

IHMC Board of Directors Meeting Minutes
Monday June 6, 2016
8:30 a.m. CST/9:30 a.m. EST Teleconference Meeting

Roll Call	Chair Ron Ewers
Chair's Greetings	Chair Ron Ewers

Action Items

1. Approval of February 8, 2016 Minutes	Chair Ron Ewers
2. Election of Chair/Vice Chair for 2016-2018	Chair Ron Ewers
3. Schedule for 2016-2017 Board Meetings	Chair Ron Ewers

Chief Executive Officer's Report

1. Update on Pensacola Expansion	Dr. Ken Ford
2. Discussion of Ground Floor Ocala Renovation	Dr. Ken Ford
2. Research Update	Dr. Ken Ford

Other Items

Adjournment

IHMC Chair Ron Ewers called the meeting to order at 8:30 a.m. CST. Directors in attendance included: Dick Baker, Carol Carlan, Bill Dalton, Ron Ewers, Eugene Franklin, Hal Hudson, Jon Mills, Eric Nickelsen, Mort O'Sullivan, Alain Rappaport, Jim Reeves, Martha Saunders, and Glenn Sturm. Also in attendance were Ken Ford, Bonnie Dorr, Laurie Zink, Sharon Heise, Phil Turner, Ann Spang, and Julie Sheppard.

Chair Ewers welcomed and thanked everyone who dialed in this morning. He informed the Board that there were three action items to discuss this morning followed by Dr. Ford's research report and stated that he anticipated a brief meeting this morning. Chair Ewers introduced Action Item 1 calling for approval of the February 8, 2016 Minutes. Director Dick Baker moved approval seconded by Director Eric Nickelsen and the motion to approve the minutes was unanimously approved.

Chair Ewers introduced Action Item 2 calling for the election of a Chair and Vice Chair and remarked that it was hard to believe that 2 years have gone by so very quickly and informed the Board how much he has enjoyed the opportunity to be IHMC Board Chair. He continued by mentioning how much we have accomplished these past 2 years including the construction of the new facility in Pensacola and waterproofing and repairing the Ocala facility and it is with pleasure that I look for nominations for the Chair and Vice Chair for 2016 to 2018 term.

Director Dick Baker nominated Bill Dalton for Chair and Alain Rappaport for Vice Chair and this motion was seconded by Director Carol Carlan. Hearing no other nominations, the motion to elect Bill Dalton Chair and Alain Rappaport Vice Chair was unanimously approved. Incoming Chair Dalton thanked the Board for their confidence and Chair Ewers for his leadership. Director Rappaport also thanked the Board for their confidence

and accepted the position of Vice Chair as a non-executive level leadership position.

Chair Ewers then introduced Action Item 3, the adoption of the 2016-17 meeting schedule and proposed the following meeting dates subject to incoming Chair Dalton's approval. He suggested an in person meeting in Pensacola in our new building beginning with dinner Sunday evening, October 2 followed by a meeting Monday morning October 3, 2016; a teleconference call at 8:30 am central time on Monday December 5, 2016; a teleconference call at 8:30 central time on Monday February 13, 2017; an in person meeting in Pensacola on Monday June 5, 2017 from 8:30 to 12 central time with a social dinner the prior evening Sunday June 4, 2017.

Director Nickelsen moved approval of these dates and Director Baker seconded and the motion to approve 2016-17 meeting dates was unanimously approved.

Chair Ewers then turned to Dr. Ford to provide his report.

Dr. Ford began by thanking Ron Ewers for his Chairmanship of the Board explaining that IHMC has had many significant things happen during his two years in the leadership role. He asked the Board to recall the Pensacola flood in spring 2014, the year of repairs and the redesign of the new building and subsequent construction; the radon and water issues in Ocala and added that through it all, Ron had been calm and collected and has helped me work through many issues. He remarked how grateful he remains for his leadership and on behalf on everyone, wish to thank him and present him with a small token of appreciation from the Board. On behalf of the Board of Directors, Julie provided Chair Ewers with a gift certificate from La Cuisine, Mesa de Notte and an IHMC shirt.

