

# AEROSPACE MEDICAL ASSOCIATION FOUNDATION NEWSLETTER

Volume 15 / Fall 2021

*With Your Help, the Foundation Marches On*

## AEROSPACE MEDICAL ASSOCIATION FOUNDATION BOARD

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As I write my third pandemic newsletter, I look back on my Spring musings and reflect that some of my wishes came true. We did have a delayed 2021 annual meeting in Denver this year, and the Foundation Board of Directors met in person with a good attendance. The AsMA meeting was smaller than usual, but the Foundation was still able to make in-person award presentations to several winners. Masks everywhere, but also a feeling of continuity and hope that next year we would see more of each other's faces.

The Mary Foley endowed fund presented its inaugural program in Denver. Board member Marian Sides is to be congratulated for her efforts to create and nurture the fund honoring Mary Foley along with the Aerospace Nurses and Allied Health Professionals Society. Their panel "A Tribute to Women in Aviation" was well attended, well received, and long overdue.

The equities market continues to be kind to the Foundation's investments, but donations have dropped due to the pandemic disruption. The Foundation is now in its Phase II of our Reach for the Stars campaign, and our goal of \$150K can only be attained if everyone joins in to support YOUR foundation. Aerospace medicine is undergoing changes in commercial space, military realignments, and civilian medical certification. Commercial air travel after COVID-19 may be changed forever. The Foundation's purpose is to help AsMA and the young professionals who are now entering the field meet these challenges. Please consider donating through our web page, [asmafoundation.org](http://asmafoundation.org). For those doing estate planning, please consider including the Foundation in your legacy and let us know you want to be a member of the Heritage Society.

Best wishes to all for a safe holiday season and a less viral 2022.

**David K. Broadwell, M.D., Chair**



## **INAUGURAL FOLEY PANEL “WOMEN PIONEERS IN AVIATION AND AEROSPACE MEDICINE” DESCRIBED AS INSPIRATIONAL**

The inaugural Foley Endowment Panel, sponsored by the Aerospace Nursing and Allied Health Professionals Society (ANAHPS), was held at the 91<sup>st</sup> Annual Scientific Meeting in Denver. This historic panel highlighted the legacy of Mary F. Foley and lessons learned from other inspirational women in aerospace medicine. The event was made possible by the Mary F. Foley Endowment established through the AsMA Foundation and with support from her many friends, family, colleagues and ANAHPS.

Attendees described the event as illuminating, exclaiming that these legacies need to live on as encouragement, hope and inspiration for the next generation. “We need to convert these exceptional profiles and stories into books for children,” says one. A panel presenter shared sentiment of wonder and wishes she had heard about these women early on. “Young people need to see and hear these stories and models of excellence as pathways and guidance for their careers,” she says. Posters and memorabilia giveaways to attendees added flare and spirit to the moment.

The second Mary F. Foley endowment panel, entitled, “Women in Space: Lessons on Leadership,” is planned for the AsMA 92<sup>nd</sup> Annual Scientific Meeting. Among leaders to be profiled are a cosmonaut who was the first and youngest woman to fly solo into space. Also, to be honored is a 29-year-old cancer survivor from St. Jude Children’s Research Hospital and crew member on the recent Inspiration 4 commercial orbital spaceflight. These women and more will be recognized for their unstoppable ambition, fearlessness, bravery, persistence, passion, desire, and curiosity for exploration and discovery of the unknown. They are models of excellence for others to emulate.

The Mary F. Foley Endowment fund has reached over \$14,000. We will continue to energize this fund to enable and fuel worthy symposia, workshops, leadership development, and mentoring activities for AsMA’s membership. If you wish to support this important program, we welcome your contributions. Please send charitable contribution earmarked for the Foley Endowment to the AsMA Foundation, 320 S. Henry St., Alexandria, VA 22314. We also greatly appreciate those who already have supported this cause that honors women in aerospace medicine and promotes the participation of women in aerospace medicine and nursing.

