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14. ABSTRACT Funding allowed for conference support to Games for Health Conference in 2011. This funding allowed Games for Health Conference staff and attendees to understand better the opportunities for games in support of warfighter health. As such we conducted survey of reports and other research that were relevant to the greater conversation over defense related health games. We also gathered input from attendees as well and we're in the process of formulating that work into our whitepaper for publishing later this fall. The funding also supported expansion of discussion related to the use of games and game technologies in learning and simulation. This restructuring of our event now establishes a much better platform for discussion about relevant simulation and game/simulation vs. game discussions at future Games for Health Events. Our Ludica Medica event is established and provides a stronger template for strengthening this component of the larger Games for Health, and medical simulation/training communities.					
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Introduction

In May 2011, The Games for Health Project, an effort organized by Digitalmill, Inc. with funding from the Robert Wood Johnson Foundation held its 7th Annual Games for Health Conference. This three day event brought together over 400 researchers, videogame developers, health professionals and health stakeholders including military, government, private sector, and foundational interests to discuss a wide range of issues, best practices, and research findings concerning the use of videogame media, and videogame technologies for use in health & healthcare.

During past events the conference has featured a number of talks concerning videogame-based simulation, and health game oriented projects with direct or derivative warfighter health value.

With support from TATRC in 2011, the Games for Health Project, sought to better expand conversations around larger potential roles for warfighter health with games and improving simulation-based development by crossing that field's DNA with the field of videogames.

A key manifestation of this effort was the launching of our 1st Annual Ludica Medica event (a title derived from Latin related words for play and medicine).

Ludica Medica, took place the day before the core Games for Health Conference. It assembled a bevy of speakers who were all working on projects that combined videogame-based approaches to professional development, elearning, and simulation. A key goal for establishing this event was to provide a better platform to service the growing medical simulation and training community that has been gathering at the Games for Health Event.

At past Games for Health events we've attempted to serve this community in the form of sporadic sessions or a strip of talks in track form embedded largely amongst a conference that is decidedly focused on therapeutic and preventative health uses for games. Our assessment was this approach was not the best way to play a meaningful role in the larger health & healthcare simulation community.

For our 2011 event, we decided to reformulate how the Games for Health Conference could be a more meaningful stop in a continuum of events that included MMVR, AIMs, and IMSH. The answer was to create a co-located standalone event that had the following properties:

- A hardcore curriculum focus on videogames, and where videogames, play, and associated design practices, technologies, and user psychology offer unique comparative advantages over "traditional" simulation, learning, training, and technology based efforts.
- A gathering spot for key leaders who are conduits between the traditional simulation communities found in areas like cyberpsychology, surgical simulation, IMSH, etc. and the game worlds. These leaders are essential towards long-term cross-pollination efforts that can be beneficial to each group
- A fostering of debate and conversation over how more fully realized videogames, those less simulative by nature, and more abstracted, may offer unique affordances and traits, not fully utilized by efforts-to-date in the healthcare learning and training worlds. The goal of fostering this debate, and documenting its output, is to better identify, and promote what might be key comparative advantages for videogames that lower the risk-reward ratio for decisions to use game-based approaches towards solving problems in health & healthcare.

Too often, our analysis showed, lines between games and simulations are blurred, such that they are often considered to be one-in-the-same. This makes decisions about methodologies either grossly mislabeled, or poorly targeted. In either case the opportunity to find attributable breakthroughs declines, and failures (actual or perceived) increase. Ludica Medica has a key mission to determine and promote the stand-alone attributes for games in the larger world of medical modeling, simulation, and learning and as such avoid being duplicative, and unnecessary contributor to the gatherings we've mentioned prior.

Beyond our Ludica Medica event, our second goal was to improve connected health discussions relevant to a wider array of warfighter health issues than previously done at Games for Health Conferences. This included exposing our attendees to game-based projects involving traumatic brain injury, cognitive health, nutrition, resilience, positive psychology, accessibility, and sensor-based health efforts.

From these discussions, we're working on a follow-up whitepaper designed to better align opportunities between warfighter health, videogame health interventions, and larger population health issues plaguing military and civilian populations alike. The hope, is that in doing so, with particular care to root discussion on the military side, to specific cited needs, that we can identify areas where decidedly game-based interventions may offer high reward opportunities relevant to TATRC's overall mission.

