

THE SERGEANT THOMAS JOSEPH SULLIVAN CENTER/AWARDS RECEPTION 2014

[BEGIN FILE]

WILLIAM WISNER:

Good evening, everyone. My name is William Wisner and I am the veteran fellow for mission leadership at the Sergeant Sullivan Center. I'm the new face here and I would like to take a moment to introduce myself to those of you I've not met. I am a veteran of Operation Iraqi Freedom Five. I was a calvary scout with 31 Calvary. Deployed to Iraq as part of the surge with Third Brigade, Third Infantry Division. My unit spent nearly fifteen months in Iraq. We established forward operating base Hammer in the Mada'In Qada which is the southeastern portion of the Baghdad Province. We later moved to combat outpost Cash which is inside of the Alta Wetha [PH] nuclear complex. After I ended my term of service in 2008, I went to school at Washington University in St. Louis on the post 9-11 GI Bill where I had been pursuing a masters' degree in non-profit management. I chose this career path as I feel that there's an obligation to the men that died on the battlefield in Iraq and the frontlines here at home for the forgotten. I became acquainted with the Sergeant Sullivan Center after attempting to fill out the burn pit registry this past summer. I had experienced some technical difficulties and the website referred me to a help desk line. So I called it. When I called, the gentleman on the other end referred me to the personal cell phone number of Rosie Torres of Burn Pits 360. So Rosie, of course, was surprised to find out that she had been appointed as a point of contact to assist veterans having technical difficulties with the VA's website. [LAUGHTER] So after talking with Rosie, she put me into contact with the Sullivan family. And so several months later, here I am. Since returning from Iraq, several of the men that I knew there have gotten sick or have died from what I have come to believe to be toxic exposure illnesses. The issues that we'll be discussing this evening are very real and they're very personal to me as I know they are to many of you in the audience tonight. We have a great lineup of some very distinguished speakers with us tonight who are here to honour Dr. Stephen Coughlin. I hope that you enjoy your evening and I hope to get to know all of you after tonight's presentation. And now, I'd like to present to you the president of the Sergeant Sullivan Center, Dan Sullivan. [APPLAUSE]

DANIEL SULLIVAN:

Hi everyone. Thank you so much for coming to this, which is our fourth annual awards reception for excellence in deployment health science. Every year, the Sergeant Sullivan Center honours a researcher, a doctor, or a scientist who has made great contributions in deployment health science on behalf of veterans and service members with complicated deployment related illnesses. And this year we're proud to honour Dr. Stephen Coughlin for his work. In particular, his testimony that he provided last year about an underlying research bias at the Department of Veterans' Affairs Office of Public Health. I just kind of want to do something a little bit different than I've done in the last couple of years and get back to the personal. And why Dr. Coughlin's testimony is important to me personally and to my family. The Sergeant Sullivan Center is a 501-C3 non-profit. It was founded in 2010 by my family, by my mother and my father and myself in honour of my brother, Sergeant Thomas Joseph Sullivan who was a Marine Corps veteran of the first 9-11 wars. He came back, he got sick, his illness involved widespread inflammation, his chronic pain – there were times when he would bleed eight to ten times a day out of his gastrointestinal system. His permanent care doctors looked at him and said we have no objective findings that there's anything wrong with you. They diagnosed him with a psychosomatic illness and then referred him to a specialty care clinic for active duty personnel suffering from psychosomatic illnesses. That was then called the now defunct medically unexplained physical symptoms clinic. A few months later, he was dead. His autopsy revealed widespread cardiopulmonary damage along with other damage to his organs. We knew there was something wrong. We met with his doctors afterwards, the doctors who treated him shortly before he died. What I remember very clearly was meeting with the doctor, the last doctor who saw him before he passed away. And I asked this guy – he was a real nice guy who was nervous as heck, he was shaking, he was shaking in his chair – and I asked him, do you know anyone else who's been suffering from similar complex of symptoms? And he stopped and he paused. He paused. He paused and about fifteen seconds, twenty seconds passed and he said, I don't know anyone with that exact same cluster of symptoms. And in that response and in that pause which was pregnant with meaning, the idea of the Sergeant Sullivan Center was born. We had a sense that there must be other people out there suffering from this complicated set of symptoms. They must be somewhere, otherwise why would he have waited so long to answer the question? We didn't at that time know that there were so many. That this problem, the problem of the deployment related illness and diseases caused by essentially the military – the occupational exposures of military service – is a long problem, a problem that's been happening at least since the Vietnam War. And when Dr. Coughlin – when Dr. Coughlin revealed that the VA has within its possession data that it's not releasing, that in fact his – that the only way that he could step out and tell the truth as he saw it was to resign his position at the department, we realised that this – our sense that there was a truth out there was real. And that we had a long and important battle ahead of us. And today we offer to you a list of incredible speakers who will share with you the story of post deployment illnesses and toxic wounds. At least from the Vietnam period forward. And we will put together the picture of what has been happening to our men and women who serve us in theatre who are wounded by toxic exposures and environmental exposures, who get sick, and who our country is not supporting. It's not just our government, it's also the people of the United States of America. We are not standing by and helping the people who serve us. And it's time for that to change and we hope that each of you

here today will become part – well, actually, everyone here today is already a part of this movement, this coming together of working between the private, the public sector, government, VSOs, scientists, doctors, researchers, all coming together to say, okay, it's time for us to recognise military occupational exposures as a problem and we're going to address it. Let me just run through our speakers real quick and then I'm going to get off the stage and we're going to go speaker to speaker. Each speaker will introduce him or herself. Or himself. And then we'll present the award to Dr. Coughlin who will provide – tell us his story. Our first speaker is Rick Weidman, our executive director of policy and government affairs at the Vietnam Veterans of America. Followed by Jim Binns, chairman, Research Advisory Committee on Gulf War Veterans' Illnesses. Next we'll hear from Anthony Hardie who is on the Veterans for Common Sense board of directors, the author of “91 Outcomes”, which is a blog about Gulf War related illnesses. And serves on a federal advisory committee – as a federal advisory committee member on Gulf War illness research. Next, Peter Sullivan, who is my father and chairman of the Advisory and Policy Panel at the Sergeant Sullivan Center, will have a few remarks. Followed by our last two honorees for excellence in deployment health science, Dr. Robert Miller and Captain Mark Lyles, in his individual capacity. And then we will present the award and hear from Dr. Coughlin. So thank you so much for coming and let's get started. [APPLAUSE]

RICK WEIDMAN:

My name is Rick Weidman and I am an executive director for policy and government affairs at Vietnam Veterans of America, which is way too much of a mouthful. So I usually just introduce myself as Rick Weidman, well known troublemaker from Vietnam Veterans of America. [LAUGHTER] [APPLAUSE] I was a medic with the Americal division, 196 Light Infantry Brigade in Vietnam in I Corps near Quanree [PH] and that's how initially I got into all of this. That was two years after I graduated from Colgate University and, no, I did not anticipate that I would go through the experiences that I did. Following my return, I ended up teaching at one of the Vermont state colleges. And many veterans were coming to me with problems. It was not a particularly friendly time to returning veterans in America. There were exceptions, but by and large, bluntly, the class of 1946 abandoned this. And when we started Vietnam Veterans of America in '78, our founding principle became Never Again Shall One Generation of American Veterans Abandon Another. We're still poor, we're still banging away, but we believe that we're holding true to not abandoning those who come after us, who have come after us and who will come after us. As well as not abandoning our uncles from Korea and our fathers from World War Two. In 1977, '78, '79, a lawsuit was initially filed by a guy by the name of Victor Yannacone on Long Island. And he and a fellow by the name of Paul Reutershan first brought attention to the issue of Agent Orange and Dioxin. And were joined in that effort by the track walkers for the Long Island Railroad who also were exhibiting the same kinds of illnesses, not just chloracne, but many other kinds of cancers that are way out of synch, if you will, with the norm of the general population. And that's how we first got into Agent Orange. And the duplicity that we have encountered over the years on both sides of the river, meaning DOD and VA, is truly breathtaking. People ask me, why are you so optimistic despite all the evidence? And I am so optimistic despite all the evidence because the will of the American people to do the right thing by the men and women who have put their lives on the line in defence of the constitution, sooner or later the truth will out and sooner or later justice will be done. How does that involve the Sergeant Sullivan Center? In fact, it is a common flow that the toxic exposures of every generation has been denied from World War One forward. A friend of mine's grandfather who was in the trenches had to sit sleeping up – sleep sitting up his entire life after he returned in 1919. Because he couldn't lay down because he would then begin gasping. And he worked, he worked hard. He was a labourer. And raised his family. And his son then served and then his grandson served in Vietnam and has significant problems due to exposure to Agent Orange in III Corps Vietnam. We knew our people were getting sick and we had to do something about it. And then we encountered some folks and a wonderful friend who himself is very ill now, by the name of Gordon Erspamer. His father was sick from exposure to ionizing radiation. And so they formed an organization called the National Association of Radiation Survivors or NARS. And Gordy, his East Coast base was out of our office in Vietnam Veterans of America, that at that time was up on S Street just off of Connecticut Avenue. And the NARS case was really the pivotal case that gave us at least limited judicial review. It took a long time and we were involved in Agent Orange and we also got involved in SHAD, which is Shipboard Hazards and Decontamination and kept saying there had to be something larger and it turns out there was. There was a thing called Project 112, where all the chemical and biological entities were brought under one umbrella under the command of the chemical and biological command of the United States Army from Fort Detrick. It wasn't until we started digging into that and finding papers, not from the government because they stonewalled us, but we found it in research libraries around the country. Things that had been declassified. And discovered that we were right. There was such a thing as SHAD and we were right there was such a thing as Project 112 and that the herbicide program had been under that command at Fort Detrick in the beginning. And it wasn't moved until 19 – late '69, because Henry Kissinger did not want to go into the negotiations at Geneva over prohibited forms of warfare with it being part of the biological warfare command. And so that began the, really, the great coverup on that. Where we are today is we have done – we've tried to supply support to the Gulf War veterans and since then to the OIF/OEF veterans. And to – much of it is being still impeded by things that are improperly classified, doesn't have a damned thing to do with national security. Being embarrassed that you've been lying for forty years is not a matter of the national security. Culpability for what you know people were exposed to, some from our own hands if you will, is not a matter of national security. Responsibility for care and benefits of those men and women who have been injured is – and shielding the truth that they should be provided those services is not a matter of national security. It is a matter,

however, of national shame that it still goes on. The latest incarnation is with the Sergeant Sullivan Center and a number of others, including Jim Binns, who you're going to hear from, and Anthony Hardie and with Diane Zumatto, raise your hand, in the back. We started a little thing called the Toxic Wounds Task Force. And it is the understanding that it is literally the same office at DOD that's lying to every generation and it is literally some of the same quote/unquote scientists – because they're not really scientists who don't have any peer reviewed articles at VA – that continue to sandbag us in collusion with those folks across the river. And we are determined that we will out the truth together. And it will grow, we'll have other veteran service organizations and military service organizations band with us because it is the right thing to do. I can't tell you how much I personally respect the Sullivan family for starting what they've started just on sheer grit and with a dollar ninety-eight. And they've already had [LAUGHTER] and that got spent at the very beginning [LAUGHTER] But they keep on plugging. And it is that indomitable spirit that will in the end bring justice to our veterans. I want to thank them for inviting me and all of us to be here tonight. And invite all of you who aren't yet active members of the fray to join with us. Thank you very much. [APPLAUSE] Jim? It's a pleasure to introduce my much more dapper friend Jim Binns. [LAUGHTER] [APPLAUSE]

JIM BINNS:

Well, I'm Jim Binns and I'm chairman for a little while longer of the Research Advisory Committee on Gulf War Veterans' Illnesses. Whenever I have witnesses Rick give testimony or speak in the past, I have always feared having to follow him with his magnificent voice [LAUGHTER] and now I'm having to do that. Gulf War veterans came back from the war in 1991 with the same experience that I think that many of the veterans from these different wars have come back – they come back thinking that they're alone in feeling badly. They don't know what it is. The doctors can't solve it for them. And eventually over time our committee was appointed in 2002 because congress was not satisfied with the job that the federal government was doing to address this problem. And we produced a report, the primary author of that report is sitting in the second row, Dr. Lea Steele, in 2008 which assembled 462 pages of scientific information, every study that had ever been done of relevance to Gulf War illness. And demonstrated once and for all that this was a serious physical problem that affected between a quarter and a third of the veterans who'd served in the war. The symptoms are chronic pain, widespread pain, chronic fatigue, unexplained, the muscle and joint pain throughout the body, often gastrointestinal and skin symptoms on top of that. And so it's caused by the central nervous system reacting to the various insults that it received which included pyridostigmine bromide in the pills that were given to the troops to protect them from nerve gas, ironically. The pesticides that were used to protect the troops from the infectious diseases, ironically. The, perhaps, we believe – the evidence is not as strong – nerve gas itself released in the destruction of Iraqi facilities and the oil well fires which you all will remember blackened the sky. In 2010, the Institute of Medicine produced a report which largely agreed with ours and from that point forward, we felt that we had accomplished the mission of at least putting the scientific community on the right path toward finding treatments. That Institute of Medicine report also said that it was likely that treatments could still be found even after twenty years at that point. So the VA actually started moving in the right direction in 2011 to adopt many of these findings from our report and the Institute of Medicine report. But in 2012, we began to see the pendulum swing back. And we still don't really know why that happened, but there clearly was a push back towards the positions taken by the government in the 1990s that this – nothing special had happened to the veterans in the Gulf, that their problems were common to many other veterans and perhaps psychiatric or psychosomatic if they existed at all. None of the science supported this. So they had to – and they still do – profess adherence to what the science has shown. But they have, on the side, sought to create new science that would substantiate these old principles. And the – one of the examples of this was a survey which has been done by the Department of Veterans' Affairs every ten years, roughly. This is, this was the third iteration of it. To survey a large population of Gulf War veterans and veterans who did not deploy to the Gulf who were in the service at the same time. And to survey their health. And Dr. Coughlin was involved in the production of that survey on the VA side and we were involved in presenting some recommendations for inclusion of questions related to Gulf War illness in that survey. There is – there are definitions of Gulf War illness and they're based on questionnaires and the logical thing to do was include in this very long questionnaire about a page and a half of questions that would pertain to and enable a person judging this survey to determine if the respondent had Gulf War illness by one of the two major definitions. The Office of Public Health staff resisted this strongly. At one of our meetings an Office of Public Health official actually refused to tell me where he worked because he thought I was going to ask him if it was nearby to go get the survey and bring it to us. And ultimately John Gingrich who at the time was the chief of staff to Secretary Shinseki decided he would personally try to referee this decision. So he asked us to submit comments and he received comments from VA staff and he eventually sent me a letter saying, Jim, I'm sorry, but it's more important to go forward with this survey than to have no survey at all. And so they went forward without the questions necessary to define the illness and to look at the toxic exposures. But they had all the questions necessary to define PTSD. Or other mental health problems. So as a consequence, that's the way the survey went out. Well, a year ago last March, Dr. Coughlin testified that the reason that Mr. Gingrich had allowed the survey to go forward was that he was misinformed by senior officials at the Office of Public Health that it would cost one million dollars and an additional year of delay in order for this to proceed. This is of special relevance here today because yesterday at a meeting of our committee, the Office of Public Health reported on the results of their survey. I should give credit to the Office of Public Health. They are much more solicitous of our opinions now, they are trying to work with us in the future and so on, but they presented these results and to no one's surprise, they show a marked increase in mental health problems of these veterans. PTSD is now at twenty-one percent,

major depressive disorder at thirty-three percent, other depressive disorder at forty-eight percent, and anxiety disorder at eighteen percent. Members of our committee pointed out that there was a possible correlation between these people having been ill for now twenty-three years and the development of depression. That it did not mean that their illness was caused by depression. But these numbers, as they are, are going to be presented to people and I'm sure that people they are going to be presented to include the new secretary of veterans' affairs Robert McDonald. Secretary McDonald attended our meeting yesterday and he is much more informal, much more engaged, much more hands on than his predecessor certainly or, I would say, other VA secretaries for the most part that I have worked for. So I am optimistic that if he spends enough time looking into these matters, he will understand the true facts. But he's only going to understand that this survey data is only half the story. And that you need to look at why this over-representation of mental health problems took place. Because of the recommendations of our committee as supported and verified by Dr. Coughlin. And if he does that, the odds are much better that he will then look at other issues within the Department of Veterans' Affairs that need reform and that are critical to the integrity and restoring the integrity of that organization. I come from a background, before I got involved in all of this, of small high-tech companies. And we didn't always do the right thing, but we tried to. And now I perceive what a luxury that is to be able to, in your job, try to do what you honestly believe is the right thing. And especially in this town where the institutions are as big as any, the government. It is now very evident to me that most people in their jobs, certainly in Washington, are not able to say that because they have to follow policy, they have to follow their boss, they have to follow their boss's boss's boss, whatever it may be. Dr. Coughlin didn't have that luxury either. But it didn't stop him from speaking out. And I am so honoured to have known you through this process, Steve, and really hope that others at VA will follow your example now that Secretary McDonald has said he wants whistleblowers to come forward, he wants to know what's really going on in that organization. And if he does, you are the person that they're going to look to. Thank you. [APPLAUSE]

ANTHONY HARDIE:

Well, Jim, if you thought it was tough after Rick, imagine following after Rick and you. [LAUGHTER] Well, it's really a pleasure to be here tonight. My name is Anthony Hardie. I'm a lifelong Wisconsiner who recently relocated to Florida for health reasons. I am an Army veteran, served in a small unit on – we were just talking with someone here earlier this evening on Smoke Bomb Hill. Fort Bragg, North Carolina. For seven years, active duty. Six overseas tours, two combat and four other. My two combat tours were in the 1991 Gulf War and Somalia as well. While in the Gulf, I testified in more detail, I'm not going to give lots of details tonight, but I've testified in more detail before congress about having gone through an Iraqi bunker complex just north of Kuwait after having had a whole host of other kinds of exposures and illness symptoms and a lot of the guys I was with were having illness issues along the way as well, but going through a particular Iraqi bunker complex, recognizing – not recognizing the characteristic odours of two chemicals called mustard and lewisite that smells like – lewisite smells like geraniums. And mustard smells like onions or garlic. And that night, having developed lung issues that were more significant than the other health issues I've been experiencing from taking the pyridostigmine bromide pills, the pesticide exposures, when our chemical arms went off and having other issues along the way, having a particular attack from Iraqi forces that was using a Silkworm land to sea missile – but it was used land to land – having blisters on my skin and a whole host of other illnesses, but this was the beginning of my lifetime of health issues. And I wound up having, many years later I finally diagnosed as chronic obstructive pulmonary disease. My doctors suspect that I probably have another condition called constrictive bronchiolitis. Hasn't been diagnosed at this point because you'd have to go in and – my understanding is you'd have to go and do some biopsies and so on. Well, after the military I'd been having a lot of fatigue issues. A number of us were having these significant fatigue issues as well. A whole host of other issues. Being a special ops guy, I was the US Special Operations – US Army Special Operation Command's Non-Commissioned Officer of the Year runner-up. I might have won except the Ranger always wins. Any Rangers in the room tonight? [LAUGHTER] And anyway, so, I was competitive – competitive guy. Was a competitive runner and wound up having a lot of these health issues. So without going through any more detail on that, they got progressively worse over time. In the mid-1990s, after having left the military, the internet was brand new. I guess Al Gore had just invented it. [LAUGHTER] And, sorry, for those that have heard it before I've said that a few times. Rick, I know you've heard that too many times, but we found each other via the internet. And we got involved and we helped to come together to create an organization that came together and was eventually helped to pass – developed and passed legislation called The Persian Gulf War Veterans Act of 1998. And that provided an array of health care benefits and pathways to research, created the foundation – there are two pieces of parallel legislation, created the authorization for the Research Advisory Committee that Mr. Binns chairs and I served on with Lea Steele and a number of others for a number of years. And then also created – was forward looking as well – and created two years of free health care for any veteran, that before that time you had to have a service connected disability claim in order to get into the VA. Later, we were pleased to see that expanded to a five year health care, five years after service, that provides an open door for a lot of folks there. You know, I meant to recognize a couple of people here – that are here tonight as well and of course the Sergeant Sullivan Center, Peter, Dan, and Jean. And I understand your daughter is here with us earlier tonight, I'm not seeing you in the room, but I want to thank you for everything that – and your granddaughter, I want to thank you for everything you do. I want to thank the namesake of this organization as well. I wish that he could have been here with us. I also want to recognize some friends from the congressionally directed medical research program, from the contractor that helps to make that program a reality, but Greg Cole and Brett Cheney who are here and helped to fund – well, this year it will be twenty million dollars in Gulf

