Let's take a moment to be honest with ourselves and fellow HOSA readers. We have all been there — the lack of motivation that unavoidably finds its way to even the most motivated of the... the well, motivated!

Whatever you label it burn-out, spring break fever, "senior-itis" or you are just plain over it, the feeling of being overwhelmed, wanting to procrastinate, or the sheer lack of lack of energy and enthusiasm for a task can sometimes get the best of us. However, that doesn’t stop the work from continuing to pile up and the deadlines to keep ticking closer.

Since it’s probably not possible to take a week at the beach everything we need to recharge our batteries, how do we reclaim our energy to task done without completely falling apart?

The answer is MINDFULNESS!

Experts suggest you consider being mindful in where you spend your time — and surprisingly that time is not spent on the actual task but rather on the energy to get the task done.

In an article from the Journal of Applied Psychology cited by Adam Grant in the Harvard Business Review, research suggest that people become happier and less stress when they simply accept that the work they are doing is just work that they don’t want to do. It’s not enjoyable. And the only way to complete the project and to feel better about it, is momentarily to detach from it.

Wait! Detach from it? It seems we are always taught to do work that we love to do and to immerse ourselves in it! And if we don’t want to do it, we should just put our heads down and dig in! But if we are being honest, isn’t there seemingly always one paper we can’t seem to get started on? And isn’t there that one lab report that we just can’t seem to bring ourselves to finish?

The question becomes, “How does detaching from a task help you find the motivation to complete it?” It begins by being MINDFUL. Give yourself permission to say that you don’t like the task before you, and that is ok. You aren’t going to love with great passion every single thing you do. Understand that forcing yourself to complete the project is probably doing more harm than good, and that you need to give some space between it and you.

The definition of space and detachment of a task is, unfortunately, not defined as a week-long cruise. It is not prolonged procrastination. It is not an excuse not to complete the assignment.

Detachment is defined as a small moment in time where an intentionally structured break from the task is taken and your body and mind is refocused on an activity improves well-being and productivity.

Experts recommend using some of these detachment tricks to rekindle your motivation!

FOR FIVE MINUTES: Intentionally find an area where you can quickly help someone else! Helping someone creates a connection to others which makes you feel better and lowers your stress. Whether it is getting someone a cup of coffee, helping someone make copies, or even helping someone carry a big stack of books, try to spot a need that you can fill, and for five minutes, be the awesome person who fills it!

HIDE YOUR PHONE: Even if it’s on airplane mode or you are not even using it, simply having your cell phone in site brings stress and hinders our ability to focus on tough task. Just by placing it in drawer, a backpack, or even behind your back tricks your brain into thinking that you are fully present and engaged in the task at hand.

CHECK YOUR BRAIN OUT: There are some positive benefits to letting your mind wander. Set a time to remove yourself from task and take your brain somewhere else. Whether it is a video game, a movie or any other creative task, an unrelated creative outlet will be a welcomed relief to churning the same problem over and over in your head. Chances are the problem is chewing away in the background anyway so when you return to the work, don’t be surprised if you have some new ideas to go with your new energy. (Remember, this is a timed break!)

GET LOST! Take a quick 10 minute walk! Put it on your calendar and make a habit of stretching your legs and clearing your mind! Try to clear your mind of the work. Listen to music, a book or a podcast, or bring a friend along to talk about anything but the work at hand!

SLEEP ON IT: Sleep is important, and when we don’t get enough sleep we feel less in control and have more stress. For those task that we can’t seem to find the motivation to finish, we often stress late into the evening and morning hours with little to show for it as the sun rises. Be mindful that you are done with the task for the day and admit that there is not going to be any progress from this point forward. Simply put it away and commit to starting again the next day with a new motivation!

That stack of books on your desk? They still have to be read. The paper that is half written on your computer? It still needs to be written. And the group project where you are responsible for creating the visual aid? It will still need a visual aid. Detaching from work isn’t permission for not doing your work. But hopefully it will be a useful tool that you can use to make your work more manageable and make you, a happier, more productive student leader!
Ways to Get Community Members Involved in Your HOSA Chapter

By Darius Thomas, Central Region Vice President

Getting the community involved with your chapter can be difficult at times, but with persistence and dedication, we are sure you can do it! Fostering connections at a community level is vital for a healthy and thriving HOSA chapter which is why I wanted to take some time to write about how to get community members involved in your chapter. Ultimately, every community is unique in some way and being members of your respective communities means that you know more about how your specific community operates. I would urge you to utilize this specialized knowledge about your community and try to make use of it. With that here are some general tips and advice that you can try to apply to get businesses and other community partners involved.

