

SUMMARY OF THE NHHPC CONNECTING THROUGH COLLABORATION WORKSHOP OCTOBER 18, 2011

Executive Summary

The theme of the second NASA Human Health and Performance Center (NHHPC) workshop was Connecting Through Collaboration. The program included morning presentations and a panel discussion regarding the importance and relevance of STEM education to any organization. These discussions were followed by many topical breakout sessions in key areas identified by the NHHPC members (see agenda, **Appendix A**). The breakout sessions built upon those from the first workshop, and the goal was to identify areas of interests for collaborative projects, prizes and data sharing/best practices. A working group focused on the topic of Education and Outreach was formed based on the breakout session from the first workshop. The NHHPC members were encouraged to establish additional working groups based on the following breakout session topic of interest and continue the dialogue on collaborative projects between meetings.

The breakout sessions were intended to create connections in areas of mutual interest to facilitate development of collaborative projects or challenges. The NHHPC wiki was used to capture the summaries and outcomes of these and to continue to foster these connections and ideas. The topics/themes for the sessions were:

- Collaborative Web Tools
- Education and Outreach
- Medical Technology Development
- Performance and Human Factors
- Innovative Methodologies
- Social Entrepreneurship

A survey was conducted to assess member expectations and to solicit feedback regarding the most (and least) valuable aspects of the event. Of the 75 members that attended the workshop, 38% of the members who responded to the post workshop surveys represented a government agency, 8% were from industry, 8% were from academia, and 46% were from non-profit organizations. Member feedback will be used to plan future NHHPC events.

The NHHPC workshop was attended by over 70 members from more than 35 different organizations [see **Appendix B**]. The participants gathered at the end of the workshop to provide overall feedback in addition to the survey and based on the survey submissions, 92% qualitatively rated the event as good or above. Some general comments include: continuing the NHHPC Member to Member Connect Webcasts on a recurring basis, continuing the workshops

Final

twice per year, and varying the location of the workshops to regional areas or webcasts to reduce travel costs for the membership.

The feedback received from both NHHPC workshop events has shown that one of the most valuable aspects of these events were the opportunities to network with other NHHPC members and to share project ideas. The contacts made during the workshops were critical to continuing the collaborations between members and to enhance human health and performance shared expertise.

Conclusions and Recommendations

The summaries from the workshop breakout sessions are posted on the NHHPC wiki and all presentation materials are available on the NHHPC website. The specific recommendations and next steps identified from this workshop are as follows:

Breakout Session Conclusions/Recommendations

Collaborative Web Tools

Summary

- When it comes to successfully using web tools to facilitate collaboration, the human experience (ease of use) is more important than which tool you use
- We need projects/project examples to drive the selection/tailoring of specific tools

Next Steps on Tools

- Keep as much open on the web as possible so people do not need to login if not necessary
 - Reassess what needs to be in secure wiki and use to archive information
- Identify specific projects underway in the Education & Outreach group that the membership can support from a technological standpoint
- Solicit member interests and needs across the NHHPC on the etherpad
 - Open collaborative editor-members will simply need to click on the link, identify themselves, and start typing to contribute. All will be able to see what each other has contributed.
- Identify champion/weavers for themes/topics

Suggestions to Improve Engagement

- Create an electronic newsletter that will include contributions from all members that we will push out
 - a. Solicit input via etherpad
- Create regularly scheduled Member to Member Connect webcasts for continuity and consistency
 - a. Provide speaker guidelines requiring it to be relevant for all members
- Create relevant and up to date content using members/weavers and information from other sources to engage and update members

Education and Outreach

1. Develop challenges on specific themes to build communities of practice
2. Provide summaries of educational activities and programs to put on the NHHPC and space Life Sciences Academy websites
3. Develop community of practice and potential Education & Outreach workshop

Medical Technology Development

1. Identified 10 medical technology focus areas that will enhance member connections with overlapping interests when seeking for or offering a new technology solution
 - a. Pharmacokinetics/pharmacodynamics (medical shelf life and efficacy)
 - b. Environmental countermeasure technology

- c. Medical event prediction (e.g. NASA IMM, GE Early Health)
- d. Medical modeling (decision support (e.g. IBM Watson))
- e. Emergency medical treatment technology
- f. Medical sensing technology
- g. Behavioral analytics/psychophysiological analytics (how much reserve is left?)
- h. Technology for human performance enhancement (physical, pharm, medical)
- i. Technology for alertness and fatigue
- j. Technology for hypo-metabolic states (hibernation like)

Performance and Human Factors

1. Determine the best mechanism to maintain information exchange for the Performance and Human Factors group
 - a. Teleconference
 - b. NHHPC wiki
2. Identify POCs from each organization to ensure effective follow-up regarding potential collaborations/touch points
3. Use training goals for undergraduate/graduate student to facilitate collaboration
4. Post all information/communications to the NHHPC wiki, including potential dates/times for group teleconferences

Innovative Methodologies

1. Spoke specifically with the San Diego Zoo on how to best move forward with their challenges using various innovation platforms
2. AFRL identified several external challenges that may be candidates for posting on the NHHPC website