Marian B Sides PhD, MSN, FAsMA, and AsMA Past President

## DR. KATHRYN HUGHES NAMED TO THE FOUNDATION BOARD OF DIRECTORS

Air Force veteran Kathryn Hughes, MD, MPH, DAvMed has recently been named to replace outgoing AsMA Foundation Board member Dr. Melchor Antunano, and she attended the Foundation Board meeting in Denver. Dr. Hughes retired from the Air Force as a Colonel after 25 years of active duty as a physician/flight surgeon and fighter pilot with over 3100 military flight hours in multiple aircraft, including the T-38, A-10, RC-135, and Royal Air Force Hawk. She remains an active civilian pilot, AME and aerospace medicine consultant. A 1988 graduate of the US Air Force Academy, she served in multiple operational and leadership roles including Squadron Commander and Chief of Aerospace Medicine at Edwards Air Force Base – responsible for aeromedical support to the 412th Test Wing for developmental and operational test, as well as the USAF Test Pilot School. Dr. Hughes served as a Royal Air Force Exchange Pilot at MoD Boscombe Down, UK where she conducted in-flight testing of life support and pilot flight equipment. Most recently, she served as Director of the Human Systems Integration Directorate at Wright Patterson Air Force Base where she was responsible for ensuring that human-centric design criteria were included in the acquisition of new Air Force systems. She was instrumental in the decision to operationalize full-coverage G-suit protection for high-G fighter aircraft to mitigate G-induced loss of consciousness. She has been a senior consultant for Martin-Baker Aircraft Company (MBA) since 2016, working to support MBA with the USAF, US Navy and USMC.

Dr. Hughes is dual board-certified in Aerospace and Occupational Medicine and specializes in Human Factors, Human Performance and Human Systems Integration. She currently practices aviation and occupational medicine and has been a FAA AME since 2001. She has been a member of AsMA since 1996, including roles in many constituent organizations and has served on the AsMA Council and Executive Committee. She represents many AsMA constituencies well and is a great addition to the Foundation Board of Directors. She has already started to provide leadership in several areas and has been a pathfinder in establishing regular recurring gifts to the Foundation.

## 2020 ASMA FELLOWS SCHOLARSHIP WINNERS



*Dr. Hansjorg Schwertz*

Due to the cancellation of the AsMA meeting in Atlanta as a result of the COVID-19 pandemic, the **2020** AsMA Fellows Scholarship candidates were unable to deliver their presentations, which is an eligibility requirement. Four of the candidates submitted their manuscripts and were approved for publication in the AMHP journal (second eligibility requirement). Therefore, these four candidates were considered eligible for the 2020 scholarship (\$2,000 1<sup>st</sup> prize and \$1,000 2<sup>nd</sup> prize), but only three of them delivered the required presentation during the 2021 scientific meeting in Denver, CO, which were evaluated by Fellows Scholarship Committee members and additional volunteer AsMA Fellows. The 1<sup>st</sup> prize winner was Dr. Hansjorg Schwertz for his



*Dr. Michelle Hong Chan*

presentation and published manuscript on "*Hypergolic Propellant Off-Gassing: Implications for Decontamination and Evacuation*". The 2<sup>nd</sup> prize winner was Dr. Michelle Hong Chan for her presentation and manuscript on "Strange Behavior in an Aviator".

The **2021** AsMA Fellows Scholarship process proceeded as normally planned. There were four candidates who delivered their presentations during the 2021 scientific meeting in Denver, CO, and were evaluated by a group of Fellows in attendance. The next step for the Scholarship Committee is to evaluate these candidate's corresponding manuscripts accepted for publication in the AMHP journal by the October 31, 2021 deadline.

The Fellows Scholarship is funded by the AsMA Foundation through the generous support of AsMA Fellows and members. The awards are presented annually to two AsMA members who are students in an aerospace medicine residency program, graduate program in aerospace medicine (Master or Ph.D.), medical certificate or aerospace diploma course, or in a full-time education/training program in the allied fields of nursing, physiology, human factors, psychology, ergonomics, and engineering. Selection criteria include delivering a slide or poster presentation as a first author at the AsMA Annual Scientific Meeting and then submitting a manuscript as first author for publication in AsMA's Aerospace Medicine & Human Performance (AMHP) Journal based on the same topic and/or material covered in the slide or poster presentation. Scholarship recipients are selected by the AsMA Fellows Scholarship Committee based on the highest scientific value, originality, quality and relevance of the applicant's presentation and AMHP manuscript related to the field of aerospace medicine (including allied scientific disciplines). The scholarship committee gives special consideration to applicants who are at an early stage in their career development. The scholarship monetary awards are used for the purpose of underwriting, in whole or in part, the cost of registration fees, transportation, hotel accommodations, or any other valid fees or expenses incurred by the winners in relation to their attendance at one or more scholarly meetings on topics related to aerospace medicine.

