

The Women's Board of The Johns Hopkins Hospital
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GRANT APPLICATION FOR FISCAL YEAR 2024

DIRECTIONS: Please complete the entire form. If appropriate, indicate "Not Applicable" and justify. The original application plus an electronic version is due in The Women's Board office on or before 4:00 pm on Friday, January 6, 2023. Only one (1) application from each department will be accepted. Late or incomplete applications will not be considered.

DATE: 12/22/22

CLINICAL DEPARTMENT: Dermatology

CONTACT PERSON: Dr. Sewon Kang

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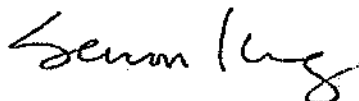
TITLE OF REQUEST: UVA-1 Phototherapy Unit

PHYSICAL LOCATION OF PROJECT: Johns Hopkins Outpatient Center Dermatology Clinic

ABSTRACT (Non-technical overview - 150 words or less):

The Department of Dermatology is very fortunate to have benefited from the Women's Board grant to purchase our current UVA-1 phototherapy device in 2010, making us the first UVA-1 Treatment Center in the region. Unfortunately, the device has now aged 12 years and is past its useful life. We are requesting funds to replace the device with an updated model that will allow us to continue offering world-class care. UVA-1 phototherapy is an advanced skin disease treatment technology that can be used to treat a variety of complex skin conditions, such as autoimmune connective tissue disorders, cutaneous T cell lymphoma, vitiligo, morphea, graft-versus-host disease, and systemic sclerosis. It emits a narrow band of UV light wavelengths that penetrate deeper into the skin than other wavelengths, reaching the inflammatory cells that spur many chronic skin conditions.

SIGNATURE OF CLINICAL DEPARTMENT CHAIRPERSON:



(Please type) Chairperson Name: Sewon Kang, MD

Chairperson Title: Noxell Professor and Chairman

Chairperson Email: swk@jhmi.edu

NOTE: Questions 1-6 must be answered. Please be thorough and concise.

1. Impact on patient care:

Ultraviolet (UV) phototherapy, in one form or another, has been used by the medical community since the 1950's to treat a variety of skin conditions, with the most common being psoriasis, vitiligo and eczema. In the last decade, advancements in medical device technology have made phototherapy treatments even more effective and accessible for these patients, as well as others suffering from more complex conditions. The UVA-1 device emits a narrow band of UV light wavelengths that penetrate deeper into the skin than other wavelengths, reaching the inflammatory cells that spur

many chronic skin conditions. UVA-1 has expanded treatment options for a wide group of patients, including those with skin of color, certain autoimmune connective tissue disorders, such as lupus, and other complex conditions including cutaneous T cell lymphoma, morphea, graft-versus-host disease, and systemic sclerosis. Additionally, UVA-1 treatment does not require the use of a combination medication (psoralen), which eases the burden on both the clinic and patient alike.

Unfortunately, our current UVA-1 device has aged 12 years and is past its useful life. It malfunctions 2-3 times per year causing delays in treatment for patients, and while it is still serviced, the model was discontinued in 2017. The new model has notable changes including acrylic lamp covers and temperature-controlled lamp bays. It is the safest, most advanced, UVA-1 phototherapy unit on the market.

If we no longer provide UVA-1 treatment due to the safety of our current device, our patients, many with rare diseases that have limited treatment options, will be greatly impacted as we are just 1 of 2 hospitals in the state that offer this treatment, the other being a VA hospital that is not an option for the public.

2. Number and type of patient who will benefit annually from this award:

In FY22, the Johns Hopkins Dermatology Department had over 69,700 patient visits. Many of our patients seek treatment at Hopkins for our expertise in offering innovative treatment options for complex conditions. Our clinic at Johns Hopkins Outpatient Center completed 305 visits using UVA-1. Patients include those with autoimmune connective tissue disorders, such as lupus, and other complex conditions including cutaneous T cell lymphoma, vitiligo, morphea, graft-versus-host disease, and systemic sclerosis.

Since the newer model has acrylic lamp covers and temperature-controlled lamp bays, we will be able to treat more patients since the cool down time will decrease significantly, giving us the opportunity to see patients every 15-20 minutes rather than every 45 minutes. The new model will also benefit patients who have a challenging time standing in heat for extended periods of time.

3. Significance:

As a leader in medicine, it is important for Johns Hopkins to remain at the forefront of clinical care, research, and education. Thousands of patients seek consultation and treatment at Johns Hopkins based on their belief that this is where cutting edge therapies should be performed. Johns Hopkins is 1 of 2 hospitals in Maryland that offer UVA-1 treatment, the other being a VA hospital. Additionally, there are just 3 other hospitals on the East Coast (2 in New York and 1 in Virginia) and 19 in the country that offer this treatment. If we no longer provide UVA-1 treatment due to our current device malfunctioning, our patients, many with rare diseases that have limited treatment options, will be greatly impacted. A new UVA-1 device will allow us to continue offering this advanced treatment to a wide range of patients with complex skin conditions.

4. Implications, if any, that this has to the Covid pandemic:

N/A

5. Personnel (Please note that we cannot fund grants that incorporate any salaries.)

Our team is well-versed in administering phototherapy.

6. Budget: Total Request: \$101,500

A. Equipment - price per item and discount if applicable for multiples. Please add compelling justification if multiples are requested. (Itemize and justify):

UVA1 Device and meter: \$93,500

B. Supplies (Itemize and justify):

N/A

C. What is the out-of-pocket cost to the patient? (Itemize and justify):

UVA1 phototherapy is covered by insurance and will be billed to the patients' insurance company.

D. Other Expenses, Hidden Costs (Please consider whether your grant proposal contains other costs that would require hospital funding, such as structural modifications for equipment installation, operating costs such as additional FTEs, training costs, etc.)*

Installation fee includes delivery, installation and training by 2 certified Daavlin service technicians: \$8,000

7. Have you requested funds from any other source?

☒ **Yes (What was the result?)**

We have requested that Johns Hopkins Hospital replace our current unit. Unfortunately, our requests have been denied due to other priorities.

☐ **No (Explain why)**

* If you have any concerns about additional costs of your grant to the hospital please feel free to contact the CFO Katina Williams @ kwill249@jhmi.edu. She is aware of our grant process. All grants selected for funding will eventually be submitted for final hospital approval by the Women's Board. It is not required for the departments to request approval from the hospital prior to submission on January 6, 2023.