Ricketts' Circus (center), and Oeller's Hotel.**

Over the next few weeks, about 20,000 flee, including George Washington, Alexander Hamilton, and Thomas Jefferson. ( Hamilton and his wife contract the disease but recover.) Most of the government officials administer the affairs of the nation from Germantown outside of Philadelphia.

Stephen Girard stays.

**August 26, 1793**

The College of Physicians recommends that a hospital be provided for yellow fever victims.

**Early September, 1793**

Many cities pass laws prohibiting or restricting entry of Philadelphia residents. Baltimore and Charleston forbid entry to ships that had recently docked at Philadelphia. Pennsylvania Hospital begins denying admission to patients with yellow fever. The city's Guardians of the Poor moves victims to an arena on the corner of 12th Street between present day Chestnut and Market Streets, where "Ricketts' Circus" had recently performed. Of the seven yellow fever victims placed there, two die. Neighborhood residents complain about the dead and dying who lay abandoned on the grounds. They threaten to burn or destroy the building unless the sick and dead are removed.

**September 10, 1793**

President Washington and his wife Martha leave for Mt. Vernon.

With civic employees fleeing, the post office closed, as well as Andrew Brown's *Federal Gazette*, the only newspaper

still active, Mayor Clarkson issues a call for an emergency meeting of concerned citizens to be convened at City Hall two days hence.

**September 12, 1793**

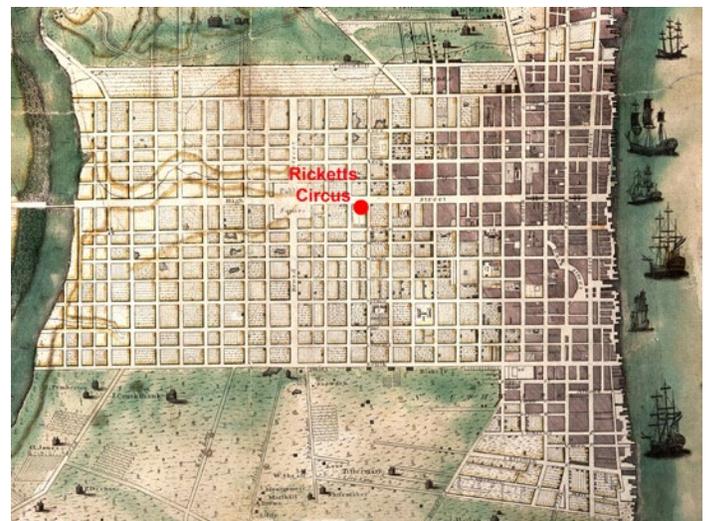
Only ten people initially volunteer their services, among them Stephen Girard and publisher Mathew Carey. Twelve more volunteer later. The group, calling itself the "Committee for Relief of the Sick", meets each day.

**September 14, 1793**

Mayor Clarkson forms a subcommittee to establish a common hospital at Bush Hill (on high ground near the present-day intersection of 16th and Spring Garden Streets). They arrange for wagons to transport the sick, hire people to bury the dead, and establish shelters for the orphans. He asks the Free African Society and black church leaders Richard Allen, Absolom Jones, and William Gray to organize their members to care for the sick and bury the dead. Rush, relying on observations during a Charleston epidemic 50 years earlier, convinces them that blacks are immune to the disease. He is wrong – more than 200 African-American volunteers succumb to the fever.

**September 15, 1793**

Stephen Girard, a wealthy man with nothing to gain and everything to lose, stuns the committee by "voluntarily



*Photo credit: © Image Courtesy of the Library Company of Philadelphia*

and unexpectedly” agreeing to take charge of the makeshift hospital at Bush Hill. It strikes his colleagues as suicide. Barrel maker Peter Helm agrees to serve as Girard’s assistant. The Committee report reads:

“Stephen Girard and Peter Helm, members of this committee, commiserating the calamitous state to which the sick may probably be reduced for want of suitable persons to superintend the Hospital, voluntarily offered their services for that benevolent employment. Resolved, that they be encouraged immediately to enter upon the important duties of their appointment.”