Social Entrepreneurship

1. A social entrepreneurship working group is necessary to sustain momentum and accomplish identified goals
 - a. Participants agreed to identify a POC from their organization to serve on the working group
 - b. The working group plans to launch in November 2011
 - c. All participants desire a project that can be executed and completed by October 1, 2012, or sooner (to be featured at the Fall 2012 NHHPC workshop)
2. Requested a directory of professions associated with the NHHPC member community
3. Would like a platform for subject matter experts to convene and share skill sets they are willing to volunteer
4. Desire a resource that provides video and audio connectivity for working group meetings

General Survey/Feedback Results

1. Continue to capture notes and feedback from the NHHPC events and post to either the NHHPC website or NHHPC wiki, based on sensitivity of the material
2. Collect and distribute a list of the workshop participants and their organizations/interests to have available prior to the networking/workshop events
3. Provide the opportunity for members to attend more than one breakout session per workshop

- a. Recap the breakout session at the end of the day for all workshop participants with 5-10 min briefings, without the use of slides/presentation materials
 - b. Consider having shorter breakout sessions but hold them in series rather than in parallel
 - c. Conduct breakout sessions as in the past but of shorter duration, followed by an interactive session of all participants to learn about the outcomes of each session and to discuss additional connection points and collaborative opportunities
4. Reduce the use of slides during panel discussions and have more time for Q&A
5. Define goals and objectives clearly and provide a more detailed agenda of the workshop and breakout sessions
6. Develop critical needs/questions to be addressed by all members in order to better facilitate collaborations/connections
7. Allow members time to address their organization's wants/needs with the workshop participants
8. Choose an overarching theme and challenge each breakout session to create a collaboration under that theme

Appendix A NHHPC Workshop Agenda



NASA Human Health and Performance Center Workshop Agenda

Networking Opportunity Sponsored by Mozilla!
Tour of Mozilla Facilities and Welcome Cantina October 17, 2011 (1700-2000 PT)

Workshop at NASA Ames Research Center
Moffett Field, California
NASA Ames Conference Center
October 18, 2011 (0730 – 1630 PT)

Connecting Through Collaboration

Presenter	Topic	Time
	Registration	0730
Jeff Davis (NASA JSC) & Carol Carroll (NASA ARC)	NHHPC Welcome and Overview	0800
Pete Worden ARC Center Director	ARC Welcome	0805
FEATURED KEYNOTE: EDUCATION & OUTREACH		
Leland Melvin (NASA HQ)	Video Presentation	0815
Jancy McPhee (USRA) Director, Humans in Space Symposium Youth Art Competition	International Youth Art Competition	0825
Moderator: Helen Lane (NASA JSC) Panel Members Ben Stephens (Clemson University) Karl Klimek (Square One) Rajendra Deshpande (Johnson & Johnson)	STEM...So What? Linking STEM to Healthy Organizations	0900

Carl Person (NASA HQ) Victor Welch (GE)		
Break		1015
NHHPC CONNECTIVITY		
Jeff Davis (NASA JSC)	Update of NHHPC Activities	1030
Jeff Davis (NASA JSC)	<p>Charge for the Breakout Sessions:</p> <p>Collaborative Web Tools</p> <ul style="list-style-type: none"> • Facilitators: Elizabeth Richard (Wyle), Pascal Finette (Mozilla) <p>Education & Outreach</p> <ul style="list-style-type: none"> • Facilitators: Helen Lane (NASA JSC), Karl Klimek (Square One), Kevin Rosenquist (Wyle) <p>Medical Technology Development</p> <ul style="list-style-type: none"> • Facilitators: Mark Weyland (NASA JSC), Victor Welch (GE) <p>Performance & Human Factors</p> <ul style="list-style-type: none"> • Facilitators: Ben Stephens (Clemson University), Mihriban Whitmore (NASA JSC) <p>Innovative Methodologies</p> <ul style="list-style-type: none"> • Facilitators: Cynthia Rando (Wyle), David Shahady (AFRL) <p>Social Entrepreneurship</p> <ul style="list-style-type: none"> • Facilitators: Samantha Snabes (Wyle), Scott Henderson (CauseShift) 	1100
Lunch		1200
All	Breakout Sessions	1330
Jeff Davis (NASA JSC) and Carol Carroll (NASA ARC)	Member Feedback/Next Steps	1600
Adjourn		1630

Appendix B NHHPC Workshop Participating Organizations

AFRL 711th Human Performance Wing	National Center for Nano-Electronics/Brain Mapping Foundation
Baylor College of Medicine	Nike
CauseShift	Opportunity International
CCI	Orion's Quest
Clemson University	PepsiCo
	Proctor & Gamble - Global Business Services
Columbia University	San Diego Zoo Global
Committee for Action Program Services	Square One Education Network
Engineers Without Borders	The National Center for Human Performance/Texas Medcial Center
FAA Civil Aerospace Medical Institute	The Texas A&M University System
GE Global Research	
German Aerospace Center (DLR), Cologne, Germany	UCONP/University of California Universities Space Research Association (USRA)
Girlstart	University of California School of Medicine (UCSF)
IBM	University of California, Santa Cruz
InnoCentive	
Innovation Learning Network and Kaiser Permanente	USAID
Johnson & Johnson	Wyle
Manna Energy Ltd.	
Mozilla	
NASA	
NASA Ames Research Center	
NASA Johnson Space Center	
NASA Open Government Initiative	
NASA/NESC	