Digitally Recovering Film Documenting the History of Space Medicine Robert Marlin Moody Medical Library University of Texas Medical Branch at Galveston

Abstract

The Moody Medical Library at the University of Texas Medical Branch at Galveston (UTMB) seeks funding to reformat and digitize its holdings of 31 16mm reel to reel films from the Charles A. Berry, M.D. History of Space Medicine Collections (Berry Collections). The information on these tapes is currently. This project would dramatically increase accessibility to these rare materials. We are requesting \$5,095.00 to complete this project.

Background

The Moody Medical Library's Truman G. Blocker, Jr. History of Medicine Collections (Blocker Collections) houses a significant collection of materials related to the history of aerospace medicine, named the Berry Collections. Materials selected for this project come from the Charles A. Berry, M.D. Papers; the William E. Thornton, M.D. Papers; and the James Gaume, M.D. Papers.

Dr. Charles A. Berry (1923-)

With the successful launch of Sputnik in October 1957, the space race between the United States and the USSR consumed both countries. A year later, NASA was formed and Dr. Berry was given the task of selecting the country's finest test pilots. He, along with a select group, was charged with determining which of these men could best withstand the rigors of space travel. The final decision of the group culminated on April 9, 1959, with the announcement of the seven Project Mercury astronauts.

Dr. Berry served as NASA's director of medical operations in Houston through the Apollo program. In 1967, he also became director of the collaborative Aerospace Medicine Residency Program at UTMB.

There are 16 total 16mm films from the Charles A. Berry, M.D. Papers that are included in this project. Titles include: "Moonflights and Medicine;" "Apollo 15 Recovery Medical Aspects;" and "Zero 'G' Waste Management." The materials date from Project Gemini in the early 1960s through Skylab in the 1970s.

Dr. William E. Thornton (1929-)

In 1967, NASA selected Dr. Thornton as a scientist-astronaut. He logged 313 hours in space aboard two missions; the STS-8 *Challenger* (August 30-September 5, 1983) and the Spacelab 3 *Challenger* (April 29-May 6, 1985). In May 1994, Dr. Thornton retired from NASA and became a Clinical Professor of Cardiovascular Diagnosis at UTMB.

Dr. Thornton holds over 60 issued patents that cover a wide range of applications from military style weapons systems to the first real-time EKG computer analysis. His space related patents include the first in-flight mass measurement devices, an improved waste collection system, and a treadmill for in-flight exercise.

There are 12 total 16mm films from the William E. Thornton, M.D. Papers that are included in this project. Topics include both of his missions as well as footage of the treadmill that he designed for use in space. These materials were created in the 1980s during the Space Shuttle Program.

Dr. James Gaume (1915-1996)

In 1956, Dr. Gaume closed his medical practice to work with Dr. Hubertus Strughold, the "Father of Space Medicine," as the only civilian in the early US space program testing the space cabin simulator. Dr. Gaume later developed the lunar housing simulator.

There are three total 16mm films from the James Gaume, M.D. Papers that we are including in this project. Titles include "Today in Space Age" and "Bioastronautics in Engineering." These materials are not dated.

Benefit

Users of the Berry Collections include researchers from NASA's Lyndon B. Johnson Space Center in Houston and the UTMB Health/NASA Aerospace Medicine Residency Program as well as interested members of the local, national, and international public. These materials have broad appeal to researchers of various ages and research interests.

We have selected this collection for the SCAMeL Speedy Startup 2018 award because we are currently digitizing and making available online documents and photographs from the Berry Collections. We are halfway to reaching our goal of uploading 3,000 total items from the collections of Drs. Berry, Thornton, and Gaume by September 1, 2018. Including the video files to the documents would be a significant addition to those online collections. We are also in the process of designing an exhibit highlighting these early space doctors and planning a lecture to celebrate the completion of our digitization project. We would use this opportunity to bring special attention to the addition of these materials.