As such, we then hope, to use this work as a roadmap for how focused efforts like Ludica Medica, and our larger Games for Health Conference curriculum can be further shaped to serve as a key resource for organizations focused on military health & healthcare and force readiness issues.

Key Research Accomplishments

Our conference is not a harden research project by nature. Our funding from TATRC was for Conference Support. None-the-less a number of key research relevant tasks took place that are useful for the future.

- With the funding we expended a decent amount of staff time researching many previous instances of games and warfighter health and which organizations and PIs had undertaken those projects. While this was primarily to invite them to attend the event, perhaps even speak, it also gave us greater insight into what has been done with games in the name of warfighter health. We're preparing to organize and share that research later this fall as staff time allows us to prepare and properly publish these findings. We hope it will help program managers, developers, researchers, and the greater TATRC and warfighter health community understand the body of work thus far, and find potential sources of advice, published findings, and potential collaborators.
- A key goal of this funding was to understand better the opportunities for games in support of warfighter health. As such we conducted survey of reports and other research that were relevant to the greater conversation over defense related health games. We also gathered input from attendees as well and we're in the process of formulating that work into our whitepaper for publishing later this fall.

Reportable Outcomes

- **Improved Community and Conference Platform**
We have now established a much better platform for discussion about relevant simulation and game/simulation vs. game discussions at future Games for Health Events. Our Ludica Medica event is established and provides a stronger template for strengthening this component of the larger Games for Health, and medical

simulation/training communities. We hope to continue to grow that effort and improve best practices across both communities as a result.

While it may seem pedestrian in some respects, the funding provided was a key motivator in restructuring our conference to be a much stronger resource for key TATRC communities in the future.

- **Key Introductions**

There have been some stronger contacts made between TATRC program managers and the UPenn Center for Positive Psychology and Dr. Martin Seligman who was one of the Keynote Speakers for the event. The UPenn Center is currently undertaking a major effort under the auspices of General Casey (NMH) and is interested in using games and simulations to improve the distribution of its efforts on a more proactive basis.

Connecting TATRC and UPenn was a useful outcome of the conference. Games for Health staff are doing a follow-up post-conference visit with Dr. Seligman at his offices on August 15, 2011 to further explore such follow-up opportunities post-conference.

- **Grantee Connections**

Several TATRC grantees, and future grantees were able to interact directly with TATRC staff and follow-up on work-to-date and explore future opportunities at the event. We worked hard to make such opportunities possible.

Work to Be Completed

Warfighter Health & Games Report

Our goal, as outlined in the original grant request is to provide TATRC a more comprehensive level-set report on the opportunity for using videogames, and videogame technologies in support of warfighter health & healthcare. While it is clear TATRC program officers have increasing knowledge and perspectives on the best-practice opportunities our ability to provide updated knowledge and perspective to aid TATRC in understanding where there are and aren't opportunities concerning the intersection of videogames, health & healthcare is significant. Given the late funding availability we expect this report to be done sometime in October. It includes significant post-conference follow-up and research.

Continued Community Follow-Up and Data Gathering

Both with initial conference outreach, and with those that attended the Games for Health Project strengthened ties to the larger warfighter health community and the simulation communities. We are now in the process of following up with these contacts in support of putting together wider-findings and perspective. Our hope is that we can strengthen ties and conversations with these interests and further identify ways we can involve them in deeper discussions for research and innovation agendas.

Posting of Captured Video

Thanks to conference support, during the entire Games for Health Event, as well as our pre-conference Ludica Medica event we captured a variety of video. That video is still being encoded and catalog for posting on the Games for Health Web site this fall. As we do that we are planning to use these posts to further promote ideas throughout the wider simulation, game development, and health communities.

Recommendations

Warfighter health roadmap matched to game strengths and opportunities.

Videogames and their connected technologies offer unique opportunities beyond other health e-technologies, simulation technologies, and simulation processes. While it's not clear what each and every unique affordance and trait are, we believe there are unique opportunities.

Similarly, through meetings, many sponsored by TATRC, and our own deeper dive into the larger warfighter health world, there is a larger set of unique health issues related to frontline personnel, support positions, active, reserve, and retired military personnel. For example, take resilience training. That training may be quite contextually different when applied to warfighters. It may even be quite different, and needed, for on-base/near-base families as well to cope with long-term deployments of their spouses and parents. Games might be the right approach to resilience training. Indeed TATRC sponsored or managed one such resilience effort spoken about at Games for Health (developed by UCF) that seemed to trying to use a deeper game-based approach to its intervention-based approach.