Dr. Ford continued his report discussing the federal appropriations process as it continues its crawl towards fiscal year 2017, explaining that federal research and development budgets are hanging on to mild increases over fiscal year 2016 budgets. In particular, he stated that IHMC is cautiously optimistic that there will be increased priority placed on defense research focused on the warfighter, and their physical and cognitive capabilities under high stress conditions. He offered that such an increase would align nicely with one of IHMC's newest research areas of human performance, safety and resilience in extreme environments, such as those encountered in diving, high altitude aviation, or even mountainous operations.

He then explained that across the board, procurement processes have been unusually slow since our February meeting, but just recently the pace of awards has picked up such that nearly \$3 million in new funding has arrived, with another \$2 million still pending and in negotiation. He started his discussion with the projects that are in-hand, and then explained that he would discuss the pending awards, which should all be in place by the fall meeting.

Dr. Ford noted that Dr. Matt Johnson has been funded by Humatics to assist with their Aurora Flight Sciences-led project under the DARPA-sponsored ALIAS program, or Aircrew Labor In-cockpit Automation System adding that in this program, DARPA is

seeking to insert new automation into existing multi-crew aircraft to enable operations with reduced onboard crew. He explained that the objective of the program is to create a portable and extensible hardware and software toolbox introducing new levels of automation across a wide variety of military and civilian aircraft that ultimately reduces crew requirements. He stated that in the Aurora effort, the team is developing a robotic copilot that must be designed to work with a human pilot and that Matt's role is to provide human-machine system design expertise, essentially ensuring proper design of the system and thus both system effectiveness and its acceptance by a human pilot. He mentioned that what is most notable about this effort is that Matt was brought onboard late in the project, to essentially fix what DARPA had noted as deficiencies in the Aurora-Humatics approach.

Dr. Ford also explained that Dr. Alberto Cañas will be working with the Concept Mapping Academy of Tallinn, Estonia, to complete the initial development and deployment of a "Concept Mapping Certification Platform" to support Information and Communication Technologies-based learning and assessment of concept mapping. He stated that the platform will have two initial purposes: that of providing an environment to learn about concept mapping, and that of testing users to certify their proficiency in concept mapping. He further explained that this is the latest of a series of collaborations Alberto has had with Estonia, and as a matter of fact the 7th International Conference on Concept Mapping will be hosted in Tallinn September 5th through 9th.

Dr. Ford then informed the Board that Dr. Niranjani Suri received a \$1.4 million award from the Air Force Research Laboratory Information Directorate for a 2-year effort to develop innovative methods enabling effective management of information for military operations. He mentioned that currently network architectures and protocols in the command and operations center environment do not transition very well to the tactical field networking environment, where wireless links are unreliable, prone to disconnection, high in latency, and constrained in bandwidth. Therefore, he explained, there is need for technologies to bridge the gap between the operations center and the tactical domain, to better provide warfighters with actionable information in a timely manner in what is further a more contested and higher threat environment. Dr. Ford stated that Niranjani will be working with Dr. Andrzej Uszok on this challenging problem, and their approach will be to explore the concept of "Value of Information," adding that this Value of Information, we believe, is a promising approach to enable rapid filtering and prioritization of information according to the corresponding value perceived by the consumer, and thus will provide warfighters the most critical information as fast as possible to support their mission in the field.

Dr. Ford then turned to IHMC's newest research scientist, David Fries, and informed the Board that David has been notified by Harbor Branch Oceanographic Institute that they are funding a one-year effort to design a material sampling biopsy module to be integrated into a modified IHMC robotic undersea sampling system. He explained that this biopsy module will allow for the intake of samples, processing of those samples, and management of sample waste. He mentioned that while the current robotic sampling system is limited to operations at 50 meters depth and constrained to sampling of liquid

solution, the modified system will be able to perform deep water sampling of soft material at up to 200 meters depth.

Turning to the still pending awards, Dr. Ford added that the IHMC Ocala team led by Dr. Bonnie Dorr received the great news that they were selected for an award under the Intelligence Advanced Projects Activity program CAUSE, or Cyber-Attack Automated Unconventional Sensor Environment. He stated that the CAUSE program seeks to develop and test new automated methods that forecast and detect cyber attacks significantly earlier than existing methods by fusing information from an organization's traditional internal sensors, such as host data, with less conventional external sensors, such as publicly available data sources. He mentioned that Bonnie and her team are partnering with prime contractor Leidos, a joint spin-off of SAIC founded in 2013, and their role is will be to adapt and apply natural language processing technologies to perform event detection and provide input to a Leidos process of generating probabilistic warnings of cyber attacks. He concluded by stating that this 3-year, \$1.25 million effort on IHMC's part is a significant win for Ocala and an important application of natural language processing to the high national priority area of cybersecurity.