Make the First Step - Identify exactly what HOSA-Future Health Professionals is and show you’re interested in starting a professional partnership with these specific community members. Perhaps sharing your HOSA Story with photos, videos, brochures, or any other material can be a way to do this!

Offer Incentives - A partnership is an agreement to work together between two parties. It must be mutually beneficial. Show the partner who you are approaching what your HOSA-Future Health Professionals chapter will gain from this partnership and make sure to highlight what they as a partner will gain from this partnership in the community. One large gain is that they are assisting in the pipeline for future health professionals! Another example is to approach a partner to sponsor the cost of your chapter’s t-shirts and then including the logo of the partner on the shirt.

Personal Connections - A lot of times teachers or family members may have the connections that can be utilized to your benefit! Make sure to ask others for advice and additional knowledge. Building a comradery and name for your HOSA Chapter in the community will help to expand your network.

Clear Vision - Once you have engaged and there is a flow of communication make sure you have defined goals and specific desired outcomes for your chapter. Using Specific, Measurable, Achievable, Relevant, and Time-bound (SMART) Goals are a great way to do this! Example goals can be fundraising for the HOSA Service Project, covering funding for ILC, or sponsoring members of your chapter to attend the Washington Leadership Academy.

On February 28th, Dysart High School HOSA chapter in Arizona had the privilege to visit the Midwestern University to show our Junior and Senior members an opportunity for a pathway for further education in the nearing future. While the chapter was there we were able to do activities that the school offers for Midwestern own students. They were able to work with the teachers and students to learn a basic background of Physical therapy, surgical skills, and optometry.

When our chapter was working on our surgical skills they learned how to properly put on scrubs for surgery and how to take it off without contamination, then they got hold an actual brain (sadly we were not allowed to take pictures of the brain) while they earned the skill to make a basic incision.

Moving to physical therapy, the team showed us basic phase one rehab exercises and stretches and simple skills they could use in a real physical therapy office. It was a very hands on part of the day which brought our members closer together.

Lastly, our chapter got the chance to test their own eyes along with test the eyes of our chapter’s members with optometry machines. Everyone enjoyed this part because it was both fun to learn where everyone stood in the line of vision but also joke and laugh as a group.

We thank Midwestern University for the great opportunity for our Juniors and Seniors to gain some skills and gain a better understanding of some jobs in the medical field. We hope to return next year and enjoy another fun and educational day at Midwestern.
Representing Oregon HOSA and CTE to the State Legislature Members

On February 5th, I experienced the amazing opportunity of travelling to the state capitol in Salem, Oregon to advocate for CTE and CTSOs. I was unsure if this would have an impact on me, because I had never done something like this before. Speaking to legislators about CTE and funding for CTSOs as a whole, rather than speaking about one organization, sounded intimidating. Before this experience, I did not understand the important of talking to legislators about this subject. Once I arrived at the capitol, I was pummeled with information about how Oregon’s funding has decreased over the last twenty years. We also learned about how there’s not enough money to go around for CTSOs in Oregon. I thought that this would be a subject that is very hard to speak to a legislator about for one main reason—I didn’t think that they cared enough. Before this experience, I thought that they are always busy with bills and laws related to the welfare of this state, I thought this would be an uphill battle.

Upon arriving at the Capitol building in downtown Salem, Oregon, I stood in awe of the vast and intricate architecture of the building alone. The historical murals, the building, and the Oregon state seal staring me right in the face. It made me feel powerful. I actually felt that I had a voice in what I was doing—advocating. It was a drastic change to what I had thought I would be doing when I first learned of this opportunity but, being in the Capitol building gave me a sense of humility.

My first meeting was with Representative Courtney Neron. As I walked with my assigned partner, a Skills USA State Officer, I was nervous. I’ve spoken to the mayor and city elected officials before, but I felt like I had a large weight on my shoulders representing Oregon HOSA. I walked into the cubical-like area and introduced myself to one of her staff members. Representative Neron was not available so, the staff member offered to speak to us about the subject at hand. I left that meeting satisfied because I was able to get my points about CTE and CTSOs across.