– Minutes of the Committee of Citizens, Sept. 16, 1793

To fully appreciate Girard’s actions, one must keep in mind that he was both wealthy and influential with the prospect of a comfortable life ahead. And by this action he faced not only heavy financial losses from the neglect of his business, but also the high probability of death in a most repulsive form.

### **Stephen Girard takes Control at Bush Hill Hospital Sept. 16, 1793**

Girard and Helm find horrific conditions at Bush Hill, the stench nauseating, the dead and dying intermingled, patients lying in their own vomit, and little nursing care or housekeeping. Girard and Helm split the responsibilities, Girard to handle inside management and Helm outside chores.

In a matter of days the facility is transformed – the dead buried, the patients bathed, beds provided, and halls cleaned. Girard moves quickly to hire matrons, nurses, and male attendants. He has clean water pumped to the hospital from a spring newly discovered by Helm, and in less than a week is caring for 140 patients.

### **September 21, 1793**

Dissatisfied with the methods and sporadic attendance of the three doctors who were being paid to service Bush Hill,

Girard uses his influence and negotiating skills to have them replaced by Dr. Jean Dévese, who has had previous experience with the disease in Sainte-Domingue. Dr. Benjamin Duffield is hired as his assistant.

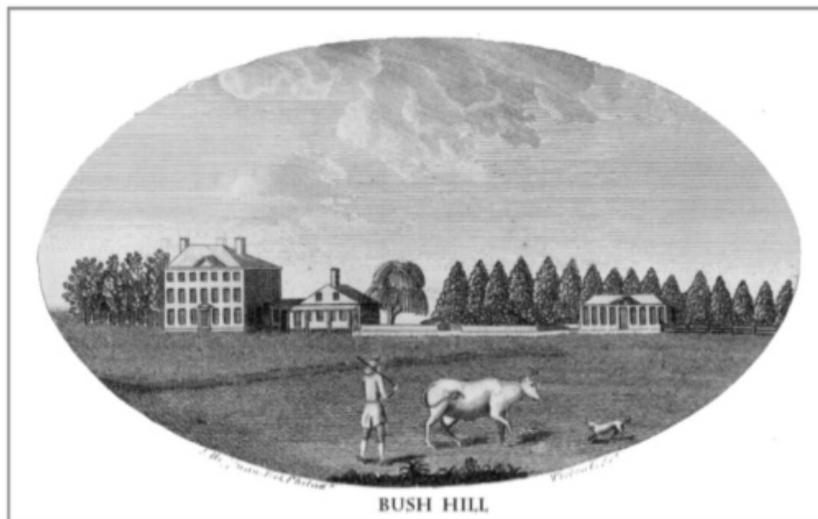
Girard and Devéze both oppose the bleeding methods of Dr. Rush, and Girard expresses the opinion that people were dying “because of the pernicious treatment by our doctors.”

### **Late September and October, 1793**

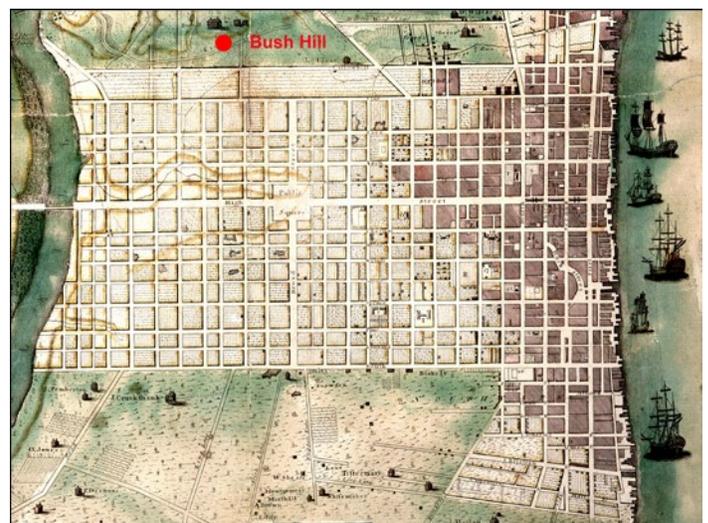
Girard works hand-in-hand with the staff, nursing the sick and dying and burying the dead. In a letter to a colleague in Baltimore he writes: “The deplorable situation to which fright and sickness have reduced the inhabitants of our city demands succor from those who do not fear death ... This will occupy me for some time, and if I have the misfortune to succumb I will at least have the satisfaction of having

performed a duty which we all owe to one another.”