Turning to other pending projects, Dr. Ford announced that in cooperation with the U.S. Navy and its senior undersea medicine domain experts, Drs. Dawn Kernagis and Alberto Cañas will be sponsored by the Office of Naval Research to develop a unified collection of well-formed concept map-based knowledge models explaining decompression sickness, decompression modeling, central nervous system and pulmonary oxygen toxicity, nitrogen narcosis, high pressure nervous syndrome, immersion physiology, and submarine medicine in a clear and understandable way. He explained that this collection of maps will be packaged into an iPad App for publishing in Apple's iTunes store and on a website for browsing adding that this archival record of undersea medicine expertise will be key to passing along experience and knowledge accumulated by senior researchers in an aging and shrinking community.

He continued his discussion by stating that in a related effort also to be sponsored by ONR, Dr. Kernagis will be leading an IHMC team to develop a roadmap for a new synthetic biology research program to optimize warfighter tolerance to hypothermic stress, and as a first step she will conduct a study that will involve knowledge capture, discussion, and strategic planning among world-class experts in fields of gut microbiome, synthetic biology, adipose tissue storage, metabolism, and human performance in undersea and hypothermic environments. Dr. Ford explained that combining the knowledge and input from these field experts will be critical to exploring the ability for warfighters to store additional adipose tissue on demand and provide them a major advantage with respect to protection against hypothermic stress and generation of metabolic energy.

Dr. Ford also mentioned that Dr. Bill Clancey, in partnership with small business partner Aqru Research and Technology, received notice of a significant phase 2 award from the Air Force Research Laboratory Human Effectiveness directorate to perform modeling and simulation for advanced design, development, testing and evaluation of autonomous

multi-agent systems. He stated that this effort is providing risk reduction for the integration of autonomous systems with manned systems, ensuring interoperability and incorporating a construct for human-machine teaming and trust adding that Bill's role is to perform work analysis of human-autonomous system operations in the air combat domain, and to extend the Brahms work practice design modeling and simulation framework as a testbed for mixed manned and unmanned operations in contested airspace.

Dr. Ford then informed the Board that together with small business Quantum Applied Science and Research, IHMC's Dr. Anil Raj has been notified that the AFRL Human Effectiveness directorate intends to fund a 24 month program to generate and validate a system consisting of a wearable sensor suite and cognitive gauges for a Quantified Warrior. In specific, he stated that Anil will be integrating modern, miniaturized sensors into a lightweight, unobtrusive, wearable suite that communicates with low-power, high performance processing elements to estimate various dimensions of user cognitive and physiologic state and then display these estimates to allow individuals and commanders to quantify cognitive workload, stress, fatigue, and other factors and adjust team tasking accordingly to improve mission effectiveness. Dr. Ford suggested that this approach has potential to greatly increase a warfighter's ability to handle individual and team cognitive demands, particularly when addressing unplanned events, system failures, high task load, and maintenance of shared situational awareness during high operations tempo missions.

Continuing on in his report, Dr. Ford stated that Dr. Robert Hoffman has received notice that he will be funded by U.S. Cyber Command, an armed forces command tasked with synchronizing defense of U.S. military networks, to conduct cognitive work analysis while observing Cyber Protection Team missions in the continental United States. He commented that this cognitive work analyses will result in descriptions of work processes and decisions, and evaluative scenarios, with the goal of identifying key ways to maximize efficiency and effectiveness of teamed analysts in a network operations center. Dr. Ford explained that Cyberspace operations are an increasingly growing concern, and we believe this effort has potential to lead to a long research relationship with USCYBERCOM.

And most recently, Dr. Ford mentioned that IHMC has received notice of two Small Business Technology Transfer awards or STTR's. In one, he stated that Dr. Robert Hoffman will be working with Aptima to develop coordination and performance metrics in command and control environments for the purpose of evaluating training effectiveness, under the sponsorship of the Air Force Research Laboratory Human Effectiveness directorate. Specifically, he commented, Robert will be helping Aptima to design, develop and validate a system for measuring human-agent performance and coordination within Air Support Operations Centers by helping them to develop a thorough understanding of relevant data from the ASOC, and subsequently the actions and behaviors of actors that impact coordination tasks and overall system performance.