By developing (even if at, first, through gathered opinion) a list of both unique elements, and then seeing how they match up, TATRC may be able to better understand where game-based approaches to health media and simulative interventions might offer the best risk-reward ratio.

A general criticism we have of the larger games for health space, let alone the even larger serious games space, is that many organizations, simply don't have a strong directive as to why and where games may offer a comparative advantage to problem/problem sets they're trying to solve. This results in uneven allocation of games to problems where we see one of two poor outcomes, either, the outcome really isn't a game beyond technology choices, or the problem was never in need of a game to begin with but somehow they decided to build one regardless. Neither approach, moves forward efforts to find real breakthrough and deployable solutions.

Unlocking Videogame Approaches

Research is needed to understand the unique traits of games (i.e. their design, production approaches, macro & micro-psychologies, and not just their technologies) and if such traits can be identified as offering specific strengths to problems in warfighter health. Part of this requires stronger participation in various aspects of research that might help to hone the means by which various communities may be influenced by common features, media and design patterns associated with videogames.

Some of this work is already being done by academia and grantees of Robert Wood Johnson Foundation's Health Games Research National Program Office but more is needed. To the extent TATRC can take what it learned by assisting fundamental research into areas like haptics, simulation, and others that have helped medical simulation, some of that strategy and its associated resources may help bring along similar efforts in videogames. This is not to say TATRC should focus on fundamental vs. applied research, or that it should involve itself in this effort unilaterally. Instead, like its recent foray with NIH on virtual reality technologies for obesity, there may be additional means of partnership and co-founding that could be a mean to bolster efforts in the field to fundamentally understand how and why games can help improve health and healthcare.

Cross-Pollination

TATRC needs larger cross-pollination with larger public-health interests specifically around common interests in games for health, simulation, and supporting social and e-health technologies. Supporting our event helps in this, and we note TATRC has been aggressive at attending a multitude of useful events, and recently working with NIH.

What we've found in looking deeper at warfighter health issues, and in conversations at this event is that major public health concerns are increasingly key concerns within the military population. While PTSD, rehabilitation, traumatic head injury, and battlefield medicine are still critical focuses of TATRC and other military health organizations, increasingly issues like substance abuse, psychological resilience, obesity, nutrition, general health, and especially personal health management (including disease management) are becoming critical population issues for the military in terms of force readiness and budget. It is here that there are a variety

of organizations also looking at games where there may be a new set of partnering and collaboration opportunities not yet fully explored.

Host a TATRC Review Panel at Future Event

Prior to Games for Health 2011, Digitalmill staff, were part of a well organized portfolio review panel that focused on in-progress, recently funded, and completed projects that were game and simulation related efforts. This was an interesting day where we saw a lot of project reports by PIs/Co-PIs, followed by a closed session discussion with a diversified review panel that commented on each project, and the portfolio as a whole.

While it was too late for 2011, one key finding for us (but which we put here in the recommendation section) was to host such a panel at our 2012 event in collaboration with TATRC. Our vision could include being the host site an actual review panel of similar focus and scope (were there enough projects available to review) but ideally might be the same style review panel, co-managed with TATRC that applied its rigorous review format to both projects with TATRC funding, but also other projects outside of TATRC funding but with similar structured research and product goals (e.g. Games for Health often features many SBIR-funded efforts from other government agencies, and many internal research and design efforts as well).

Such an event could be held as a pre-conference, or in-conference co-located effort. It would bring some additional rigor to our proceedings, and further serve as a means to cross-pollinate and hone discussion about where the reward opportunities for game-based interventions really exists (or doesn't) that can be beneficial to future funding efforts by organizations such as Robert Wood Johnson Foundation, TATRC, NIH, and others who are investing in the greater games for health field.

This will be a key goal for us for 2012 provided we can shape the opportunity correctly.

Conclusion

TATRC personnel have been at over 50% of the now seven annual Games for Health events held since 2004. Originally our exposure to TATRC and understanding of its mission was focused on simulation-based efforts to improve mostly surgical and triage based outcomes for battlefield injuries. As we've interacted further over the years we've better understood its mission and watched it evolve to deal further with issues such as PTSD, rehabilitation, and additional surgical issues like animal and human cadaver training limitations.