Presently, the Blocker Collections cannot provide access to these materials due to their format. Further, a few of the films are in the early stages of developing "vinegar syndrome," in which case, reformatting is critical to the survival of the information.

The Blocker Collections holds several other archival collections containing obsolete video and audio recordings. Completion of this reformatting project will provide valuable insight for future media transfer projects.

Project Plan

The first step in completing this project will be prioritizing which materials will be transferred first and assessing damage.

UTMB's videographer has the equipment needed to transfer the film into digital format. We will schedule appointments to deliver the materials to him, by collection (Berry, Thornton, Gaume), according to a mutually agreeable schedule. We will not require funding for shipping or delivery as the videographer's office is on campus; the University Archivist will transport the materials.

All of the monies requested will go toward the transfer of the information on the film as quoted by the videographer.

The digital files will be saved on discs to be stored in the Blocker Collections as well as on the designated Blocker Collections server. The film will be reviewed in order to check for the quality of the picture/sound and to gather information to be used as metadata (title, length in minutes, subjects, abstract, etc.).

We will upload the metadata and video files to UTMB Health SHARED (Scholarship, Historical Archives, Repository, & Electronic Dissertations); the Moody Medical Library's digital collection site hosted by the DSpace platform of the Texas Digital Library. Digital collections for Drs. Berry, Thornton, and Gaume already exist and these files will be added to those online collections.

Staff involved in this project will include the University Archivist and the Library Services Manager. Both will assess the condition of the films with expertise of the videographer before transfer. The Library Services Manager will communicate with the videographer about scheduling dates/times to have the materials delivered/picked up. The University Archivist and the Library Services Manager will review the files when returned. The Library Services Manager will create metadata and upload the files to UTMB Health SHARED.

Timeline

Based on the small number of materials involved in this project, we do not expect it to take more than six months to complete.

Month 1

Assess damage and prioritize collections.

Month 2

- Contact videographer to set up delivery for first collection.
- Deliver first collection.

Month 3

- Retrieve first collection materials and discs.
- Review videos.
- Create metadata and upload to UTMB Health SHARED.
- Deliver second collection.

Month 4

- Retrieve second collection materials and discs.
- Review videos.
- Create metadata and upload to UTMB Health SHARED.
- Deliver third collection.

Month 5

- Retrieve third collection materials and discs.
- Review videos.
- Create metadata and upload to UTMB Health SHARED.

Month 6

• Complete creating metadata and uploading to UTMB Health SHARED.

• If necessary, deliver to videographer any materials that need to be redone.

Statement of Library Director

As Associate Vice President of Library Services and Academic Resources, I endorse the proposed project to reformat and digitize the 16mm reel to reel films from the Charles A. Berry, M.D. History of Space Medicine Collections. I believe that this project would fulfill the intended purpose of the SCAMeL Speedy Startup award of benefiting the region by providing online access to this collection of a unique part of the history of aerospace medicine.

Patricia Ciejka

Associate Vice President of Library Services and Academic Resources

Moody Medical Library

University of Texas Medical Branch at Galveston

Budget

The total amount of funding requested is \$5,095.00.

For this project, we would hire UTMB's videographer to transfer the 16mm reel to reel film as the Blocker Collections does not have the appropriate equipment. The entire amount of funding requested will be paid to him based on the following quote.

The videographer charges \$100 per item to reformat. Each item will have its own digital file and DVD. He charges \$25 per file and \$20 per DVD.

We estimated the length in feet of all 31 of the films and based on our estimate (over 19,000 feet total), the videographer believes he can edit the films in six hours.

Description	Quantity	Unit Price	Total
16mm to Digital	31 films	\$100.00	\$3,100.00
Digital File	31 files	\$25.00	\$775.00
DVD	31 discs	\$20.00	\$620.00
Editing	6 hours	\$100.00	\$600.00
TOTAL			\$5,095.00