For the second STTR, Dr. Ford announced that Dr. Kristy Hollingshead and Adam Dalton of IHMC's Ocala office were notified that, together with small business Modus Operandi, they were selected to receive an Army STTR award to develop and deliver a

standalone system for online threat detection and behavioral analysis for enhanced situational awareness. He explained that collecting and analyzing online content for situational awareness is currently so laborious and error prone that it cannot be accomplished by a single user in an operational environment but that in this initial phase of what we hope will be a multi-phase effort, Kristy and Adam will be assisting in developing and demonstrating a prototype that will be installed on a single USB drive and that will be simple enough to use that a non-technical warfighter can rapidly gain a big picture understanding of relevant events, entities and communities by automatically “scraping” and contextualizing information from multiple sources such as Twitter, Facebook, LinkedIn, and blogs, and from multiple data types such as text, pictures, audio and video. In this effort, Dr. Ford stated that Kristy and Adam will be leveraging IHMC expertise in data science and natural language processing, and a significant goal is to bring in Pensacola researchers with expertise in data visualization in phase 2.

Dr. Ford also announced that IHMC will be competing in the inaugural Cybathlon 2016 in Zurich this October explaining that the Cybathlon is a competition for disabled athletes using advanced assistive devices, including robotic technologies. He added that we are currently the only United States team competing in the Powered Exoskeleton Race continuing on to share his belief that the Cybathlon is an important event to accelerate technology and showcase the advancements being made in robotics and other technologies to assist persons with disabilities. He informed the Board that the IHMC pilot, the term for the athlete using the device, for Powered Exoskeleton Race must be paralyzed from the waist down and that using IHMC’s state-of-the-art Mina Exoskeleton, our pilot, Mark Daniel, needs to complete a set of challenges as fast as possible with the challenges including tasks people would encounter everyday but cannot be performed with a wheelchair. He concluded by showing the Board a video from the Cybathlon trailer and Mark Daniel and stating that IHMC is very excited to have been invited to compete in this event.

Dr. Ford then turned the conversation to employment and personnel updates at IHMC Ocala and Pensacola mentioning that Ian Perera, an upcoming young scientist recently completed his PhD in Computer Science from the University of Rochester. He informed the Board that IHMC has promoted Ian to IHMC Research Scientist and he gave a talk to IHMC employees May 24th on his dissertation research and we all celebrated his success with a party at the Union Public House. He asked the Board to join him in congratulating Ian who shows promise at being a very successful grant recipient.

He continued by mentioning that on a sad note, Ann Spang who runs the administrative side of things at the Ocala office will be leaving us at the end of the summer as she is retiring and moving to Ft. Myers to aid her daughter who will be giving birth to twins this fall. He added that while he doesn’t think that is called retiring, we will miss Ann and we appreciate Ann giving us so much notice to find and train people and while she will be irreplaceable, IHMC has revisited the needs at the Ocala facility and created two new positions that we have now filled.

Dr. Ford announced that Trish Smith joined us in mid-May as Program and Research Coordinator in Ocala reporting to Dr. Bonnie Dorr and that her responsibilities will be to provide contract and grant support to the Ocala research staff, including assimilation of multi-site inputs for project-related proposals and reports, production and uploading of periodic reports and pre-publication forms, arrangement of project-related travel, calendars and teleconference announcements/agendas. He mentioned that Trish will also assist in coordinating and assisting in the planning and execution of IHMC events including the Ocala Evening Lectures, Science Saturdays, and Robotics Camp as well as scheduling and coordinating internal meetings and visits including workshops and afternoon lectures. She will also function as the Coordinator for the Ocala office and supervise building maintenance, purchasing, and perform all other duties required for the successful operations of the office including supervision of student employees and volunteers that assist in IHMC events. He added that all of Trish's responsibilities will involve frequent communications with the Pensacola operations.

Dr. Ford also mentioned that Laurie Zink joined us on May 31st as the IHMC Development and Community Outreach Director stating that her responsibilities will be primarily related to planning, developing and implementing an IHMC development program with measurable results and although her home office will reside in Ocala, it is my expectation that she will include the Pensacola and national marketplace in her development program. Dr. Ford stated that Laurie will also assume leadership of the external and outreach events at the Ocala office of IHMC including the Ocala Evening Lectures, non-scientific guest visits and other outreach and external events. He asked the Board to join him in welcoming both Trish and Laurie to IHMC and of course, wishing Ann well.