War illness research aimed squarely at treatments. Sheila Ross from the Lung Cancer Alliance. Doing some extraordinary things over there and helping to highlight that lung cancer is a very real outcome of military deployment for a number of people. Denise Nicholas and Angie Green, two Gulf War veterans that are at a lot of functions here in Washington, but they live halfway across the country and have traveled from a long ways to be here as well. And then Diane Zumatto from AMVETS, I think you were recognized earlier as well, but thank you for everything that you, Rick Weidman, are doing for the major VSOs to help to advance the cause that's important to so many of us. So my own health issues led to this involvement with others. We wound up getting involved legislatively and in 1998, well, we got this legislation passed and we all thought we were done. You know, the legislation has passed, that's the be all and end all. We had no idea how Washington really worked. So we didn't realize that it would be a lifetime of, essentially a lifetime of trying to hold VA's feet to the fire. In trying to get every piece of it implemented, including the research advisory committee that took a bunch of years to get implemented. After that legislation got passed, I got picked up by a new member of congress that we helped and worked on veterans' issues for a long time and her office – she wrote a letter to the then-secretary of the VA and a number of other offices wrote letters. Jim Binns was pushing things from a different direction as well and all these forces eventually finally came together and years after it was statutorily mandated to be implemented, the research advisory committee finally came together and was implemented and set and began in 2002. And I think that, my sense is from having talked to some of the folks who were on the research advisory committee back then, that it was also going to be a, we're simply going to give these recommendations, it was very clear what needed to be done, scientists like Lea Steele and others were going to give these recommendations and we would fix everything that was wrong with Gulf War vets. Having no idea that that was not to be the case and that at every step of the way that the VA would be fighting and battling and simply ignoring and shoving things under the rug, essentially. Before 1998, we Gulf War vets had – it was long before Don't Ask/Don't Tell was Don't Look and Don't Find. And VA – DOD had had this, what we Gulf War veterans called the Three No's with Gulf War exposures. And it was that there was no presence of chemical warfares in theatre. Therefore there was no possible use by the Iraqis. And therefore there was no possible exposure. Because of those three no's, then no one could possibly be sick, so it was logically concluded there was nothing wrong with any of us. Well, since all of that time we have learned through the testimony of countless – countless veterans that chemical warfare agents did exist in theatre. They were probably used in theatre. They were certainly present in theatre. There were certainly exposures. In addition to an array of other exposures, that the wonderful thing that's come out of Gulf War illness research is that it's not just chemical warfare agents that can potentially cause people to be sick, this isn't a wonderful thing, but knowing this is the wonderful thing. And that things like pyridostigmine bromide anti-nerve agent pills, they've been used for a condition called myasthenia-gravis for a long time. Well, it turns out that if you have diabetes – if you have diabetes and you take insulin, it saves your life. If you don't have diabetes, and you take insulin, well it can be life-threatening. If you have myasthenia-gravis and you take PB, it saves your life. If you don't have myasthenia-gravis and you take PB, it causes the mild symptoms of nerve agent poisoning. And can cause, it sounds like, we understand, can cause some lifetime – some long term and potentially lifetime issues as well. Add in now pesticides and those crossing the brain-blood barrier and a class of pesticides called organophosphates that potentially cause nerve agent poisoning symptoms as well and an array of other toxic exposures in the Gulf as well. But these three no's, well this was DOD's stance was that – and so no one could possibly be sick. So we battled, we battled, we won the legislation, the RAC was implemented, it began moving forward and, well, it was pretty clear the VA wasn't listening or wasn't intending to listen. And that – I wound up serving on the RAC myself for eight years. Last year, all of us Gulf War veterans decided collectively to walk out of the RAC meeting because VA wasn't listening to us. And so we resigned in protest, two of us resigned in protest because VA wasn't listening to the recommendations by these incredibly brilliant scientists that had an array of solutions. In fact, documents full of solutions on what to do to fix Gulf War illness and help to solve it. Forever. Not just for us, but for future generations that – the Institute of Medicine tells us that likely other forces are affected by Gulf War illness or at least chronic multi-symptom issues as well. Through all of this process and all of the advocacy and all of the, you know, trying to work to get funding and – outside of VA with this congressionally directed medical research program that does great treatment research, it's now doing two consortia style inter-disciplinary research projects at Boston University, a five million dollar program that's aimed at solving, helping to identify and solve what's going on in our brains. And a project at Nova Southeastern, Fort Lauderdale, Florida, another one that's going from animal models all the way through phase three clinical trials of things that actually might have treatments that might actually help us. Really significant work there as well. But we Gulf War vets have always had this sense that there was a lot more going on. We had – we began to get names of the people that were responsible, people whose names, people like Dr. Kelley Brix over at the office of – over in the Department of Defense. People who were helping to make sure that everything that was seen with Gulf War vets and others like us that it was nothing more than just stress. That it was all just in our heads. Well, it turns out that it really is all in our heads and it's an array of things that are in our heads. And we heard yesterday a presentation from brain studies that show that decreased white matter in the brain, decreased grey matter, including the hippocampus that includes memory formation, decreased white matter, these are known risk factors for other neurologic diseases. It is absolutely in our heads. Some of us have had chronic sinusitis issues as well. And after a couple of surgeries and an array of treatments there, well, it turns out that the chronic inflammation in our sinuses may actually be affecting inflammation in other parts of our body as well. So it's definitely in our heads but not the kind of in our heads that was pushed for for so many years. We had the sense that there were all of these things that were really going on in VA and DOD. And then in July of 2012, Dr. Steve Coughlin, who we had seen at a research advisory committee's – on the other side of the table for a number of years – approached some of us and shared with us the document that he had just

