# **UAHRA Newsletter**

#### **Summer 2023**

### **Upcoming Activities**

As you will see in the Recent Events section of this newsletter we have continued to enjoy frequent meetings and events. The Board would like to have an event or activity almost every month. Here are the events that are scheduled or planned.

August 1, 2023, 1:30 pm Meet in Nursing Building Lobby Tour of Nursing Simulation and Learning Innovation Center (SLIC)



The SLIC is a state-of-the art teaching facility with a 16 bed hospital lab. The SLIC provides a mock hospital for clinical experiences, including many high-fidelity human patient simulators.

# September 14, 2023, 2 pm Meet in SWIRLL Lobby Tour of SWIRLL

Given the history of severe weather in North Alabama, we are glad to have the chance to visit SWIRLL (Severe Weather Institute and Radar & Lightning Laboratories.



SWIRLL is a core research and teaching facility that houses infrastructure and UAH faculty, staff, and students who are involved in many areas of atmosphereic science research, including severe weather, lightning, radar meteorology, remote sensing, numerical modeling, and tropical cyclones. We'll see a number of parts of SWIRLL including the Research Operations Center and the high bay garage that houses mobile equipment that can be taken to areas where severe weather is anticipated.

# October 19, 2023, 2 pm Room 313 Student Services Building Meeting with President Chuck Karr

Dr. Karr will give us a talk on the state of UAH and then respond to questions.

#### **Recent Activities**

# February 21, 2023. Tour of Propulsion Research Center

On February 21<sup>st</sup>, UAHRA members got a guided tour of the facilities and research of the UAH Propulsion Research Center, one of the leading research centers at UAH. The tour was led by Dr. Robert Frederick, the Director of the PRC. The PRC does research in liquid, solid, electric, and fusion propulsion using facilities that include a supersonic wind tunnel and vacuum chambers.



Retirees in the Propulsion Research Center

During the tour, we were able to meet a number of very impressive undergraduate and graduate UAH students who are working on research projects in the PRC.

# March 23, 2023 Guided Tour of UAH Salmon Library

On March 23<sup>rd</sup> we had a guided tour of the UAH Salmon Library, including Archives, Making Place, and Special Collections. The tour was led by David Moore, Director of UAH Libraries. Highlights of the tour included the Makerspace, where UAH students can use 3D printers, make posters, and engrave a variety of materials, the Special Collection of science fiction literature, and the archives space where UAHRA members have been working on the photo identification project described in the Winter 2023 newsletter. There is a lot more photo identification to be done, so UAHRA members are encouraged to participate.



**Retirees in Makerspace** 

Unfortunately, two other planned activities did not take place. UAH cancelled the planned production of **Hair** and Dean William Wilkerson had to cancel his talk on the UAH Honors College. We hope to get Dean Wilkerson's successor to join us to talk about the College.

#### Officers and Board

The UAHRA Officers and Board for 2022-23 are:

President Jack Fix
Vice President Ravi Seth
Treasurer Debra Moriarity
Secretary Juanita Owen

Board Member Royce Boyer

Sharlene Bruce Steve Bruce Sherri Messimer

#### **New Members**

Cathy and Harry Delugach Sherri Messimer Marlena Primeau James Swain

#### **UAHRA President's Message**

About a year ago you may have recieved a message from me encouraging you to consider joining the Osher Lifelong Learning Institue.

Few retirees took advantage of the incentive, so I want to try again to encourage you to participate in OLLI because the UAHRA Board and I believe that OLLI and UAH retirees have much to offer one another. Amazingly, only about 5% of OLLI members are UAH retirees and only about 5% of UAH retirees are OLLI members. This is remarkably low considering that OLLI is housed in Wilson Hall on the UAH campus.

I've been an OLLI member for many years and have both taught and taken classes in the program. Given the extraordinary nature of the Huntsville community, there are retirees who have extensive backgrounds in many fields, some technical, some not. Many of these folks teach in OLLI. OLLI classes are generally outstanding, professional, and an enriching way to learn something in your retirement.

My OLLI students have often asked penetrating questions that are much better than those I usually get from the UAH undergraduates I teach in AST 100. They have knowledge that often surprises me. If you decide to join OLLI and to teach a class, I'm sure you'll be challenged by and pleased with your students.

Given what I know about UAH retirees, we have a lot of expertise and a lot to offer OLLI teaching, and, by implication, the Huntsville retired community. Collectively, UAH retirees could teach OLLI classes in just about anything.

OLLI is a remarkable bargain. You can join OLLI and take three courses in each of two semesters for a little more than \$200. Contrast that with the estimated \$11,000 for in-state undergraduate tuition and fees at UAH and the \$70,000+ annual cost of many private universities including Tulane, Vanderbilt, and the Ivies.

So please consider joining OLLI. OLLI can enrich your retirement and we can enrich OLLI. You can learn more about OLLI at

https://www.uah.edu/library/olli.

