PERFUSION APPRECIATION WEEK 2025

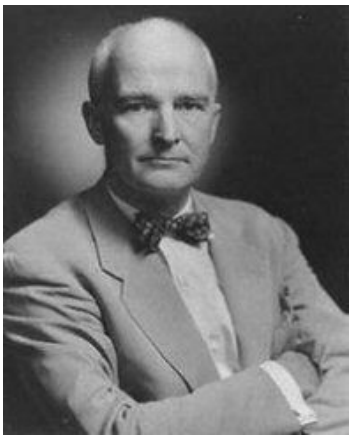
John Heysham Gibbon Jr., AB, MD, (September 29, 1903 – February 5, 1973) was an American surgeon best known for inventing the heart-lung machine and performing subsequent open heart surgeries which revolutionized cardiac surgery in the twentieth century.

In 1930 Dr. Gibbon was assisting Dr. Edward Churchill in an emergency pulmonary embolectomy. It was a desperate attempt as no patient in the U.S. had survived the removal of blood clots in open-heart surgery. As he recorded the patient's waning vital signs prior to the procedure Dr. Gibbon thought, "If only we could remove the blood from her body by bypassing her lungs, and oxygenate it, then return it to her heart, we could almost certainly save her life." Despite successful removal of large clots from her pulmonary artery, the patient never regained consciousness. This "critical event" initiated Gibbon's determination to produce a heart-lung machine. Over the next two decades, while most of his colleagues and superiors shared little hope in the prospect of designing a successful apparatus, Gibbon persevered by juggling fellowships and employment that allowed him time for research.

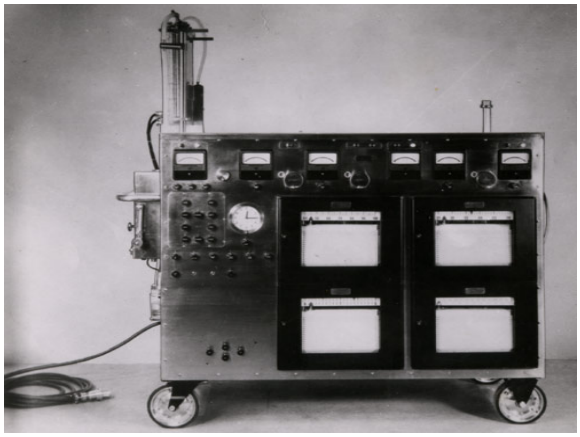
One of his supporter-colleagues was a researcher at Harvard, **Mary "Maly" Hopkinson**. Maly pursued work in scientific research, where she ultimately met her first husband, Dr. John ''Jack'' H. Gibbon. Jack and Maly were partners in every sense of the word and their collaboration made it possible for the Gibbon dream of the heart-lung machine to be realized. They married and continued working together, mostly at the University of Pennsylvania's research laboratories. By 1939, they published results of total body perfusion experiments on a number of laboratory cats that survived by employing the early apparatus invented by Gibbon.

On May 6, 1953 at Jefferson Medical College Hospital, **Dr. John H. Gibbon, Jr.** and his staff, with the help of his latest-designed heart-lung machine "Model II," **closed an atrial septal defect"** in eighteen-year-old Cecelia Bavolek. This was the first successful intra-cardiac surgery of its kind performed on a human patient. While Dr. Gibbon prepared the patient, **Maly Gibbon prepared the heart-lung machine** for operation. Maly Gibbon is therefore considered the **First "Perfusionist"**. Ms. Bavolek was connected to the device for three-quarters of an hour and for 26 crucial minutes, the heart-lung machine completely supported all circulatory and respiratory functions.

In recognition of this historical event, the first week of May is designated as National Perfusionist Appreciation Week.



Dr. John H. Gibbon Jr.



The First Heart-Lung Machine

While we Salute Maly and Dr. Gibbon, we Perfusionists rededicate ourselves to this wonderful profession.

Innovate, adapt, improvise, keep thinking, keep learning…

Wishing all my dear colleagues the very best for a rewarding and successful career in Perfusion

RAVINATH SWAMI
PRESIDENT, BCP-I