That videogames can possibly help with those issues is interesting. However, most of what we've seen applied has been technology based, especially the use of game engines, as the key platforms for core-simulative experiences. With the exception of a few recent portfolio projects (we participated in TATRC's recent portfolio review held just prior to Games for Health) few applications of videogames moved past the technology link.

We believe there are two core reasons games haven't been used more heavily outside of technology sourcing approaches. First, for many problems in traditional medical modeling & simulation, games (beyond core technologies) don't easily match up well to the design approaches commonly taken. This isn't to say they can't, but the specific means by which you might bend a design more towards abstracted ideas of playfulness, and more pointed videogame design psychology are not easily obtained.

Second, the problems, where games might be more useful for, have tended to be on the therapeutic, behavioral, and preventative health side. TATRC, hasn't as heavily participated in that portfolio of health issues, and the military community overall, has only in the past decade begun to more deeply invest in these issues as similar civilian health population costs and health effects have begun to be more deeply recognized as threats to national defense overall.

While we can not expect TATRC to suddenly change its entire portfolio approach to attack problems that may be better suited to games, our key point is that, bigger, more potentially successful opportunities for videogame health efforts may come about as the defense sector moves to use games in more compatible health arenas that are increasingly becoming of concern to defense.

Given this analysis and trend, we've tried to align our conference, with 2011 TATRC Conference Support, to help prepare for the moment when that intersection is more fully engaged in future years. As we continue to organize and publish the information we've gathered from our 2011 conference the means to align forces between the growing games for health field with more established fields of practice in telemedicine and advance medical technologies is more informed, and more specifically focused then before.

We hope, that as this unfolds, these efforts continue to benefit TATRC and its mission overall the way other events it has supported such as MMVR have as well.

Appendices:

See Attached Complete Conference Program for Games for Health 2011

Enabled Play: Games Accessibility Day IV

Tuesday, May 17

8:00 BREAKFAST & NETWORKING

9:00 **Featured Talk: The Explorer and the Mystery of the Diamond Scarab**

A Wii Game for Players with Visual Impairments

Rob Willems, Hanze University Groningen/Principal Blue

9:30 BREAK

9:45 **Building Accessible Controls : Hacks to Hardware**

RJ Cooper, Benjamin Heckendorn

10:30 BREAK

10:40 **Game Design and Accessibility: Breaking Down Stem Stumper A blind accessible game for iPhone**

Kwasi Mensah

11:10 BREAK

11:20 **The BlastBay Game Toolkit : A Powerful Audio Only Game SDK**

Philip Bennefal

BlastBay Studios

12:00 BREAK

Project Redbird Premortem : A Game You Play with Your Brain

Max Voelker (Project Redbird)

12:30 **Lunch**

1:30 **Games Inside Mist Tents**

Ben Heckendorn, The BenHeck Show

Ryan Sharpe, Get Well Gamers

1:50 BREAK

2:00	SpeakEasy : Using Accessibility Technologies to Create New Games for Everyone
	Reid Baker Entertainment Technology Center : Carnegie Melon University
2:20	STRETCH BREAK
2:25	Assistive Technologies for Breakthrough Teaching and Learning : Finding Room for Games
	Alise Brann, National Center for Technology Innovation/American Institutes for Research
2:50	BREAK
3:00	Press This Button to Win!
	A Review of One Button Games as Accessible Games
	Tim Holt, PCI Education
	Click-to-Speak : A One-Button Interface for Conversation Games/Interfaces
	Marleigh Norton, Singapore-MIT GAMBIT Game Lab
4:00	BREAK
4:10	Project Injini
	<i>Developing Cognitive Training Games for Children with Special Needs</i>
	Soojin Lee, NCSoft
4:30	BREAK
4:40	Building Guidelines & Best Practices for Building Accessible Games
	<i>Talks+Group Exercise</i>
	Eleanor Robinson, 7-128 Software
	Tara Tefertiller Voelker, IGDA Game Accessibility SIG
5:30	BREAK
5:40	A Sneak Peak: GameShare
	Ben Sawyer & Benjamin Heckendorn
6:00	END

Out & About II

Mobile Serious Games Day

Tuesday, May 17

8:00 Breakfast and Networking

9:00 *Conference Starts*

If There is a Mobile Serious Games Advantage: What is it?