become a whistleblower. And several months later it evolved into a congressional hearing, the House Veterans' Affairs Committee, subcommittee on oversight and investigations. I was honoured to be one of the people testifying at the same hearing. Dr. Lea Steele, who is sitting behind Steve as well was another one that testified and Steve was the, really the star of the show and helped to put what we Gulf War vets had known for an awful long time, suddenly put names, dates, places, specifics to what we had always sensed was going on inside VA. And I want to read just a paragraph from Steve's testimony. The Office of Public Health conducts large studies of the health of American veterans. However, if the studies produced results that did not support OPH's unwritten policy, they did not release them. This applies to data regarding adverse health consequences of environmental exposures such as burn pits in Iraq and Afghanistan. And toxic exposures in the Gulf War. On the rare occasions when embarrassing study results are released, data are manipulated to make them unintelligible. We'd had this sense for a long time, trying to read some of this research studies that were released that they were gibberish. No matter how you tried, you could not make sense of them and it was written in such a way that you couldn't make sense of them. This Don't Ask – this Don't Look/Don't Find philosophy. That we suddenly had someone who had come forward and shared the details – details with pages of documents on specific incidents, specific studies, specific reports, we suddenly had a whistleblower that had come forward and shared all of the details on exactly how – what we had been believing had been happening for all of this time, had become convinced of. What Steve shared before congress wasn't something that was new to those of us Gulf War veterans. What was new was that we now had absolutes. What eventually came into place – and if you haven't picked one up yet, I encourage you to pick up a copy of the article out front that's on the table of literature out front, is a news article that came out that helped to highlight that an internal – a very quiet, very quietly released internal investigation of VA helped to verify Steve's allegations. Including that veterans who were contacted in the surveys that had been suicidal had been identified as being suicidal, the VA supposedly has this big push to prevent veteran suicides, that many of these veterans were never contacted, and they did in fact commit suicide. It was an incredible tragedy. So I know I'm over time here and I just want to wrap up and say I really want to thank you, Steve, for everything that you have done to help to bring this issue to the forefront, for your incredible courage. It had to have been some awfully dark days there between July and December from when you decided to become a whistleblower to when you finally resigned over your ethical – your ethical concerns there. I hope that you will be the beginning of others coming forward as well. I had a conversation with a VA employee today that is troubled and I hope that there will be others that will eventually – eventually follow in your extraordinary footsteps and help to make this real. These – and I should add, these are real implications for real people. The Gulf War in '91, 697,000 served. Estimated 250,000 – one in three of us – are suffering from chronic multi-symptom issues that we call Gulf War illness. Of that 250,000, you would think that all of us would be approved for our Gulf War health issues for service connected disability compensation. Instead, it's just about 22,000 have been approved. And of those 22,000, you would think, well, of all the conditions that have been filed, that they're conditions that a lot of them would be rated at a hundred percent for those conditions. Of those conditions that have been rated, just 294 conditions have been rated at one hundred percent out of 700,000 troops. Is VA doing a good job? Well, a message to Secretary McDonald. I'm really pleased that you came to the research advisory committee meeting today and I believe there is a reset button. But there's a long ways to go. And cleaning house at VA – Operation Clean Sweep is something that needs to kick off, this is something that's affecting real people in very real ways and we have a very long ways to go. I hope under Secretary McDonald's leadership, that we will see change, real change at VA. We haven't seen it up to this point, but it took an awful lot at Phoenix to see cooking the books on VA scheduling and VA health care access, VA has been cooking the books on VA research as well. And Steve Coughlin helped to bring that to light. So I want to thank Steve, I want to thank the Sergeant Sullivan Center, all of you for coming tonight. This is a very impressive and very august body of audience here tonight. So thank you all and thank you for the opportunity to address you tonight. I really appreciate it. [APPLAUSE]

MAN [OFF-MIKE]:

You'll be happy to know I'm yielding my time. [LAUGHTER] I have been known to filibuster.

ROBERT MILLER:

That's to be determined. [LAUGHTER] So I'm Bob Miller. I'm a pulmonary physician from Vanderbilt. I got a call from providers at Fort Campbell in 2005 and said that they had seen – that twenty thousand soldiers had returned from service in the Middle East and that they were seeing a lot of service members who had shortness of breath. They couldn't complete their two mile runs. These were elite athletes at the time of deployment. And these providers were concerned that this group of service members had been exposed to a sulphur fire in northern Iraq and that sulphur fire was a significant exposure. And the stories came and they came and they came and they came. I was a great athlete, I was a high school athlete, I had twelve and a half two mile run times and now I can't complete a two mile run without stopping. It was amazing how consistent the story was. This group of soldiers had normal X-rays. Normal CT scans. Normal cardiopulmonary exercise tests. And normal pulmonary function tests. So we became concerned about something else going on that we couldn't detect with these non-invasive studies and ended up doing a lung biopsy on one and then another and then another. And the biopsies were all the same. They had a condition called constrictive bronchiolitis. Which is a scarring of the airways. They had pigment deposition that was consistent with airway inflammation and maybe even more striking than the airways being narrowed and that they had arteriopathy, the blood

vessels that went along with these small airways were narrowed or occluded. So over time we collected a large series and we notified people at the DOD at Chipham [PH] and they came down. We presented a protocol where we evaluated these soldiers and then everything stopped. And we were told by Fort Campbell we're not allowed to send patients to Vanderbilt anymore. And we can handle it ourselves. And we ultimately got our work published in the *New England Journal*. And I'm not doing this to name drop. But it was, for us, a victory because we knew that if we could get something in a peer reviewed journal of this caliber, that it would mean something for the veterans. And I think it did. Jeff Drazen, who is the editor of the *New England Journal* and actually has an interest in small airways asked why he published this article. And he said, he thought it was important because without physicians knowing about this illness, they're likely to miss it. And it's true. I mean, it's unconventional to do surgical lung biopsies on somebody with X-rays and pulmonary function tests that are normal. But that's what it took. And that's what the literature says. The literature says that in this disease, you can't pick it up without a lung biopsy. So we weren't completely off base. Well, in the interim, we've collected over seventy biopsies. National Jewish Hospital has followed us and they've done another thirty biopsies. They've looked at our biopsies and they've confirmed it. But we're still not getting through. The Department of Defense did a review of this sulphur fire which started all this. They discredited our work and they put the thirty-five biopsies that we had done in the appendix. The Defense Health Board is reviewing this issue now and this is where I'm going to ask you all to get behind the Sullivans and see if we can have some impact on what's going on. Because the Defense Health Board looked at this recently and they said, we don't believe in doing lung biopsies in this group. We don't know what happened to this group. We don't know how to evaluate soldiers with unexplained shortness of breath. We don't believe that you should do this for disability benefits. And we don't – and we haven't acknowledged the body of literature that says this is what you should do to evaluate small airways disease. So I'm going to challenge this group to get behind the Sullivan family and respond to this Defense Health Board report because it's a preliminary report at this point and before it becomes final, it's important that we deal with the issue of respiratory disease post deployment. It's – we have an opportunity between now and November 5th or 6th and it's important that we get behind this. In this report, they make claims like, well, we don't know whether this exists in the civilian population. There is no data that this rare disease ever occurs in normal, young healthy adults. Well, we don't know whether it occurs maybe in soldiers who have been non-deployed. Show me the data. The only letter that disputed our article in the *New England Journal* came from the Department of Defense. This isn't how we should do things. There are a lot of things that are under the veil when it comes to going into conflict. The care of those who serve should not be under this veil. [APPLAUSE] This is not classified work. This is what we owe this service – to these people who have served. So please take me up on my challenge. Let's try to get it right. The science is there that we can understand, we can evaluate, we can diagnose, and we can give benefits to this population of people. If you have a diagnosis of constrictive bronchiolitis through the VA like our group you get zero. If you go through a med board with constrictive bronchiolitis, you get zero. These are people that have a service connected disability like any other. So I thank you for your attention. Take me up on my challenge. [APPLAUSE]

MAN [OFF-MIKE]:

I further yield [LAUGHTER] to my friend, Captain Lyles who – provided he stay within the time limit. [LAUGHTER] We have the room only for a little while longer.

