



A Dedication to Zachary B. Friedenberg, MD

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It is a privilege to dedicate the 21st volume of the University of Pennsylvania Orthopaedic Journal to Dr. Friedenberg. However, it is quite a daunting task to write a dedication to a man who has been on this earth for 95 years and counting. In a few paragraphs, we will try provide a brief outline of his life and in a very small way to celebrate and pay a tribute to Dr.

Zachary B. Friedenberg.

Dr. Friedenberg was born April 12, 1915. That year also marked the birth of Muddy Waters, Billie Holiday, and Frank Sinatra. Historically, in May of 1915, the British steamship Lusitania was sunk without warning off the coast of Ireland by a German submarine resulting in the drowning of 1,198 individuals, including 114 Americans. This led the United States to enter into World War I against Germany in 1917. Other interesting events that occurred the same year as Dr. Friedenberg's birth include the establishment of direct wireless service between the U.S. and Japan, the first transcontinental phone call, and the first transatlantic radio-telephone communication (between Virginia and the Eiffel Tower in Paris). In the same year, the Victor Talking Machine Co. introduced a phonograph, the "Victrola", and the one-millionth Model T was produced by Ford.

During his younger years, Dr. Friedenberg was a first-hand witness to many other critical events in American history. He saw Amelia Earhart become the first woman to fly across the Atlantic Ocean solo. He experienced unemployment that reached 13,000,000 and the U.S. economy operating at less than half its pre-crash volume. Franklin D. Roosevelt was elected President in a landslide, the 21st Amendment repealed prohibition, *Gone with the Wind* by Margaret Mitchell and *Of Mice and Men* by John Steinbeck were published, and Disney released *Snow White and the Seven Dwarfs* as the first animated feature film.

It was also during this time, the 1930s, that Dr. Friedenberg began his career in medicine. He attended medical school at the Columbia University College of Physicians and Surgeons, graduating in 1939. The same year, researchers at Oxford began their study of penicillin and World War II began. After graduating medical school, he served a two-year internship in Brooklyn, NY at Kings County Hospital. As a member of the U.S. Army Reserves, he was called into active duty at the end of his internship in June of 1941. His first assignment was in Fort Benning, Georgia with the paratroop school. Although comfortable in Georgia, Dr. Friedenberg grew restless and requested a transfer to serve overseas. His request was granted and he was transferred to join the 95th Evacuation Hospital in North Africa.



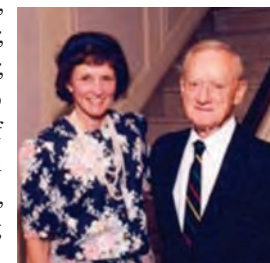
While serving in WWII with the 95th Evacuation Hospital, Dr. Friedenberg was intimately involved in the war. On September 9, 1943, the 95th became the first U.S. hospital in Europe during WWII after landing on the beaches of Salerno at noon on D-day. Dr. Friedenberg and the 95th also saw action at the Battle of the Bulge and were advancing toward Bavaria when the war ended. During this time period, the 95th admitted 42,000 casualties and was awarded two unit citations.

When Dr. Friedenberg returned from the war, he had earned enough points to be discharged from the Army. However, he had been classified by the Army as an Orthopaedic Surgeon without any formal training and was required to continue serving. After much insistence and a trip to see the Surgeon General in Washington, D.C., he was discharged and allowed to pursue formal training in Orthopaedic Surgery at the University of Pennsylvania. He successfully finished his training and remained at the University of Pennsylvania to start his practice in 1949. During his illustrious career, along with Carl Brighton, he played a major role in developing and standardizing bioelectricity as a science. The usefulness of bioelectricity was underscored in 1971 when it was first used to heal an un-united fracture.



Unbelievably, Dr. Friedenberg was much more than an Orthopaedic Surgeon. He was a family man, with a wife of greater than 30 years, children, and grandchildren. He loved to travel and scuba dive, taking amazing photographs that document his journeys on land and underwater. He was a prolific writer with countless journal articles to his credit. He also authored multiple books including *Medicine Under Sail*, *Hospital at War*, and *Legacy of Heroes*. He was a philanthropist, developing the Clinician Scientist Award through the Orthopaedic Research and Education Foundation, which provides salary support to investigators who conduct research while remaining in clinical practice. One of the first recipients was our very own David L. Glaser, MD.

There are so many words to describe Dr. Zachary B. Friedenberg: author, brother, diver, father, friend, hero, historian, husband, leader, lecturer, mentor, philanthropist, photographer, sailor, son, surgeon, and teacher (just to name a few). As Sir Isaac Newton said, "If I have seen further it is by standing on the shoulders of giants." Dr. Friedenberg, thank you for being a giant and allowing us to stand on your shoulders



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Dr. Friedenberg passed away on January 27, 2011. The decision to dedicate this year's UPOJ to him was made prior to his passing. We were looking forward to presenting this year's UPOJ to him at our graduation dinner. He was unaware of his being honored in this manner. We will all miss him greatly.