While walking down the hall, I ran into a lady holding a breakfast box and I greeted her, thinking she was no one in particular then, I turned, on a hunch, looking back towards the direction she went. She turned into the area I had just left. It was Representative Neron! I walked back into her office where I had the opportunity to speak to her about my experiences in HOSA and elaborate on the importance of funding for CTSOs. It was great, because she expounded on her support for CTE and CTSOs as a whole. So in the end, it was easy talking about my HOSA story and how this organization has had such a lasting impact on me. I left her office, excited, ready to go to my next meeting with Senator Kim Thatcher.

After a filling lunch, I rushed up to my next meeting. I was nervous, but excited, hoping for a similar outcome with what happened earlier that morning with Representative Neron. We were invited in and we greeted each other and the meeting began. I switched partners so he took the lead on this meeting, but by the way the Senator was looking at the both of us, it was clear that she wasn’t very enthused. I tried inserting things about my HOSA experience and what benefit funding would be for all students in Oregon CTSOs, but in the end, though I saw her taking avid notes of what was being said, I left pretty battered by the outcome of the meeting. It left me with mixed feelings, destroying my confidence I built up from the first meeting I had. I learned that not every lawmaker has the same views on specific issues and that sometimes rejections allow one to learn things like this and thus can have a more tailored conversation to specific lawmakers as opposed to other ones.

In the end, I believe I had a successful time representing Oregon HOSA and CTE to the state legislature members. I had very informative meetings and, it helped me understand what it meant to advocate for something that one cares about. Not only did it reinstate a fire within me to advocate and to be bold about the things I care about, it also allowed me to learn to be a leader and not a follower. My next steps following this experience is that I plan on running for State Office because, after having such an experience, it is empowering me to step out and allow myself to get in uncomfortable situations, so that I can have more confidence in advocating for things I do care about and expounding on it in the best way possible. I also want to use this as an opportunity to be more active in the National Service Project. Educating people about pediatric cancer and using statistics and facts to increase awareness. In the end, this experience has had a major impact on me and is allowing me to branch out and do things I never thought I would be doing.
Beaverton High Schools raise $5,500 for Operation Walk Freedom to Move

HOSA Chapters in Beaverton High Schools, in Beaverton, OR, sold RightResponse First Aid kits to raise funds for Operation Walk Freedom to Move. The HOSA Members surprised Doctor Paul Duwelius with a check for $5,500 to support the next Operation Walk Freedom to Move medical mission in the Dominican Republic. Over 134 HOSA members were a part of the fundraising efforts involving the sales of the HOSA Branded RightResponse First Aid kits.

Operation Walk Freedom to Move enlists medical teams to travel to the Dominican Republic to provide orthopedic surgeries to those needing life-improving procedures, ensuring that they have the ability to work, move, and engage in life. The medical teams also share their knowledge and expertise with local medical staff so that they can perform the same life-changing operations long after the Freedom to Move teams have returned home.

In addition, two separate USA physical therapy teams visit each spring to compliment the Dominican caregivers and physical therapists who work with post-operative patients. Seven American Orthopedic Surgeons have made long-term personal commitments to provide medical education and surgical training for Dominican Orthopedic doctors. The Operation Walk Freedom to Move plan is to raise the bar of Orthopedic health care for the island, so ultimately the island’s physicians and allied care providers can sustain care at a quality level.
It turns out that the reminder to simple “don’t forget to say thank you” that was instilled in us at an early age is one of the keys to making our brain and body healthier.

Happify.com sites those who those who regularly practice giving gratitude notice “more positive emotions, feel more alive, sleep better, express more compassion and kindness, and have stronger immune systems.” Gratitude can also calm down the nervous system, rewire your fight or flight response system, and help you become more resilient.

It seems to be the simplest (and nicest) way to improve your overall health! And what could be easier? Gratitude seem easier to roll off the tongue when presented with a raise at your job, a new car, or flowers from a loved one. However, Robert Emmons, author of “Thanks! How the New Science of Gratitude Can Make you Happier,” and UC Davis psychologist, discovered that even simply writing a brief reflection on the moments or a list of things that you are thankful for can significantly increase your well-being. Yes, the simple task of taking a few moments to be thankful for the little things in life that we often take for granted-- a cup of coffee, a nice text from a friend, or the fact the sun is shining- can provide the same benefits.