Ben Sawyer, Digitalmill, Inc.

9:45 BREAK

10:00 **Project Injini**

A suite of cognitive training games for young children with special needs

Soojin Lee, NCSoft

10:30 BREAK

10:40 **Possible Worlds: Play. Reply. Rethink**

Learning Games for Science and Reading on Mobile Systems

John Parris, EDC

11:10 BREAK

11:20 **FEATURED TALK:
Personal Connected Health Ecosystems Gets Ready to Play**

Chuck Parker

Managing Director, Continua Health Alliance

12:00 **Lunch**

1:00 **Step Up! How Small Actions Can Improve Well-Being**

Bill Sabram, MeYou Health

1:25 STRETCH BREAK!

1:30	Our Journey to Our First Mobile Health Game
	Julie Price, Ernie Medina, Aaron Dence
1:50	STREATCH BREAK!
1:55	Pathways & Pokerwalk : Fitness & Rehabilitation Through Mobile Play
	Ann Beaver & Scotty Hoag, Melissa Yu, UC Berkeley Center for New Media
2:20	BREAK
2:40	MamboWalk - Gamification meets Walkathons
	Timothy L. Schmidt, Mambo Health Gaming
3:00	BREAK
3:10	Leave the Lab, Take the Tablet: Mobile Cognitive Assessments
	Joan Severson, University of Iowa
3:30	BREAK
3:40	The 1st Annual Mobile Serious Games Roundup
	Alan Au, University of Washington
4:20	BREAK
4:30	Vanished, the Smithsonian/MIT Alternate Reality Game (ARG) for Middle School Science
	Scot Osterweil, MIT Education Arcade
5:00	BREAK
5:10	Closing Comments : Group Discussion
	Now, Near, Next : Where Should Mobile Serious Games Head?
6:00	END

Ludica Medica I

Improving Medical Modeling, Simulation, Training, and Education with Videogames

May 17, 2011

8:00 Breakfast and Networking

9:00 Opening Presentation: **The Healing Blade**

A game about infectious diseases and therapeutics

Arun Mathews, Francis Kong

Nerdcore Learning

9:30 **BREAK**

9:45 **Safety Training Games and Healthy Behaviors**

Eben Myers

Etcetera Edutainment

10:10 **BREAK**

10:20 **Games vs. Simulations:
Is there a Difference & When Does it Matter?**

Ben Sawyer, Games for Health Project (Moderator)

Eben Myers, Etcetera Edutainment

Jeffrey Taekman MD, Duke University

Brock Dubbels, University of Minnesota

Bob Waddington, SimQuest

11:25 **BREAK**

Evolving Our Use of Applicable Game Worlds for Medical Training: A Case Study

Jeff Taekman & Michael Steele, Duke University Medical School

12:00 **LUNCH**

1:00 **Games, Sims, and Advanced Technology: Where the Armed Forces Simulation Institute for Medicine is going. Presented by TATRC.**

Harvey Magee, TATRC

1:30	BREAK
1:40	Lessons Learned: The review, planning & production of a digital training tool for long-term care certified nursing assistants.
	Brock Dubbels, University of Minnesota
2:10	BREAK
2:20	Best Practices for Role Playing Soft Skills in Virtual Worlds
	Patti Abshier & Michelle Hyland, Cikatelli Associates Inc.
2:40	BREAK
2:50	Now, Near, Next: The Real State of Health Training Simulations, Worlds, and Games
	Moderator: Bruce Milligan, Trainingport Strategies
	Doug Whatley, Breakaway, Ltd
	Parvati Dev, Innovation in Learning
	Jerry Henneghan, Virtual Heroes/ARA
	Harvey Magee, TATRC
4:00	BREAK
4:10	Applying Contemporary Theory for Game-Learning to Medical Education
	Eric Bauman, University of Wisconsin
4:40	BREAK
5:00	Better Outcomes Through Varied & Adaptive Training for Games & Simulations
	Jamie Pina, RTI International
5:25	BREAK
5:35	Pivotal Decision & Blast: Game-Based Training Projects for Emergency Response
	Randy Brown, Virtual Heroes/ARA
6:00	BREAK
	Closing Group Feedback & Follow Up Actions
	Bruce Milligan & Ben Sawyer
6:15	END