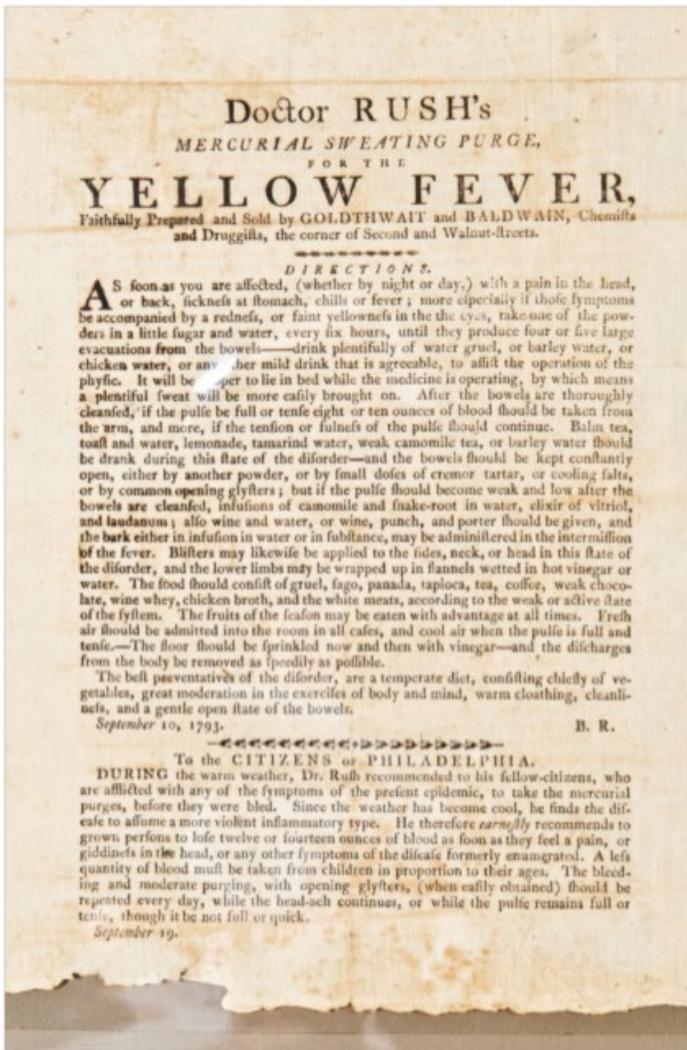
In his history of the epidemic, Dr. Devéze describes the heroism of Stephen Girard at Bush Hill: “I even saw one of the diseased...[discharge] the contents of his stomach upon [him]. What did Girard do?



*Image Courtesy of the Library Company of Philadelphia*



*Photo credit: © Image Courtesy of the Library Company of Philadelphia*



Stephen Girard using his own carriage to transport a yellow fever victim.

### Girard Properly Honored

On March 22, 1794 the following resolution was passed:.

*“[Stephen Girard] under whose meritorious exertions and peculiar care at the Bush Hill Hospital, in conjunction with Peter Helm, every possible comfort was provided for the sick, and decent burial for those whom their efforts could not preserve from the ravages of the prevailing distemper.”*

The resolution was neatly framed and delivered to the city archives, and that was it!

It took almost 100 years for the City of Philadelphia to finally and fully recognize Girard’s singular acts of bravery and mercy, when, on November 19, 1895, a plaque in his honor was unveiled in the Girard College chapel by the

...He wiped the patient’s cloaths comforted [him]...arranged the bed, [and] inspired with courage, by renewing in him the hope that he should recover. ... From him he went to another, that vomited offensive matter that would have disheartened any other than this wonderful man.”