Can this be true? Can a simple list of things you appreciate about your day can make you mentally and physically better? Research says YES and here is why!

ENERGY LEVEL AND YOUR PHYSICAL HEALTH! In Emmons’s study of those who consistently wrote down things they were grateful for, reported an increase in energy and improvements in their physical health. They had improved kidney function, lower blood pressure, and stronger hearts. Experts believe that it is because grateful people appreciate their health better, thus are more mindful to take care of themselves better than those who don’t acknowledge themselves when they are healthy – only when sick. The better you feel, the more energy you have!

READY AND RESILIENT! Acknowledging positive aspects in our day can create the habit of looking for the positive in people and in our lives instead of finding and dwelling on the negative. Emmons states that it makes us better at “bouncing back from loss and trauma and being able to see the blessings and not the curses.”

RECIPIACED RELATIONSHIPS! Showing gratitude to our close friends and family can also rewire our brains. With gratefulness and appreciate being top-of-mind, our nervous system is calm and we resistant the urge to argue or immediately go negative. As one study participant stated, “you can’t be grateful and resentful at the same time.”

A CULTURE OF NICE! When you express gratitude, a biological response is triggered in your brain that includes dopamine, a “feel-good chemical.” So, when you express gratitude to someone, they feel gratitude in return, and the feelings continue back and forth. The more that this feeling is receive and replicate, it will eventually create a culture of kind acts and appreciation.

So, take a few moments to stop and think about the things that you are most grateful for in this day.

Your body and mind will THANK YOU for it!
WIN CASH & MAKE A DIFFERENCE

HOSAvia and the Campaign for Tobacco-Free Kids continue to offer HOSA members FREE Taking Down Tobacco trainings that include the dangers of tobacco and nicotine including e-cigarettes, and how youth voices can help create the first tobacco (and nicotine) free generation.

What Can I Do NOW? Host a Taking Down Tobacco 101 training by May 17, 2019
- The first 50 chapters or Advisors to host trainings and report them online receive $100.
- Chapters that train 75 youth or more are entered to win one of three $1,000 cash prizes.

What Can I Do NEXT? Check out other Taking Down Tobacco online courses to take your advocacy to the next level!

For More Information CLICK HERE

GIVE YOUR STUDENTS A CHANCE TO INNOVATE FOR CHANGE AND WIN BIG!

COMPETE TO WIN $35,000+ IN SCHOLARSHIPS & PRIZES

The AdCap Challenge offers a chance for high school students to use their creativity to create change and make a difference in the world they’re living in.

Students will team up to solve real-world problems faced by our Challenge Partners, compete with other student teams nationwide, interact with influential companies, and earn recognition, prizes, scholarships, funding and more!

HOW IT WORKS
- Sign up to be a Challenge Advisor at AdCapChallenge.org to receive a free Challenge Kit!
- Dig into your Challenge Kit when it arrives to get started! Challenge Teams choose one of 5 Challenge questions they want to address and come up with their BIG idea to solve it.
- Challenge Teams must submit their solutions by April 25 to compete to win!

RECOGNITION & REWARDS

All participating students who submit a complete entry by April 25 receive a Certificate of Recognition.

100 Semifinalist teams will win prize packages and the potential to receive a $1,000 grant to implement their project.

5 Finalist teams compete in an all-expenses-paid, in-person “Finalist Experience” at SAP headquarters in Pennsylvania for a chance to win funding and scholarships!

HOSA members and family SAVE when you use Hertz!

HOSA has been accepted into the Hertz Membership Program! By using the CDP ID# - 2174594 when making your car rental reservations with Hertz, you will receive:
- 10% discount on Hertz daily member benefit rates (car classes A through F compact 2 door through full-size 4 door).
- 10% discount on Hertz Standard daily, weekend, weekly, and monthly rates (all car classes).
- 5% or greater discount on Hertz Leisure daily, weekend, weekly, and monthly rates (all car classes).

When in need of a rental car this year use the above code to receive a huge discount with Hertz!