Dr. Ford then mentioned that IHMC also has several new hires in the Pensacola office as well. Specifically he stated that Robert Griffin has been working as a research associate in the Robotics lab since the spring explaining that he is a PhD student at Virginia Polytechnic Institute in the Terrestrial Robotics, Engineering and Controls Lab and holds a BS in Mechanical Engineering from Tennessee Technological Institute. He also stated that Tyson Cobb has been hired as a Research Associate working with Jerry and Peter in the robotics lab adding that Tyson has a mechanical engineering degree from UCF and has been working as an engineer for a large surgical device company in California. Dr. Ford stated that Tyson's areas of interest are solid modeling and design, rapid prototyping and metalworking and he will be working on the Exo Project.

Continuing with new hires, Dr. Ford stated that Mark Daniel has been hired as a full time research associate, our pilot for the competition, until the end of the Cybathlon (mid-Oct). adding that as we test our hardware/software for the Exo and as Mark starts training for the Cybathlon, it will be an all encompassing experience. He mentioned that Mark, whom some of the Board may have met, is paralyzed from the waist down with a spinal cord injury, and also has experience with mechanical design and fabrication, so he will assist with those aspects of the project. He explained that IHMC is very fortunate to have Mark work with us and he is postponing his "walk" across America journey to accommodate the Cybathlon, and will resume his training and planning once the Cybathlon is over.

Dr. Ford mentioned that Koen Kramer has been hired as a research associate in the robotics lab adding that he is completing his Masters in Mechanical Engineering from the Technical University in Delft, Netherlands and he holds a Bachelors degree in Human Movement Science from the VU University in Amsterdam. Continuing he stated that Georg Wiedebach, recently hired from Germany, is also a research associate with the robotics lab mentioning that Georg worked two summers, 2014 and 2015, as a student intern on the DRC challenge and completed his BS in mechanical engineering and his Masters degree from ETH in Zurich, Switzerland. Dr. Ford added that Georg recently returned to IHMC and his interests are perception, control and motion planning.

Continuing his personnel report, Dr. Ford informed the Board that Dr. Antonio Bento Filho has been invited this year to join IHMC as a Visiting Research Scientist collaborating with IHMC on exoskeleton, legged robot, and humanoid robot projects. He mentioned that Dr. Bento is teaching and performing research at Brazil's Federal University of Espirito Santo where he is the robotics' lab leader at the Mechanical Engineering Department's lab Guara and that his research experience and current interests are an excellent match with the research being conducted at IHMC on humanoid robots and exoskeletons.

And recently, Dr. Ford added that IHMC concluded another joint hire with Tulane and that he was pleased to report that we have again hired a joint research scientist with Tulane University stating that Dr. Parisa Kordjamshidi was hired as a Research Scientist on a joint appointment with Tulane University and will be starting her new assignment in August. He mentioned that Parisa will be a tenure track Associate Professor in the Department of Computer Science with an initial 4-year appointment and will be spending about 30% of her time performing research at IHMC informing the board that Parisa received her PhD in computer science from KULeuven in Belgium performing her dissertation in the area of Structured Machine Learning for Mapping Natural Language to Spatial Ontologies. He stated that she holds a Masters in Software Engineering from Terbiat Modares University in Tehran and that in 2015, she received the MIT Department of Electrical Engineering and Computer Science Rising Star Award. For the past several years, Dr. Ford added, Parisa has been on a postdoctoral appointment at the University of Illinois, Urbana-Champaign and we believe Parisa and her research interests will be a great fit with both our Pensacola team headed by James Allen and our Ocala team with Bonnie Dorr. And, he added, along with Brent Venable, our other joint hire with Tulane, IHMC hopes to continue to strengthen our research relationship.

Dr. Ford then turned the discussion to one of his personal favorites, welcoming the summer interns and informing the Board that we are privileged to have a diverse group this summer mentioning that some have already started working and some will be arriving in the next several weeks but that he would highlight a few of the interns.

He mentioned Nadia Razek who attends Carnegie Mellon University and is majoring in Applied and Computational Mathematics and Human and Computer Interactions and will be working on Software development with Peter Neuhaus and Jerry Pratt. He added that

although originally from Egypt, Nadia grew up in Pensacola and she designs and sews clothes, loves sports and enjoys Pensacola area beaches.