Games for Health Day I

Wednesday, May 18

8:00	Breakfast, Networking, and Registration					
9:00	KEYNOTE	Positive Psychology>Positive Computing>Positive Videogames				
		Dr. Martin Seligman				
		Director of the University of Pennsylvania Positive Psychology Center				
	PRESENTATION	Project GameShare...				
		Are Two Bens Better Than One?				
10:40	BREAK					
	Open Track	Open Track II	Sensorimotor Rehab Track	Exergaming & Active Gaming Track	Cognitive & Emotional Health Track	Nutrition and Games Track
	Ballroom A	Olympia	Ballroom B	Ballroom C	Michangelo	Queen Mary
11:00	Psychology of Avatars : A Roundup of Research & Design Ideas Debra Liberman, Ph.D., University of California, Santa Barbara	Playing with Physiological Measures Didier Combatalade, Thought Technology	Achievements and Challenges in the Implementation of the Microsoft Kinect Technology into Game-based Rehabilitation Applications Belinda Lange, ICT/ USC Opening Remarks Sheryl Flynn, Blue Marble Game Co.	Gaming Your Way to a Healthier Lifestyle Shellie Pfohl, Executive Director, President's Council on Fitness, Sports and Nutrition	The Efficacy of Casual Video Games in Reducing Clinical Depression and Anxiety: A randomized controlled study. Carmen Russoniello & Matthew Fish, East Carolina University	
11:45	BREAK					
12:00	The Nintendo DS The Worlds #1 Games for Health Platform : A worldwide retrospective Peter Smith, ADL Co-Lab	Fantastic Voyage: Battling Chron's Disease & Ulcerative Colitis inside a Videogame Robert Becker, Becker Multimedia Eric Zuckerman, DO, The Pediatric IBD Foundation, Inc. Jess Kaplan, MD, Mass General Hospital for Children in Boston.	Why Can't Rehabilitation be Fun? Ulrich Schulze Althoff, Kaasa Health, GmbH	Games for Cardio Fitness Machines Don Ice, HeartRate Games	Linking off-the-shelf videogames with cognitive assessments for self improvement Joan Severson, Cognitive Media with support from University of Illinois	Nutrition Games: Where Things Stand Today Catherine Frederico, Newbury College, Regis College
12:30	Lunch			Virtual Heroes HumanSim & More (sponsored session) Olympia Room 1:00pm - 1:45pm		

	Open Track	Open Track II	Sensorimotor Rehab Track	Exergaming & Active Gaming Track	Cognitive & Emotional Health Track	Nutrition and Games Track
1:45	Advergaming & Public Health Panel Christian Meyer, GSN Dan Baden, Centers for Disease Control and Prevention Ben Sawyer, Games for Health	Mobile Games Panel: Project Injini A suite of iPad games for young children with special needs Sooin Lee, NCSoft Touch Screens and Apps: A multi-modal approach to games for health literacy John Pollock & Joana Ricou, Duquesne University Out & About : Mobile Games for Health Report Out Dave Warhol, Realtime Associates	A Rehabilitation Platform for Balance, Gait & Cognitive Intervention for Aging Populations & People with Acquired Brain Injury. Tony Szturm, U Manitoba The Efficacy of Nintendo Wii on Post-Burn Rehabilitation: A Pilot Study Sam Yohannan, Cornell Medical Center Russian Doll: Quality Assurance in Rehabilitation Game Design Bonnie Kennedy PhD OTR/L, Blue Marble Game Co.	Closing the Gap: Strategies for Promoting Exergaming-based Exercise Lisa Hansen, University of South Florida Ernie Medina, MedPlay Technologies Judy Shasek, Footgaming Jennifer Mercurio, Entertainment Consumers Association	Opportunities for Positive Psychology & Games Panel/Group Discussion	Apps for Healthy Kids : Demos & Discussion Fitter Critters: Transforming Children's Attitudes toward Nutrition John Ferrara, Bri Lance, Megazoid Games Creature 101: Using Science to Make Healthy Food and Activity Decisions Dan Fu, Stottler Henke Pamela Koch, Teachers College, Columbia University
2:45	BREAK					
3:00		Neural mechanisms of dynamic decision-making -- A functional imaging study on a real time pursuit-evasion game Xian Zhang, Columbia University	Using Nintendo Wii Fit in Out Patient Rehabilitation Following Total Knee Replacement Vera Fung, St John's Rehab Hospital Oovit PT - Making Knee Replacement Physical Therapy Fun Sai Moturu, MIT Media Lab	Techniques for improving Multiplayer Exergames Tadeusz Stach, Queen's University	PTSD Training Game for Families of Returning Veterans Using Emotionally Responsive Avatars Ron Goldman, Kognito, Inc.	Games for Shoppers : Brainstorming Play at the Point of Purchase Group Activity
3:30	Exergames & Active Gaming Expo Break					
4:00	My Avatar is My Future : An Avatar System for the Age of Behavior Change Lynn Sullivan, Kimberly Hieftje, Play2Prevent/Yale University School of Medicine	mPower! Games to Improve the Health of the Invincible: College Students Pete Grogg, Hamid Ekbia, Wisdom Tools	Through the Looking Glass & What Therapists Found: Applications of Alice 2.0 for Rehabilitation Rachel Proffitt, USC/ Blue Marble Game Company Energy Demands During Interactive Video Gaming of an Individual Post-Stroke Judy Deutsch, UMDNJ	Wii Active Intervention Produces Weight Loss, Improves Self-Efficacy, and Enhances Friendship Quality in Overweight and Obese Low-Income African American Adolescents Sandra L. Calvert, Georgetown University	Every Body Has a Brain: Games, Music, Research, Brain Dancing & More Karen Littman, Morphonix, Inc.	Cookies, Candy, Fast Food & Games : Games on Food Web Sites