From our Challenge Partners:
- #AdCapChallenge
- @GENYOUthNow
- AdCapChallenge.org
That’s right! Beginning on September 21 2019, you are invited to HOSA-Future Health Professional’s premier leadership experience! HOSA – Future Health Professionals’ 13 Annual Washington Leadership Academy (WLA) is hosted at our nation’s capital and provides a one-of-a-kind leadership experience for HOSA state and local officers. There is no other national HOSA experience like this one that is dedicated to networking, experiential leadership sessions, and learning and practicing advocacy - all while experiencing the sights and sounds of Washington D.C!

During this four-day experience, WLA provides HOSA State Officers not only the opportunity to network with other leaders from across the world, but gives them the opportunity to participate in a capstone leadership experience designed to take what they have learned throughout their HOSA career and learn how to apply it to their future career and plans. Lead by the 2018 – 2019 Executive Council, this experiential learning experience is an opportunity to explore in-depth leadership topics and learn new ways to impact the HOSA chapters in their states and providences.

Local HOSA officers participate in an action-packed leadership of their own that focus on the important role of the chapter officer and prepares them to effectively lead their local chapter. This hands-on experience boasts a dynamic facilitator that takes HOSA local leaders on a journey that will teach them how to take their chapter members from those who think they are “just a member” to being a HOSA leader, a team builder, a recruiter, a role model, an advocate, and desire to be the best future health professional they can be!

WLA also provides an opportunity for HOSA leaders to hear from key leaders in the medical profession as they share their stories and inspire HOSA leaders how to prepare and be ready to lead the future of health professions. Many of these stories come to life as WLA participants embark on health industry tours with our partners around the city. In the past, HOSA leaders have visited Walter Reed Medical Center, Kaiser Permanente, and the D.C. Consolidate Forensic Laboratory, just to name a few! (Please note: This is not an all-inclusive list and the health industry tour sites may vary from year to year.)

We can’t forget our host city! From the Twilight Tour of our historical monuments to paying our respects and a moment of reflection at Arlington National Cemetery, WLA provides an opportunity to see and reflect upon many of the moments that have shaped our country.

And following in the historic footsteps of those who have gone before us, we will GO TO THE HILL! One of the WLA highlights is the opportunity to meet with your Congressional Representatives and advocate for HOSA-Future Health Professionals and Career-Technical Education. After working with actual Legislative Assistants from Capital Hill, HOSA advisors and members feel prepared and ready to meet and inform their government officials about their future and the future of health professionals and career tech education.

Don’t you want to be a part of the most intense, dynamic leadership experience we can possibly pack into four days? Past WLA leaders have describe the experience as “DYNAMIC!” “ENGAGING!” “ONE OF THE BEST HOSA EXPERIENCE I HAVE EVER HAD!” “THIS IS BY FAR MY FAVORITE HOSA EVENT EVER!”

We hope to see you in D.C.!

www.hosa.org/WLA

The 13th Annual WLA is September 21-24, 2019 and registration opens August 1!

“This is by far my favorite HOSA event ever!”
I was just shy of 18 months old when my family noticed a bump on my stomach while we were wrestling on the floor. At my 18 month checkup, the pediatrician scheduled a follow-up ultrasound just to make sure this lump wasn’t something more.

However, on the ride home from getting the ultrasound, my parents received a phone call notifying them that I had an appointment at the Oncology Department at Dayton Children’s Hospital the following morning. The next few weeks were an absolute whirlwind of tests and operations, diagnosing and preparing for treatment. I was diagnosed with Stage 3 Hepatoblastoma, having a large tumor on my liver. After having a port placed, I underwent two, 4-week rounds of chemotherapy in order to shrink the tumor so the surgeon could safely remove it. Thankfully, the cancer responded well to the chemotherapy and the surgeon was able to successfully remove it, along with 70% of my liver. With a suppressed immune system from the chemotherapy, I spent almost a week in the ICU recovering from the surgery. After the tumor was removed, I again underwent two, 4-week rounds of chemotherapy to ensure there were no residual cancer cells left in my body. Following the final two rounds of chemotherapy and just after my second birthday, I was declared in remission!

I am still in remission over three years later and my liver has fully regenerated to the normal size for a kid my age. I still have to undergo scans on a regular basis to ensure the cancer has not returned, but they have gotten less invasive as time progresses. The hearing aid I wear in my left ear as a result of the chemotherapy is a daily reminder that I survived cancer!