*Melchor Antunano, M.D., M.S., Chair, Fellows Scholarship Committee*

## **2022 RICHARD "DICK" TRUMBO 5K PREVENTIVE MEDICINE FUN RUN/WALK ON MONDAY, MAY 24, 2021 IN RENO, NEVADA: HISTORY IN THE MAKING**

Plans are underway for the Richard "Dick" Trumbo 5K Preventive Medicine Fun Run/Walk scheduled for Monday, May 23, 2022 in Reno, Nevada. This year's Trumbo 5K will use the Virginia Lake Loop, a one-mile path surrounding Virginia Lake in Reno, Nevada. The Virginia Lake Loop is a short walking distance from the Peppermill Resort. The 2022 Trumbo 5K event will begin at 6:00 AM. History will be made during the 2022 Trumbo Preventive Medicine Fun Run/Walk. The very first AsMA 5k Fun





Run was organized by the AsMA Deputy Executive Director, Dick Trumbo, in 2001 and was conducted in Reno, Nevada! The 2022 Trumbo 5K event will occur 21 years after Dick Trumbo organized the first AsMA 5K Fun Run, and it will be conducted in the same city of Reno, Nevada.

We are hoping the COVID virus will be under control by spring 2022 that will allow all our Aerospace Medicine colleagues from around the world to attend the Reno meeting. Following our success in Denver for an in-person scientific meeting, we look forward to getting the “AsMA family” back together for a large in-person celebration in Reno, Nevada in 2022. We hope you will be able to attend the AsMA 92<sup>nd</sup> Annual Scientific Meeting and we also hope many of you will choose to celebrate the 21st anniversary of the AsMA 5K Fun Run by joining us for the Richard “Dick” Trumbo 5K Preventive Medicine Fun Run/Walk in Reno, Nevada.

Jeffrey C. Sventek, MS, CASP, FAsMA, FRAeS, Executive Director

## **WINNERS ANNOUNCED FOR THE 2020 AWARDS SPONSORED BY ASMA FOUNDATION ENDOWED FUNDS**

### **THOMAS J. AND MARGARET D. TREDICI AWARD – ARI TANIGUCHI-SHINOJIMA, MD, PHD**



Ari Taniguchi, M.D., Ph.D is the 2021 recipient of the Thomas J. and Margaret D. Tredici Award given for the most significant contribution to aerospace ophthalmology and vision science. Dr Shinojima studied the problem of Spaceflight Associated Neuro-ocular Syndrome (SANS) that affects astronauts on long-term missions and vision impairment in airline pilots. She contributes

to both aviation and space medicine and is frequently consulted with cases of central serous retinopathy. She serves as a Japanese representative to the ISS Eye Problem Working Group and has been active in educational activities for Japanese aviation medical examiners. This award is supported

by the Foundation through the Thomas J. and Margaret D. Tredici Endowed Fund in Aerospace Ophthalmology. The Foundation was saddened by the death of Dr. Tredici during the past year.

### **WALTER AND SYLVIA GOLDENRATH AWARD – VINCENT MUSASHE, M.S., CASP**



Vincent Musashe, M.S., CASP, FAsMA, CAPT, MSC, USN(Ret) received the 2021 Walter and Sylvia Goldenrath Award that is presented for the most significant contribution in aerospace physiology for his unmatched career accomplishments as an aerospace physiologist. He was tapped to lead the aerospace physiology career field providing

management to over 100 naval physiologists. He has continued to mentor young physiologists within AsMA and spent 20 years representing aerospace physiology on the AsMA council and served as president of the Aerospace Physiology Society. He developed and instituted the Marine Corps Aeromedical Safety Enlisted Program that was the first of its kind and led to the oversight of the aerospace medicine residency and the Naval Operations Medical Lessons Learned Center. He directed a task force to turn the aerospace medicine residency program into an all-inclusive operational medicine advanced program designed to improve the operational culture of senior medical personnel. This award is supported by the Walter and Sylvia Goldenrath Endowed Fund.