	Open Track	Open Track II	Sensorimotor Rehab Track	Exergaming & Active Gaming Track	Cognitive & Emotional Health Track	Nutrition and Games Track
4:30	BREAK					
4:40	Games with Sensors : From Experiments to Ubiquitous Health Gaming Jim Burns, Elbrys Networks	30 Years of technology use in workplace health interventions Rikke Magnussen, Steno Diabetes Center	An instrumented Glove for In Home Therapy (DEMO Too) Croinna Lathan, AnthroTronix Standing Growing Blooming Tree - Rehabilium :Development and Testing of a Rehabilitation Game Hiroyuki Matsuguma, Kyushu University Fumitada Hattori, Nagao Hospital	Designing Better Exergames : Features & Foundations for Future Success Group Activity Barbara Chamberlin, New Mexico State University Steven Yang, SUNY-Cortland	"Elude" - When it Comes to Playing "Opposite of Play" T. Atilla Ceranoglu, M.D., Massachusetts General Hospital Doris Rusch, MIT Gambit Lab	Engaging Kids in Nutrition Education with Online Game Experiences Sally Schmidt & Jori Clarke, Circle1Network Camp Eatapita: A Nutrition Game for Young Kids Steve Geist, Entertainment Technology Center, CMU
5:30	BREAK					
5:40	Breath Games for Cystic Fibrosis Peter Bingham, University of Vermont	CDC Health Games Briefing Dan Baden, Centers for Disease Control and Prevention	Games for Parkinson's Disease: Promising Results from NIH-funded clinical trial Bob Hone, Red Hill Studios <i>with special guest: Sue Lifschiz</i>	How Long do Children Play Wii Active Videogames? Tom Baranowski, Baylor University	R.O.G.E.R: A Prototype Kinect Game For Assessing Lack of Logic & Organizational Skills Laurent Grumiaux, Fishing Cactus	Defining a Research Roadmap for Nutrition Games Group Activity
6:15	Reception Sponsored by... 					
	Games for Health Sensor Day: <i>Enabling A Personal Health Entertainment Ecosystem</i>					
	This year, with support from various companies involved with The Continua Health Alliance, Games for Health is offering extra sessions on Wednesday, May 18, devoted to exploring ideas involving health games powered by biometric and environmental sensor data.					
	Games, Sensors & PHRs : Gameplay Meets Measurement 12:00pm - 12:30pm (1st Floor Rooms) Brigitte Piniewski, MD, PeaceHealth Laboratories			Topical Lunch w/Continua Health Alliance 12:30pm - 1:45pm (Tent Area) Chuck Parker, Continua Health Alliance		
	PHRs and Games : Back to the Drawing Board 1:45pm - 2:45 pm (1st Floor Rooms) Steven Munini, Dossia Service Corporation					
	The Pervasive Sensor World : Obstacles & Opportunities 3:00 pm - 4:00 pm (1st Floor Rooms) Anthony Delli Colli, Elbrys Networks (moderator) Ed Siemens, A&D Medical Mike Paradis, ANT Wireless Michael D. Clay, Verizon Wireless			Business Models for Games for Sensors 5:40pm - 6:15pm (1st Floor Rooms) Anthony Delli Colli, Elbrys Networks – Moderator Brigitte Piniewski, MD, PeaceHealth Laboratories Michael C. McGarry, Ascension Health Steven Munini, Dossia Service Corporation Michael D. Clay, Verizon Wireless		