I chose to be an NPCF Ambassador to give those battling cancer hope and inspiration to all those fighting cancer today, and to highlight important research currently being done to find effective treatments which are less harmful and invasive to children.

PRINCETON REVIEW DISCOUNT

Planning on taking the MCAT soon? HOSA’s partnership with the Princeton Review can give you the advantage that you need to ace this exam!

HOSA current and alumni members are eligible to receive a discount of 15% on The Princeton Review’s MCAT Ultimate course, MCAT Ultimate & Strategy course, and the MCAT self-paced course.

You can try out an MCAT course for FREE to experience the powerful tools that accompany all MCAT prep courses. The free trial will unlock content associated with the Biochemistry Class 1.

The Princeton Review also offers online tutoring! HOSA members receive 1 hour free. Click the link below to learn more.

For more information please visit – www.princetonreview.com/hosa
HOSA is pleased to be a part of a research study that will be developing resources for teachers to prepare students to stop the bleed by using tourniquet kits. This research project is part of a national grant that is being administered by the National Center for Disaster Medicine and Public Health and the American Red Cross. The goal of the project is to prepare materials that will produce the best results possible for students to learn and retain the process for administering a tourniquet and stopping the bleed in a traumatic situation.

As part of this process, HOSA is asking students that are rising seniors or younger to participate in the study at the International Leadership Conference. If you plan on attending the Washington Leadership Academy this fall, we want you to participate. Those that participate will register for a time on Thursday or Friday and attend a session where you will watch a training video and then demonstrate using a tourniquet.

Students that have had Stop the Bleed training are not eligible to participate in this program. There are only 390 seats available for this training and registration will be on a first-come, first-served basis. We appreciate your willingness to be part of this very important project being conducted at the 2019 ILC.

The training will be Thursday, June 20 and Friday, June 21 with registration times each day at 8:00 a.m., 9:30 a.m., 11:00 a.m., 2:00 p.m., 3:30 p.m. and 5:00 p.m. SATT registration will be available as Options and Activities in the HOSA Conference Management System.
She led two separate decadal reviews into how NASA handled sex and gender difference, the last of which published in 2014. Those audits taught her that women astronauts often struggled to get spacesuits to fit right. “I was very concerned,” says Mark, of what should have been exciting news. “I was concerned because of my knowledge about how spacesuits do not properly fit women, female astronauts. And with the spotlight shining on the space program and an all-female spacewalk, I wanted to be sure that the spacesuits fit properly so they could do their jobs well and safely.”

The Failure of NASA’s Spacewalk Snafu? How Predictable It Was

By Emily Dreyfuss in Science, of Wired Magazine
Featuring Saralyn Mark, HOSA-100 National Advisory Council

When Saralyn Mark heard the news earlier this month that NASA was planning the first all-women spacewalk at the International Space Station on March 29, she started to worry.

Mark, an endocrinologist by training, was a senior medical advisor to NASA for 18 years. In that role, she studied the way men and women’s bodies differ, on space and on earth. Within the agency, she advocated for spacesuit and technological design that took these differences into account.

She led two separate decadal reviews into how NASA handled sex and gender difference, the last of which published in 2014. Those audits taught her that women astronauts often struggled to get spacesuits to fit right. “I was very concerned,” says Mark, of what should have been exciting news. “I was concerned because of my knowledge about how spacesuits do not properly fit women, female astronauts. And with the spotlight shining on the space program and an all-female spacewalk, I wanted to be sure that the spacesuits fit properly so they could do their jobs well and safely.”

Mark no longer works at NASA. She was asked to leave the Office of the Chief Health and Medical Officer, which oversees NASA medical policy, two years ago, at the beginning of the Trump administration. So Mark waited, not knowing what was going on inside the program but hoping for the best. Her answer came Monday, just four days before the historic spacewalk with Christina Koch and Anne McClain was to take place. NASA announced that McClain would no longer participate in Friday’s walk because the second available suit on the ISS did not fit her; instead, Koch would be joined by a male astronaut, Nick Hague. (NASA said McClain is tentatively scheduled to do another walk on April 8.)

The change in plans provoked widespread outrage online. Mark said she couldn’t sleep all Monday night because she was getting pings nonstop from people across government and science who were just as dismayed as the Twitter masses. As we spoke, a government worker from a different agency texted her, “OMG I can’t believe this.”