MARK LYLES:

Hi. [LAUGHTER] Hi, I'm Captain Mark Lyles. I'm here in my American citizen capacity, not as a uniformed officer of the Navy. So sayeth my lawyer. [LAUGHTER] I am the Vice Admiral Joel T. Boone Professor of Health and Security Studies at the Naval War College. My background is degrees in analytical and physical chemistry, cellular structure biology doctorate. Did my DMD at Louisville. I did training in maxillofacial surgery. That was before they had ADD medicine so I collected a lot of degrees before I was properly medicated. [LAUGHTER] Which I am today. I want to thank the Sullivans for everything they've done over the last few years. I'm quite humbly honoured to be in the same room with many of these researchers and other people here. It really is a formidable group of guys. Most of you can read what I did on the internet as far as my early work in 2003 on identifying heavy metals and bacteria fungi and viruses in the dust in the Middle East. For every story that's been told here about DOD, I've got a dozen more. And VA. I saddle a fence between what I can talk about and what I can't talk about. Because what I can't talk about would surely land me in jail. And so I don't want to do that. My wife is pretty sure she doesn't want me to do that either. [LAUGHTER] The reason that I'm speaking to you tonight is, is I came here tonight to tell you why I nominated Steve Coughlin to – Coughlin to the Sullivan Center for this award. I just occurred to me sitting there, Sullivan, Lyles, Coughlin, what is it about the Scot-Irish? Can they not just, you know, sit down and shut up? [LAUGHTER] I mean, come on. [LAUGHTER] I don't know why you have a bar here. I really don't. [LAUGHTER] So one of the things when I was talking, we were thinking about Steve, and I was reading his testimony and I was thinking about the things that he said and saw. And the things that I had said, I had sent, said, saw, experienced, dodged, hid, was protected, the things that I went through over these years and why I still hung in there. And I saw the courage that Steve presented and I said, you know, this is a guy that really needs to be part of this group and to be recognized for this. Because it took great courage. And the definition of courage, believe it or not, is moral strength to venture, persevere, and withstand danger, fear, and difficulty. When you are threatened with your job, with your profession, with your integrity, it takes great

courage to stand up and say, I will not die. I will not fail against the dying of the light. I will not go empty into that good night. While looking up and thinking about what Steve went through, I was reminded of a quote from Abraham Lincoln when I had some really, really hard times within the Navy. And I thought my career and life and everything was going to come to an end, someone passed this along to me and I'd like to read it for you now. It was a statement in a quote from Abraham Lincoln. He said, I desire so to conduct the affairs of this administration that if at the end I have lost every other friend on earth, I shall at least have one friend left. And that friend shall be down inside of me. That got me through some really hard times. When you're the only one there that really believes in yourself and that's the only person you have to be true to, that's real courage. And so that's why I nominated Steve for this award. One of the other things that made Steve's contribution and his presentation and what he did for all of us, veterans and citizens alike, is he worked at a government administration whose motto is To Care For Him Who Shall Have Borne The Battle And For His Widow And His Orphan. And that's what Steve's done. And I am honoured to be in this group with him, Rich Meehan, Bob Miller, and the Sergeant Sullivan Center for all they've done for veterans. Thank you. [APPLAUSE]

DANIEL SULLIVAN:

Would Dr. Coughlin – Coughlin, where are you? Oh, you're right in front of me! [LAUGHTER] Come up here.

MARK LYLES:

The bar's closed. [LAUGHTER]

DANIEL SULLIVAN:

Okay, now is the part where we present the award. My father is going to read a little bit from the letter of acknowledgment and we've asked Mark Lyles to present the award, which I need to give you.

PETER SULLIVAN:

The letter is not fully signed yet. But I can recite it from memory. Which is the operative language of which is to acknowledge the significant contributions that Dr. Steve Coughlin has provided through his integrity and research at the Department of Veterans' Affairs. And the letter is written better than I just summarized it. But the small token that goes with this letter which my wife hasn't signed yet and that's why it's not in front of me, cause I forgot to ask her to sign it. But we have this very nice token of this award. Mark Lyles is actually the brain – the one who came up with this, it was his brainstorm. When he received the first award, it was just a mere piece of paper. He thought we should upgrade it when we awarded it to Bob Miller. [LAUGHTER] And actually made a donation to enable us to do it. So the reason why it's this nice award is because of Mark Lyles and he also was the person who nominated Steve for this. So I give it to Mark to present it to Steve. [APPLAUSE] Okay, I'm going to save this one. I have one to give to Mark, but only at the conclusion of Dr. Coughlin's remarks. [LAUGHTER] Okay. Don't go home without the box.

STEVEN COUGHLIN:

It's a sincere pleasure to be here this evening and I appreciate – appreciate all of you taking time out of your busy schedule to come here and to hear about the important work that the Sullivan Center is doing on behalf of military service personnel and US veterans. And I'll keep my remarks short so that there is more time for networking and talking about exciting opportunities to collaborate together to address post-deployment health concern. I was asked to talk about suggestions for the way forward for advancing research in the field of post-deployment health. I'm a senior epidemiologist and my current appointment is adjunct professor of epidemiology at the Rollins School of Public Health at Emory University in Atlanta. And for four and a half years, I had the privilege of being a senior epidemiologist in the Office of Public Health at the VA Central Office here in Washington, DC. I had a very nice office two blocks from the White House during this exciting year and I worked with a lot of talented people. I want to make sure that I mention that I know a number of really talented epidemiologists and other scientists both at VA and the Department of Defense around the country and that there's a lot of great people out there doing fine work. One of the suggestions that I have is that, well, first let me say that I was recruited to the VA by Dr. Han Kang who has an outstanding international reputation for veterans' health research. He's a statistician, occupational epidemiologist by training. He was in a group that published papers right and left for twenty years on Gulf War illness and other topics and he's an outstanding researcher. He's still busy but he calls himself retired. And I worked with him and Dr. Clare Mahan, a senior statistician there, and they were my mentors in post-deployment health research. And this was a group that published in the New England Journal and JAMA and, you know, they had eight to ten papers in peer reviewed journals every year and I was excited to join their team. And I was contracting officer technical representative and a co-investigator on the national health study for a new generation of US veteran. This is an ongoing study that reached out to a panel of sixty thousand men and women who served in OIF/OEF during that same era. And a year after I joined the VA, Dr. Kang retired and they brought in new blood and unfortunately there was a marked change in the climate. We were at that point discouraged from publishing, papers never seemed to go forward, it was extremely difficult to get articles out for