We will continue to ask those who attend UAHRA events to bring a non-perishable food item to donate to the Charger Pantry. The Charger Pantry was created by SGA in 2014 to provide UAH students with food assistance in times of need. The Pantry is usually low on protein (tuna, chicken, etc), ramen noodles, breakfast items (breakfast bars, single serving cereals), and fruits (canned or cups). These items are very helpful and run out quickly. The Pantry usually has plenty of canned vegetables, beans, and pastas.

#### We Welcome New Members!

If you know UAH retirees who are not members, encourage them to join. If you are a new or not so new retiree, please consider joining.

An organization such as ours always needs new ideas, helping hands and the strength that our mutual past brings. If you know of a potential UAHRA member, please ask them to fill out the "Membership Form" on the last page of this newsletter and mail it along with a check made payable to UAHRA to:

Debra Moriarity 1704 Mountain Fork Road New Market, AL 35761

Our membership year runs from October 1 – September 31.

# **Retiree Spotlight**

This and future newsletters will include short updates on what our retired colleagues are doing in retirement.

#### **Bernard Shroer**



Bernard (Bernie) Schroer retired from UAH in 2005 after a career as faculty member and chair of the Department of Industrial and Systems Engineering and Engineering Management and Associate Vice President for Research. For the first several years after retirement he worked part time at UAH developing simulation models for transportation systems. He also continued to serve as Executive Director of the Alabama Automotive Manufacturers Association.

More recently he has been volunteering at the UAH Systems Management and Production Center (SMAP) in developing new and extending the life of training simulators for nursing students in the College of Nursing's Simulation and Learning Innovation Center (SLIC). Since 2019 he has worked with fourteen undergraduate students who were employees in SMAP.

SMAP has two laboratories supporting the projects: 1) 3D printer lab and 2) a materials lab for casting a variety of items in Dragon Skin silicone rubber which is used extensively for special effects in the movie industry. Some of the projects using silicone rubber have been:

- Needle injection pads, suture pads, lance abscess pads, foreign object removal pads, intravenous catheter (IV) pads
- Simulated wounds
- Toenail removal trainers
- Child and adult ear and nose foreign object removal pads
- Baby foot needle prick trainers
- Ear, nose, baby foot, toenail trainer



Needle injection pads made at a cost of \$3 as compared to purchased pads of \$25+.

The group has developed a variety of silicone rubber patches to extend the life of trainers that have needle holes after many hours of student use. Many of the trainers can cost thousands of dollars.



Repairing a chest tube and needle decompression trainer. The chest drain pad with four ribs was made at a cost savings of \$200.

One of the more complex projects was the development of a lumbar puncture trainer. An IV bag of liquid is placed in an infuser bag. A bulb pump causes liquid to flow from the IV tube into the trainer. Nursing students then insert a needle between L3 and L4 vertebra to draw a sample of simulated cerebrospinal fluid. A manometer can be placed on the needle to measure the water pressure (simulated CSF fluid).



Lumbar puncture trainer. L1-:L5 vertebrae embedded in block of silicone rubber. A purchased LP trainer can cost over \$1,000. The trainer was made for \$100.

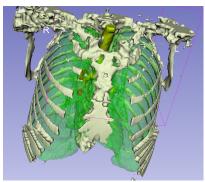
A number of organs and bones have been segmented from CT scans and 3D printed including:

- Spine segments (cervical, thoracic and lumbar vertebrae)
- Skull (various cross sections)
- Heart/aorta/spine assembly
- Kidneys/aorta/spine assembly
- Most of organs in body (lungs, heart, liver, stomach, spleen and kidneys)

Finally, the group has developed specialized trainers simulating medical conditions, including:

- Compression fractures at L1 and T12 vertebrae and corresponding kyphoplasty repairs
- Collapsed/punctured lung and healed lung

Patient with severe emphysema.
 Installation of four Zephyr valves in bronchi airways



Computer simulation/animation where students can zoom inside the lungs to see Zephyr valves.

# Thank You to UAH

Although the UAH Retirees Association isn't officially part of UAH, we get a great deal of help and cooperation from the university. The officers and board are very grateful for UAH support.

# The University of Alabama in Huntsville Retirees' Association (UAHRA)

# 2023-24 Membership Form

Membership in UAHRA is available on an annual and lifetime basis. Annual fees are due on October 1 and must be paid in full to qualify to vote in the spring elections in May.

New retirees may enjoy complimentary membership until the fiscal year begins in October.

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	$\Box$ UAH		\$1				
	☐ UAH	retired spouses (both UAI	H retirees)	\$1	15.00		
	☐ UAH retiree and non-UAH retired spouse				17.50		
	☐ UAH retiree and non-retired spouse				20.00		
	☐ Surviving spouse of UAH retiree				0.00		
	☐ Assoc	iate member*		\$1	0.00		
	☐ Other	individual applicant*	e years of retirement eligibility)		20.00		
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