He discussed Amelia Leenig, a third year student at UWF majoring in mechanical engineering who will be working on mechanical designs this summer with Jerry and Peter adding that Amelia is Vice President for the UWF Chapter of the American Society of Mechanical Engineers and is Secretary for UWF's Ultimate Frisbee Club.

He continued with Marcus Jackson, a UWF mechanical engineering student who will be working with Jerry and Peter this summer and is on the drone team for UWF's unmanned systems lab and enjoys making and printing 3d parts in Solidworks, loves fixing cars, figuring how mechanical things work and fishing.

He discussed Erik Winfree, a UWF senior, majoring in software engineering and minoring in Art who will be working under Peter Neuhaus adding that Erik is a 32 year old originally from Tennessee that enjoys competing in triathlons, fishing and studying art and is actually a sponsored cyclist by Gulf Coast Cycle and Tri.

Dr. Ford mentioned Aimee Gerold, a third-year undergraduate student at Georgia Institute of Technology pursuing her degree in biomedical engineering, along with a minor in French adding that she graduated from Pensacola High School with a degree from the International Baccalaureate program. This summer at IHMC, he stated that Aimee will be working with Dr. Peter Neuhaus and Dr. Jerry Pratt on many different projects, such as the NRI Avatar project, and learning new skills on software engineering and coding and that Aimee's future plans involve working in biomechanics or stem cell research but when not working, Aimee enjoys playing ultimate Frisbee on the women's club team at Georgia Tech, and she also enthusiastically loves animals.

He discussed Blake Ordway, a Pensacola native interning for Nirranjan Suri for three months during the summer of 2016, who is a junior at Pensacola Christian College studying computer information systems adding that Blake will graduate in the spring of 2017 and foresees himself getting a Masters degree in cyber security from the University of West Florida. Dr. Ford mentioned that Blake will be working on the ONR Adaptive Middleware project with Nirranjan and when Blake is not programming computers he enjoys reading books, watching YouTube videos, and playing computer/video games.

Dr. Ford also discussed Eric Gordon, born and raised in Pensacola, who is joining IHMC this summer to intern for Nirranjan Suri. He added that Eric is a senior at the University of Florida, majoring in computer engineering and enjoys Tae Kwon Do, and holds a second-degree black belt.

He also mentioned Basil Kuloba, a 19 year-old student at the University of West Florida, born in Canada who is double majoring in computer science and physics, and hopes to one day work in, or own, his own robotics facility. Here at IHMC, Dr. Ford stated that Basil will be working under Dr. Jerry Pratt and Dr. Peter Neuhaus as a software intern where he currently, is working on techniques for coding and when Basil is not interning

at IHMC this summer, he enjoys playing music, such as the piano and brass instruments, and singing and is proficient in the art of sign language.

Dr. Ford mentioned that many others will join us as interns this summer but wanted to mention just a few. He then turned the Board's attention to Science Saturdays and Evening Lectures for Fall – and began a discussion of the Pensacola Lectures Fall 2016 series that include: on August 11, 2016, James Briscione, a local Pensacola chef returning with his topic, Who Teaches the Cooks to Cook; followed by September 7, 2016, Leonard Wong, with his talk on: Lying to Ourselves: Dishonesty in the Army Profession; followed on October 13, 2016 by the famous Robb Wolf discussing The Paleo Solution; and then on November 17, 2016, IHMC hosts Gregory Smith discussing Microbiology and Immunology; and finishing up on December 1, 2016 with Judith Curry on Climate Science and the Uncertainty Monster.

In Ocala, Dr. Ford informed the Board that the Lectures for Fall 2016 include: September 29, 2016 with Doug McGuff discussing Body by Science: A Research-Based Program for Strength Training; October 20, 2016 with Kirk “Doc” Parsley with How Sleep Affects Performance; November 10, 2016 with Dr. Oscar Schofield an Oceanographer with Rutgers School of Environmental and Biological Sciences; and concluding December 15, 2016 with Mark Reifkind discussing Energy, Mobility and Strength.