publication. So after three and a half years of that I was very frustrated. And I love to publish and I love to get articles out in peer reviewed literature. And you look at other outstanding research groups like the DOD effort for the millennium cohort study. They publish right and left, they changed the literature. They add to the body of scientific knowledge about military medicine and post-deployment health. And we wanted to be more like them, you know, to publish, make an impact. I could not make sense of, you know, taxpayers spending ten million dollars on research study that requires, you know, a decade to carry out. And even more money on the salaries of those of us who were working on this study over time and not publishing anything. It was just exceptionally frustrating for me as an epidemiologist who spent eleven and a half years at CDC in Atlanta and had been in academia before I joined the US civil service. So that was one of the points I made to the congressional subcommittee. You know, it doesn't make sense to spend scarce dollars on very expensive, large scale national surveys and not publish anything. So unfortunately that's still happening today. There are projects that were initiated while I was at VA like a registry of twins who served in the Gulf War and in OEF/OIF. Proper studies program. Protocol 585, an exciting bio repository and survey of Gulf War veterans led by Dr. Don Provencal [PH]. These projects are moving so slowly, you can't see any progress. There was a study initiated, the first year I was at the department, to recontact Army personnel who were in the chemical corps, the Army Chemical Corps, they had the highest exposures to Agent Orange because they were the ones spraying it out of the airplanes over Vietnam. And Dr. Kang had looked at their mortality experience and published that important paper a decade ago. And Secretary Eric Shinseki directed the Office of Public Health to recontact them, look at their mortality experience, interview them, check their medical records, find out if they have an increased risk of COPD, emphysema, chronic bronchitis, or high blood pressure, hypertension. Where are the results? You know, this is 2014. I can go on, but you get the picture. There needs to be some accountability and some of the projects that are on the OPH website are very high visibility studies that just do not produce results over extended periods of time. And I think that needs to change. You know, research dollars are short. What happens in academia is, if you don't publish, if you don't remain productive, you don't get the next grant. The government, you know, NIH and so forth, they give the monies to some other more productive research group. Why isn't that true of parts of VA? So that's one suggestion. There needs to be more attention to the science. You know, rigorous peer review is essential. Jim Binns was talking about John Gingrich, the former chief of staff of VA. He was trying to adjudicate this dispute between the RAC and my supervisors over the Gulf War survey that I was the principle investigator of. It was a follow up survey of an established panel of thirty thousand men and women who served in the 1990-1991 conflict or during that same era. And the RAC wanted additional questions included about neurological symptoms and we wanted to get into the field and Mr. Gingrich made a very wise decision. He said send it out for additional peer review. So my supervisor sent it out to a friend of theirs. Someone who was the dean of a US school of public health and asked him to critique the survey. This was someone with no background in Gulf War research. And he, you know, pointed it down to a faculty member at his school who also had no background in Gulf War research. And my immediate supervisor said the RAC's critique is politically motivated. So of course, you know, when we received the comments they were glowing, you know, he loved the draft survey questionnaire. But that's not scientific rigor. So I think the other important example to cite is after I returned to academia and I was contacted by the Sullivan Center to peer review the draft registry, data collection instrument for the national registry on respiratory illnesses, I looked at it – there was no mention of constrictive bronchiolitis. I was shocked. You know, if you're establishing a multiple year, multimillion dollar national registry on respiratory conditions among OEF/OIF vets, how could you not include a question or two about constrictive bronchiolitis? Similarly, one of our outstanding medical officers at VA, who's still there doing excellent work, Dr. Paul Ciminera – I have a very high regard for Paul – he was asked by DOD to consult on an outbreak of idiopathic pulmonary fibrosis among military servicemen who were exposed to certain types of aviation gasoline. And one of them – at least one of them died. It was a very serious but rare respiratory condition. No mention of that on the registry data collection instrument. So it seemed like a glaring oversight. That's where peer review comes in handy because people pick up on things like that. So the VA needs to do more external peer review and do a better job of it. The other recommendation I have is something I mention every time I'm contacted by a reporter. And the major problem I had at the VA is on the new gen study where we reached out to an established panel of sixty thousand veterans. They often reported that they were experiencing suicide ideation. About ten percent were having thoughts that they would be better off dead. These are young men and women who came back from the conflicts in Iraq and Afghanistan and got out of the service. So if they reported that and nobody reached out to them to see how they could be helped, except for a very small percentage, roughly four or five percent, who were interviewed by catty telephone interview. Most of them filled out a paper and pen questionnaire or participated in a web based survey. So two thousand men and women filled out this sixteen page questionnaire about their military exposure, their military experiences, their health. And they indicated they were having thoughts about killing themselves. Nobody contacted them. So when I became principle investigator on the follow up survey of Gulf War veterans, the panel of thirty thousand, I was adamant that we would implement improved patient safety procedures. That's what DOD and NIH did on the STARRS study. That's a landmark study of, you know, preventing suicide among active duty servicemen and women. They called people, brought them in, you know, assisted them to get better. Suicide is preventable. So in trying to identify co-investigators at the VA medical center here in DC at the risk and in the psychiatric service and to bring them in as co-investigators on this study, so that they could reach out to these men and women on the Gulf War survey and find out if they needed assistance, my supervisors did everything that they could to block my efforts. So I got written up, you know, I was hammered, you know, that's what happens to whistleblowers. You take a beating. And I ended up contacting the chair of the IRB who was with me on this. He supported it all along. He wanted us to implement improved patient safety procedures. And then after two months I finally got permission to