“I was not surprised,” Mark said. But she was upset. “The good news is that no one died. No accident occurred, so it’s the right moment to highlight that the science behind it is unacceptable.”

By the science, Mark really means the lack of science, or the failure to translate science into real-world solutions. In her commentary accompanying the 2014 decadal review, Mark highlighted problems like a failure to fully enforce gender inclusion policies, lack of astronaut data segregated by sex, and a misguided belief that because the data that exists on women in space comes from such small sample sizes, it can’t be trusted. Years of not looking into or addressing the specific needs of women astronauts led up to this moment.

This problem is not unique to NASA. Women face challenges getting the right equipment in every extreme field, according to Mark.

This problem is not unique to NASA. Women face challenges getting the right equipment in every extreme field, according to Mark. She has turned a program she developed while at NASA and in the White House Office of Science and Technology into a nonprofit iGIANT that advocates for gender-inclusive design. Since its inception in 2016, she’s hosted more than 62 roundtables with women in the military, in rescue operations like wildland firefighter crews, deep sea divers, surgeons, and astronauts, and she has heard the same refrain: the equipment doesn’t work right for me. The gear in these fields was not designed for women.

One fighter jet pilot told Mark about how her flight suit was built for men to urinate easily, but not women. On long sorties, she’s had to dehydrate herself. Female surgeons have told Mark how they’ve had to redesign medical tools to fit their hands. “It sends a very profound message,” Mark says. “Great, show up, but you’re not really that welcome. We’re tolerating your presence. And you’re so happy to be at the table that you’re tolerating the fact that you’re not actually given a seat, you’re just at the table, and you’re trying to find a way to make it work.”

This is a consequence of “the gender data gap,” writes author Caroline Criado Perez in her book Invisible Women: Data Bias in a World Designed for Men. Perez describes how a failure to take women’s bodies into account can have deadly consequences, from cancer drugs calibrated for men that then won’t work for women, to body armor that doesn’t fit female police officers’ torsos. For women in these extreme environments, she writes, “the consequences of living in a world built around male data can be deadly.”
Experts familiar with NASA’s history aren’t surprised that the agency had to cancel what would have been its first all-women spacewalk because of spacesuit sizes. In a blow to what would have been one great leap for womankind, the plan for Christina Koch and Anne McClain to change a batters had to be called off.

It’s hard to imagine a situation more deadly than an astronaut walking in the vacuum of space wearing a suit that doesn’t fit. The two suits on the International Space Station that are currently calibrated for spacewalks are a size medium—the smallest size—and a size large. McClain had trained in both sizes on earth, and had indicated to NASA that she could safely use the large, according to NASA’s account. This would allow her to walk with fellow astronaut Koch, who needed the medium size. But after doing a walk last week wearing the medium size, McClain realized the large didn’t actually fit her safely in space and she needed to be in the medium.

“This decision was based on my recommendation. Leaders must make tough calls, and I am fortunate to work with a team who trusts my judgement. We must never accept a risk that can instead be mitigated. Safety of the crew and execution of the mission come first,” she tweeted from space.

There is another medium torso on the ISS, but it’s a spare, and would take time to get it ready. “For logistical efficiency, the ISS has a pantry of suit parts that can be mixed and matched as needed to accommodate a variety of crew combinations, but we do not maintain a fleet of six completely assembled suits. To change upper torsos, the complete life support and controls system must be removed in addition to the pressure garment components,” explained NASA engineer Lindsay Aitchison, who works on the spacesuit designs, in an email to WIRED. It was faster to switch astronauts for the upcoming spacewalk than spacesuits.

Even with the right size torsos, women astronauts have trouble getting the suits to fit. “The suits are big and difficult and often don’t fit women well. This can impact one’s focus while wearing the suits. Women have had to compensate. Some women use a water ski vest to help the suits fit better. Some use padding.”

former astronaut Cady Coleman told a NASA roundtable on gender difference and design in 2016 organized by Mark and then NASA chief health and medical officer Richard Williams, according to minutes provided by Mark. Mark remembers Coleman saying she felt like she was floating in her suit. The minutes go on to dryly state that Coleman “emphasized that women shouldn’t need to do this.” Mark says NASA has been aware of the problem with suits not fitting women correctly for decades.