### **ANITA MANTRI, PH.D., MEMORIAL TRAVEL SCHOLARSHIP: - JASON DAVID, M.D.**



Shubha and Vishakh Mantri attended the annual scientific meeting in Denver and personally presented Jason David, M.D., Capt., USAF, the 2021 Anita Mantri, Ph.D., Memorial Travel Scholarship. This award honors the aerospace medicine legacy of Dr. Anita Mantri. Dr. David is currently stationed at Nellis Air Force Base as an Emergency Medicine Physician. He graduated from a Residency in Emergency Medicine at the Kirk Kerkorian School of Medicine and University of Nevada, Las Vegas. He graduated with distinction from the U.S. Air Force

Academy in 2014 and attended medical school at the Uniformed Services University of the Health Sciences (USUHS), receiving his M.D. in 2018. He started his career as an Emergency Medical Technician Basic at the U.S. Air Force Academy Health Clinic in Colorado Springs, CO, USA, from 2011–2014. From 2013 to 2014, he was also Cadet Commander at the U.S. Air Force Academy Cadet Wing Staff Ethics and Education. He attended USUHS from 2014-2018 and served his residency from 2018–2020. In 2020 he became Chief Resident at the University Medical Center Emergency Medicine



Residency in Las Vegas. He will begin earning an MBA at the University of North Carolina at Chapel Hill in October 2021.

Dr. David is a member of the Special Operations Medical Association, the Government Services American College of Emergency Physicians, the American College of Emergency Physicians, the Space Medicine Association, and the Aerospace Medical Association (AsMA). He was a member of the American Medical Association Medical Student Section until May 2017 and a member of the Aerospace Medicine Student and Resident Organization of AsMA until May 2021. His awards include the Asia Institute of Political Economy Scholarship, the Brigadier General Ronald D. Reed Outstanding Achievement in Biology Research Award, a Government Services of the American College of Emergency Physicians Scholarship, a University of North Carolina at Chapel Hill MBA Program Fellowship, Resident Quality Improvement Project of the Year, and Emergency Medicine Resident of the Year from Nellis AFB. His military awards include the National Defense Service Medal, the Global War on Terrorism Service Medal, and the German Armed Forces Proficiency Badge (Gold). The Mantri Award honors the life of Dr. Anita Mantri who was a student in the MD/PhD program at Texas A&M when she was fatally injured in an automobile accident. The Award is funded through a permanent endowment created by the Mantri family.

## **STANLEY R. MOHLER, MD, AEROSPACE MEDICINE ENDOWED SCHOLARSHIP: NINA PURVIS, M.PHYS., M.SC., PH.D**



Nina Purvis, M.Phys., M.Sc., Ph.D., PGCert, is the 2021 recipient of both the Stanley R. Mohler, M.D., Aerospace Medicine Endowed Scholarship and the AsMA International Aerospace Medicine Scholarship. She is currently working on an M.B.B.S. in Medicine and Surgery at the Barts and The London School of Medicine and Dentistry, Queen Mary University of London. She earned an integrated Bachelor's and Master's degree in Astrophysics from the University of Hull in 2012 and then a Postgraduate Certificate in HE Research and Teaching and a Ph.D. in Medical Physics at Hull York Medical School in 2015. She received

her M.Sc. in Space Physiology and Health in 2020.

A native of Britain, Dr. Purvis began as a Graduate Teaching Assistant at the University of Hull from 2012–2015. At the same time, she served as a doctoral researcher as part of her Ph.D. From 2015 to 2016, she was a Postdoctoral Research Fellow in Oncological Imaging and Radiogenomics at Memorial Sloan Kettering Cancer Centre. Her teaching experience includes being a physics teaching assistant, a graduate teaching assistant, and lecturing on the physiology of commercial spaceflight. She is an author or coauthor on seven papers. Her honors and awards include the Piramal Healthcare Student Award for Highest A2 Level in Physics; Finalist for 3-Minute Thesis at the University of York; both the International Society for Magnetic Resonance in Medicine (ISMRM) Conference International Student Travel Award and the Hull York Medical School (HYMS) Conference Travel Award for travel to the 2015 ISMRM in Toronto, Canada; runner-up of the Next Generation Aerospace Medicine Presentation Competition from the Royal Aeronautical Society; Suborbital Day Special Prize for Best Presentation; and the UKSEDS National Award for Research Project of the Year.

The Mohler Award is supported by an endowed fund supported by Dr Mohler’s friends, family, and colleagues and honors his lifetime of achievements in the field of aerospace medicine and education.