enlist the help of social workers and clinical psychologists to reach out to the vets. And this is what we learned, this was this panel, thirty thousand men followed for twenty-two, twenty-three years, longitudinally, ever since the end of the first Gulf War, some people fall through the cracks. You know, they hadn't seen a doctor in VA or outside VA for ten years. You know, they were participants in a landmark study initiated by Dr. Kang and followed for more than two decades. They had made a contribution, not just as veterans, but also as research participants. And here they were in dire straits in 2012, you know, with thoughts of killing themselves. And the social workers and the clinical psychologists, they reached out to them, they got them into care. It wasn't coercive. You know, it's voluntary. But they worked with the national center that the VA has in New York and they worked with local VA medical centers around the country to get these men and women into care. There were veterans who were imminently suicidal. I had one research participant whose handwriting, you know, was very, very shaky. He had metastatic cancer. And previously he was told he wasn't eligible for VA health care. Cause he had a house, you know, he owned a home, he was married, he had, you know, finances, well situated. But at the end of his life, he had lost everything. He lost his house, you know, he was living alone with metastatic cancer with no health care. He couldn't afford to go to the doctor. So I can't tell you his name or where he lived because of patient confidentiality, but my social worker contacted the people at the VA where he lives and they got him into care. It didn't save his life. He was already at the end of his life. But it enabled him to get adequate pain treatment, palliative care, that's what we owe the veterans. I thought of this recently when I was reading the news about the controversy over, you know, delayed health care in different parts of the VA nationally and the more recent uproar over that. They were saying, well, there's no proof that the forty veterans in Arizona who died, died as a result of not being brought into VA health care in a timely fashion. Well, if you have somebody with metastatic cancer, you're not trying to save their life or prolong their life, you're trying to alleviate pain and, you know, that's part of palliative care. So the other thing I learned is an amazingly high percentage of these men and women who served in both eras, you know, 1990-1991 Gulf War and then the more recent conflicts in Iraq and Afghanistan, are living in poverty. It's shocking when you look at the numbers. I could never get over that. You know, you look at the numbers in these population based studies, twenty, thirty percent of them are living in poverty. You know, it's unbelievable. And I've never seen a single published article from one of these prestigious research groups funded by VA, by our tax dollars, that have looked at income, you know, the relationship between income and health. You know, people in academia do that routinely. Like in health disparities research. But within the VA you don't see it. So I think that there's a need for more attention to that by researchers because poverty, lack of education, these socioeconomic factors they have a huge impact on health. So I made the practical suggestion to congress that they require the VA Office of Public Health to put these landmark studies, these huge databases, into the VA Office of Research and Development VINCI repository. That's a state of the art resource for data sharing. So people who are within the VA system and their affiliated partners in academic institutions can make use of these valuable data sets, you know, to do secondary analyses. The VA Office of Public Health won't release the data. But, you know, many, many useful studies could be done based upon existing databases where they're not publishing or they're publishing very, very slowly and a lot of other talented researchers in VA and outside VA would love to access to those data, why not? They should be required to put it into VINCI. So my last remark is that, you know, sometimes things change very slowly in epidemiology and in science as a whole. Sometimes you have these major leaps. When they started the human genome project and it really, you know, caught rapid progress, that was like a leap forward. A paradigm shift in how we approach genetic research. And research on gene environment interaction. Well, the same thing is happening this year on exposomics research and in epigenetic research. Exposomics is a concept that's only been around since 1995. It refers to all the environmental exposures we have, both internal and external exposure from embryonic, fetal, newborn, early childhood, pre-adolescence, adolescence, young adulthood, adulthood, older age and into advanced age. So these environmental exposures are dynamic, they vary over time, and there are major scientific initiatives underway in Europe and the United States to decipher the human exposome. It's analogous to what they did on the human genome but this refers to environmental exposures. Everything from what you're exposed to in combat to the diet, pharmaceuticals, you know, the microbiome in your gut, etceteras, etceteras. So in Europe, they have these large very expensive research projects to identify a vast array of epigenetic markers. You know, in the past we've had one or two like DNA methylation. Think of a methylated compound on a gene. Something in the environment that gets attached to a little piece of a genome. The gene gets turned off. If you can figure out how to remove that methylated compound, the gene may become active again. So epigenetic changes are potentially reversible. This makes me think of Gulf War illness and other deployment health concerns. So right now in big science projects like ENRICO [PH], several others, they're identifying an array of epigenetic markers and deciphering the human exposome. So I haven't seen anything in the literature or in conferences tying deployment health research or military medicine to exposomics research. Or epigenetic research. I think it's essential to have military servicemen and women bank blood, voluntarily provide blood through phlebotomy and save that until they get out of the service or they're older. And that way you can look at epigenetic markers, markers of exposure, both before and after deployment. So that's something that would require close collaboration between academia, DOD, VA. I would like to see more discussion of this. So thank you for your time and attention.

[APPLAUSE]

DANIEL SULLIVAN:

Listening to Steve talk reminded me of something about the work that we got to do together regarding the burn pit registry. And the possibility of small victories. Or even great ones. We are – we saw this burn pit registry and got to talk

to Steve and recognized that constrictive – there was no question, have you ever been diagnosed with constrictive bronchiolitis? We also noticed another question, which was, have you ever, in the course of your life, before, after, or during deployment, experienced an event that you would consider to be very stressful? [LAUGHTER] And Steve, in his analysis, wrote something to the effect of that question is absurd. Stress is part of the human condition. And the – actually, Paul Ciminera was our contact, one of the people we talked to regularly, and he's very – we do talk. We have dialogue, we have a dialogue, we all do, with folks at the VA. And there are people at the VA and the DOD doing very important and good work. And I consider some of them to be good friends now. But I wanted to just mention that the burn pit registry that – I don't know who made the decision, but they took the question about stress off the questionnaire. And they added a question about constrictive bronchiolitis. And that wouldn't have happened without Steve. [APPLAUSE] But I also wanted to just remember another Steve, Steve Robinson. A few years ago – actually, it was about a year and a half ago, maybe, I was in this room for a Bob Woodruff Foundation event and I was talking about my brother's story and how many veterans are suffering from medically unexplained physical symptoms. There's a – the VA tracks the number of people with unexplained illnesses, and Steve stood up and said, this guy named Steve Robinson, I never met him, he worked for Prudential, he said, I can tell you exactly how many post 9-11 era veterans are suffering from medically unexplained physical symptoms and then he gave me a number. It was 460,000 or thereabouts. And he told me he got the number from the VA website. That number right now, reporting people – these are people with undiagnosed symptoms. Which are, some of them, very much, akin to symptoms of deployment exposure illnesses, is – the number has gone up to 590,446. But Steve Robinson – when I wanted to get hold of Steve Coughlin, Steve Robinson had told me at this event that he had helped work on the event where Steve Coughlin was able to testify before congress. So I asked Steve Robinson, can you get me in touch with Steve? And he did right away. And that's why we're here today. That's why we're here today. Without Steve Robinson – now Steve Robinson fought, was a Gulf War veteran and I got to know him very briefly, but I know he fought the fight that we're all asking you to – which all of you are really involved in – he fought the fight hard. He fought it for a long time. And he died at his desk. And I just wanted to pause and remember him because his – for me, his spirit, he was sitting right over there when he stood up. And what he did when he stood up is he said, your brother's story is the story of many. And he deserves honour. And so too do all of the people who are suffering right now deserve honour. And so too does Steve for the sacrifice that he made in order to tell the truth. Thank you, Steve. Thank you all for coming. [APPLAUSE]

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