Aitchison, the current NASA engineer, told WIRED that padding is a standard part of getting spacesuits to fit regardless of gender. “The padding preference for each astronaut is kept on file and tweaked just like any other aspect of their suit as they become more experienced with spacewalking and how they prefer their suit to fit,” she wrote to WIRED. People commonly add a “0.5-inch thick pad on their back to push them forward in the torso to increase visibility of controls,” she says, as well as pads to make the gloves fit better, or the boots.

Partially this is all necessary because the suits are not custom fit anymore, as they were during the Apollo missions. “Back then a mold of your body was used,” says Mark. But those missions were limited in size; after they ended in the 70s, NASA’s programming changed and hundreds of astronauts joined, and the cost of custom molds at the scale was prohibitive. “Now it’s more off-the-shelf,” Mark says, “to fit the average individual, generally male.” Even so, a single suit can reportedly cost around $250 million.

NASA knows this is a problem for women and people with different body types. The agency’s Office of Inspector General pointed it out in a 2017 report on spacesuit management and development. “The Hard Upper Torso was designed in the Shuttle era to accommodate a specific range of individuals and fabricated in three sizes: medium, large, and extra-large,” the report states. “However, over the years the astronaut corps has become more diverse and includes individuals that do not conform to the historical norm. As a result, astronauts who do not fit comfortably into available suit sizes can have increased accessibility issues.”
Everyone Has a Heart:
Get Screened

The rivalry is fierce between New Prairie High School and LaPorte High School in Northwest Indiana. Competition is strong between the two Hoosier schools, but when tragedy hits, students and staff come together as a community.

In the past 5 years, our community has suffered the loss of 2 high school boys, one on the football field at LaPorte and the other at New Prairie following an intramural basketball game. Jake West collapsed during football practice in 2013. The shock of his passing shook the LaPorte community and the New Prairie community shared in their grief and provided support in whatever way they could. Jake’s mom, Julie West-Schroeder, is a teacher at an elementary school in the New Prairie Corporation and took action with her grief and started the Play for Jake Foundation, an organization with the mission to offer free heart screenings to students.

In 2015, the Play for Jake Foundation offered their first heart screening to LaPorte High School students and a year later held a screening for New Prairie students. More than 2,500 students in the LaPorte and New Prairie School systems received a free heart screening, including members of New Prairie’s HOSA team. It was at this screening that one of our HOSA team members, Kaley, discovered she had a heart condition that if not detected would result in a sudden death for her. She attributes the screening and Play for Jake foundation to saving her life.

In 2017, tragedy struck again in our community when New Prairie senior Mark Mayfield collapsed at school following an intramural basketball game. The rival schools came together again, but this time it was LaPorte coming to support New Prairie as students and staff struggled to comprehend this heartbreaking loss. Following the incident at New Prairie High School, a group of sophomore girls in HOSA decided to focus their Public Health event on the resilience of our community coming together in response of a tragedy. They wanted to focus on educating the community on undetected heart conditions and the importance of heart screenings (both boys died from the same undetected condition). The students organized a dance marathon and invited LaPorte students to join in the fun. In the past 2 years, this JAM (Jake and Mark) event has raised more than $3,000 that was divided between the Play for Jake Foundation and the Mark Mayfield Scholarship fund.

Fast forward 3 years and the original group of sophomore girls are now seniors and have evolved their original project to a Community Awareness event. This event has brought the founder of the Play for Jake Foundation and myself (New Prairie HOSA Advisor) together with a common goal to spread awareness and screening more students. It has become the NPUSC HOSA mission. I have had the privilege of getting to know the mother of the boy who passed at our school and with her blessing we are ramping up our campaign to spread this message. A major initiative that NPUSC HOSA has taken on is to offer heart screenings at the Indiana HOSA State Leadership Conference April 16. We have medical staff onboard and the support of the Play for Jake Foundation. We will be screening 215 Indiana students for free and giving away a FREE AED to an Indiana HOSA chapter.

We do it for Jake and Mark. We do it because we are grateful for Kaley. We do it because everyone has a heart. The risk is real. The solution is simple. Get screened.
HOSA International Leadership Conference

ORLANDO

See YOU there!

JUNE 19-22, 2019

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