He then turned to Science Saturdays, mentioning that the spring 2016 Science Saturdays were successfully completed in both locations with photos from both locations posted to the IHMC website. He added that the fall season of Science Saturdays is close to final and that in Ocala, it's as follows: September 10th with Adam Dalton demonstrating Balloon Cars; October 8th with Kristy Seitz on Computer Game Design; November 5 with Sunny Ferrero on Food – What's in It?' concluding on December 3rd with Jena Hwang discussing Secret Codes or Big Data.

In Pensacola, he mentioned that the fall schedule is: September 24th with Pat Hayes on Bottle Rockets; October 22nd with Fun with Chemistry with Jamie Zigterman and the American Chemical Society; November 19th with Dawn Kernagis, Topic to be announced; and concluding on December 17th with Matt Johnson demonstrating Roller Coasters.

Dr. Ford also discussed the IHMC Robotics Camp adding that once again we are holding robotics camps for 6th, 7th and 8th graders, and it will be the fifth year in Ocala and our first robotics camp in Pensacola. He mentioned that Pensacola has two sessions of camp scheduled for the weeks of June 20th and July 5th with each session being four days modeled more or less after the Ocala camps. He stated that camp sponsorships include Best Buy (\$5,000), the JH Baroco Foundation (\$5,000), and FLATE (\$340) adding that approximately \$3,000 of the Best Buy funds were used to purchase 10 laptop computers and that Pensacola will use the robots we've used in Ocala, and Ocala will likely use the laptops. In Pensacola, Dr. Ford added that the camps will be taught by Heath Parr, a Brown Barge Middle School teacher who is the advisor of the school's robotics club and that Community Action Programs of Pensacola has agreed to sponsor camp fees of \$150

for up to 15 students. As of this date, he mentioned that both sessions of camp are full with 20 students each with a short waiting list. He added that Pensacola research staff who will be supporting the camp include Dawn Kernagis, David Fries, and Matt Johnson, with lunchtime talks (“Humans in Sea and Sky”, “Robots in the Sea”, and “Humanoid Robots”, respectively); Dawn Kernagis, Chris Schmitt, and John Carff (Lunch with a research scientist – small groups of students in round table style similar to that at the evening lecture dinners), and Brooke Layton (robotics lab tour and high school volunteers.) He thanked all of the IHMC volunteers for their enthusiastic support.

Dr. Ford mentioned that Ocala, also, is full in both sessions with a waiting list. Most of the details are the same as last year and the research staff supporting the camp include Adam Dalton, Ian Perera, and Lockheed Martin with lunch time talks, and Adam Dalton, Ian Perera, and Lockheed Martin with lunch with a research scientist. He also thanked all of the Ocala HMC volunteers for their support.

He informed the Board that he was looking forward to sharing some fun stories about these camps at our fall meeting but each student who applies for a space at camp has to fill out an application with why they want to attend camp in 50 words or less. He read one of these that he thought the Board might find interesting... “Robotics fascinates me and I have always been interested in machines and electronics. I have my heart set on being a robotics engineer at IHMC and I thought this camp would help me along”.

Dr. Ford then informed the Board about the new podcast series StemTalk about interesting people in science and technology and showed the Board how to access the podcast series and played some footage from a recent talk.

He also informed the Board about a recent award stating that this May, the League of American Bicyclists recognized IHMC as a bronze level Bicycle Friendly Business adding that IHMC joins a cutting-edge group of nearly 1,200 local businesses, government agencies and Fortune 500 companies across the United States that have a bike-friendly designation. He mentioned that this designation lasts for four years, and is renewable thereafter and before it renews, IHMC can re-apply for a higher designation. He added that several IHMC employees bike to and from the Pensacola location, and the Institute has its own bikes for employees to use.

Finally, in closing, Dr. Ford mentioned that IHMC hopes to hold the fall meeting in our new building, entertaining everyone in the new facility and showing off the new Board room and kitchen. He added that we have held hotel rooms for everyone from out of town and that we will be forwarding more information as we get closer to the fall meeting.

He concluded his report by again thanking Chair Ewers for his leadership.

Chair Ewers thanked Dr. Ford for an excellent report and stated that he spoke for the entire Board to say how delighted we are with the progress this past year and all the new funding opportunities.

He then asked if there were additional discussions for the Board and hearing none, he adjourned the meeting and thanked everyone for dialing in.

The meeting adjourned at 9:35 central time.

Respectfully submitted,

Julie Sheppard
Corporate Secretary