Girard typically labors from six to eight hours a day, leaving only to visit the infected districts and assist in removing the sick from houses in which they were dying without help.

### November 14, 1793

As cold weather sets in and the epidemic abates, the Committee of Citizens issues the following report: “After the long continued distress with which our city hath been afflicted, the committee have the happiness to congratulate their fellow citizens upon the return of as great a degree of health... Applications for admission to the hospital at Bush-Hill have ceased ...”



Bush Hill record books.

widow of Jean Auguste Girard, the son of Girard's youngest brother Etienne. The plaque reads: "In commemoration of the courage and humanity displayed by STEPHEN GIRARD during the epidemic of yellow fever prevailing in Philadelphia in the year 1793. His heroism in that eventful period of the plague is an example of public spirit and charity most worthy the emulation of his fellow citizens. When there was no one to come to the rescue he volunteered his services in the noble task of nursing the fever-stricken victims in the city hospital. This courageous conduct demands more than a resolution of thanks. Such magnanimity merits admiration and honor from the citizens of Philadelphia forevermore."

A statue honoring Stephen Girard, sculpted by John Massey Rhind, was dedicated on May 20, 1897. It now stands at the west end of the Philadelphia Museum of Art. No United States commemorative stamp honoring Stephen Girard has ever been issued.

### **Humanitarian, Not to be Forgotten**

"His gallantry in taking charge of Bush Hill was akin to the heroism of a soldier in battle who rises to an occasion and performs an act of incredible bravery far above and beyond the call of duty. This was the real Stephen Girard, showing what he was really made of, who came to the fore in the

yellow fever epidemic when he could easily have followed the thousands of others who fled in fear and panic."

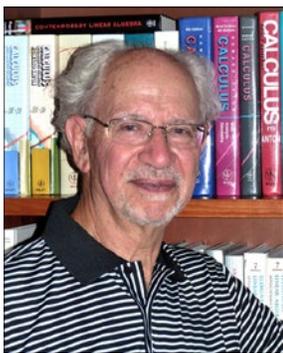
– **George Wilson, Biographer**

"When Girard made a proffer of his services, in the fever of 1793, it was not merely to aid by his counsel, or cooperate by his money, in alleviating the calamity of his fellow citizens; but it was to undertake in person the performance of the most laborious and loathsome duties of a nurse in the public hospital, for those who were then laboring under, and hourly dying of malignant fever!"

– **Stephen Simpson, Biographer**

"Oh! You who pretend to philanthropy, reflect upon the indefatigable Girard! Take him for your model, and profit by his lessons; and you citizens of Philadelphia, may the name of Girard be ever dear to you! – If you, like me, had witnessed his virtuous actions, his brows would have been long ago adorned with a civic crown." – **Dr. Jean Devéze Physician**

"My deeds must be my life. When I am dead my actions must speak for me." – **Stephen Girard**



**About the author.** Howard Anton is a Professor Emeritus at Drexel University. He obtained his B.A. from Lehigh University, his M.A. from the University of Illinois, and his Ph.D. from the Polytechnic Institute of Brooklyn, all in mathematics. He worked in the manned space program at Cape Canaveral in the early 1960's. In 1968 he became a research professor of mathematics at Drexel, where he taught and did mathematical research for 15 years. Following an initial success as a mathematics textbook author, he left Drexel in 1983 to become a full-time writer. There are now more than 200 versions of his books in print, including translations into Spanish, Arabic, Portuguese, French, German, Chinese, Japanese, Hebrew, Italian, and Indonesian. He was awarded a Textbook Excellence Award in 1994 by the Textbook Authors Association, and in 2011 that organization awarded him its McGuffey Award. Dr. Anton served on the Board of Governors of the Mathematical Association of America and guided the creation of its Student Chapters. He is a recipient of both the Girard College Alumni Award of Merit and the Stephen Girard Award. He is an avid photographer and has won awards in juried competitions.