## **SUPPORTING THE ASMA FOUNDATION**

The AsMA Foundation supports aerospace medicine, the allied fields, and the Association through scholarships, awards, research grants, scientific publications, professional development, educational opportunities, and other activities. Despite the effects of the COVID–19 pandemic forcing the cancellation of the 2020 AsMA Scientific Meeting and reducing attendance at the 2021 meeting, the “REACH FOR THE STARS” campaign continues to reach major milestones. The Foundation’s major fund-raising effort was introduced at the 2019 meetings with an initial Supernova goal of \$50,000. With the help of AsMA members and friends, the campaign has now far surpassed that goal and has gone intergalactic at \$117,816 and is approaching Andromeda, the next goal of \$150,000. With the help of recent donations and gifts transferred from the annual meeting registration process, the funds of the constituent organizations, endowments, and Foundation now total \$641,500. Though we are pleased with that success, our progress has been slowed by the pandemic, and the Foundation and its mission continue to be dependent upon your generous donations. We thank all the donors and supporters of the Association and the Foundation whose contributions continue to make a difference in aerospace medicine and the allied fields and encourage those who have not contributed to help the Foundation reach its next goal. While the Foundation’s unencumbered funds are limited, there has been considerable effort to find specific activities and projects that the Foundation can support for the Association at this critical time. Please consider donating this year to help us accomplish this goal and continue our ongoing programs. However, it is also possible to designate Foundation gifts to existing Foundation endowed funds or constituent organization funds held in the Foundation’s pooled investment fund. These funds include:

### **Fund Name**

Stanley R. Mohler Fund  
Walter and Sylvia Goldenrath Fund  
Thomas and Margaret Tredici Fund  
Richard B (Dick) Trumbo Fund  
Mary Foley Fund  
Anita Mantri Fund  
Society of NASA Flight Surgeons Fund  
Space Medicine Association Fund  
ANAHPS Louis Marshall Fund  
ASAMS

### **Fund Supports**

Scholarships  
Aerospace Physiology  
Aerospace Ophthalmology  
Trumbo Preventive Medicine Activity  
Leadership Events for Women in Aerospace  
AMSRO Mantri Travel Scholarship  
Scholarships and Awards  
Scholarships and Awards  
Scholarships, Research, and Training in ASN  
Scholarships, Research, Education, Travel

It is also now possible to donate cash gifts through the Foundation’s website noted below. Gifts may include the donation of securities, bequests, life insurance, savings bonds, retirement plan assets, or real estate. Many of these methods can limit tax liability, but it is prudent to consult a tax advisor. Donating stocks or securities directly to the Foundation is easy and requires no more than emailing



the Board Secretary/Treasurer for simple transfer instructions ([eugenia.bopp@us.kbr.com](mailto:eugenia.bopp@us.kbr.com)). If you prefer, you can call Jeff Sventek of the AsMA HQ office at 703-739-2240 ext 105. For more Foundation information, visit the Foundation website at: <https://asmafoundation.org> As you consider your next contribution, keep in mind that it can be done through:

- Credit Card donations
- Donations can be made by pushing the Donate Now button on the Foundations web page – <https://asmafoundation.org>
- Donations through PayPal
- Donations of stocks and securities
- Donations of Charitable Gift Distributions
- Donations by check using the form below
- AsMA members may also consider joining the Heritage society and include the Foundation in their estate planning or by designating future gifts

## AsMA FOUNDATION HERITAGE SOCIETY



The Heritage Society honors colleagues and friends who make a commitment to the Foundation by will, revocable living trust, life insurance, life-income gift, retirement account designation or a deferred (future) gift arrangement. Qualifying commitments may be of any amount and may be directed to support existing programs and endowments, qualified new programs of the donor's choice, or may be undesignated. You can assure your ASM Legacy by joining the AsMA Foundation Heritage Society. We will add your name to list of AsMA Members who have included the Foundation in their estate planning. Please notify Dr. Broadwell or any of the Board members.

Charles Billings\*  
David K. Broadwell  
\*Deceased

Jeffrey R. Davis  
Walter and Sylvia Goldenrath\*

Richard Jennings  
Al Parnet

## CONTACTING THE FOUNDATION

**AsMA FOUNDATION**  
**320 S. HENRY ST.**  
**ALEXANDRIA, VA 22314**

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**Somewhere inside all of us is the power to change the world. *Roald Dahl***

## Thank You for Supporting the AsMA Foundation

Donation Amount: \_\_\_\_\_

Purpose of donation? \_\_\_\_\_

Name: \_\_\_\_\_

Payment:

My check payable to the AsMA Foundation is enclosed

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Please Charge my credit/debit card

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Name on Card \_\_\_\_\_

CVC Code (3 numbers on back) \_\_\_\_\_

Mail to: AsMA Foundation

Signature: \_\_\_\_\_

320 South Henry St.

Alexandria, VA 22314