Games for Health Day II

Thursday, May 19

8:00	Breakfast, Networking & Morning Roundtables					
9:00	Keynote:	The Last Mile Doesn't Have to be the Hardest: Solving Problems Between Games and Health				
		Dr. Roni Zeiger, Google				
	PRESENTATION	Games for Change Conference 2011 : Highlights & Update				
		Asi Burak, Games for Change				
	Open Track	Open Track	Social Games, Communities, & Virtual Worlds Track	Exergaming & Active Gaming Track	Cognitive and Emotional Health Track	Meetups & Roundtables
	Ballroom A	Olympia	Ballroom B	Ballroom C	Michangelo	Constitution (3rd Floor)
10:00	Exergames & Active Gaming Expo Morning Break					
10:30						
	Launching a Game-Driven Public Health Campaign Howard Rose, Firsthand Technology, inc.	Safer Sex Through Gaming Leslie Snyder, University of Connecticut	BE Community: Bridging Social Isolation for Teenagers & Young Adults with Cancer Mette Høybye, Stanford University	Beyond calories: Social and Psychosocial impacts of exergames Ann Maloney, Maine Medical Center Emily Murphy, West Virginia Games for Health	Video Game Play as Nightmare Protection: A Preliminary Inquiry on Military Gamers Jayne Gackenbach, Grant MacEwan University	NY Games for Health Meetup Ron Goldman, Kognito, Inc.
11:00	BREAK					
11:15	Gamification/Healthification Panel : Are meta-games and gamified systems the Next Big Thing? Michael Kim, Kairos Labs Judy Shasek, Healthy Community Development Timothy Schmidt, Mambo Health Richard Tate, Hopelab Tommy Lee, BigDoor	This is your Brain on Video Games: Novel insights on Dance and Karaoke Games, neurphyschology, cognitive function and health Sabrina Ali, Shaw Bronner, Jeff Campoli, Rutika Naik, Adam Noah, Zawadi Williams-Murray ADAM Center: Long Island University	Massive Multiplayer Meets Massive Health: How do we use the scale of big games to attack big problems? Parvat Dev, Innovation in Learning Trapper Markelz, MeYou Health Dan Scherlis, Scherlis.com Kristi Miller, American Heart Association John Lester, ReactionGrid	Exergaming with digital companions: How women over forty use fitness games Lorna Boschman, Simon Fraser University, School of Interactive Arts and Technology	Improving Psychological Resilience: A Preventive Game for Warfighters Clint Bowers, University of Central Florida	

	Open Track	Open Track	Social Games, Communities, & Virtual Worlds Track	Exergaming & Active Gaming Track	Cognitive and Emotional Health Track	Meetups & Roundtables
11:45				BREAK	BREAK	
12:00				A Case study of a Girls Physical Activity Program Yoonsin Oh, University of Wisconsin	An Experimental Game for Traumatic Brain Injury Bob Waddington, SimQuest	
12:30	Lunch					
1:30	Schwarzenegger vs. EMA : The SCOTUS case from a public health perspective Paul Ballas	Games for Global Health : Examples & Discussion Jackson Stakeman, USC	Safe2Live: Using Virtual Worlds Tools to Engage AT-RISK Youth for HIV Monique Richert, Protect Yourself 1 SLIDES (Second Life Improves Diabetes Education and Support) : A Virtual Community Intervention Allison Vorderstrasse, Duke University	The Exergame Network: A Report on our Progress Richard Coshott, Gamercize Lisa Hansen, USF Brett W M Young, Exergaming Australia	Junomi? - A Game for Better Mental Health Ida Toft, Amani Naseem, IT University of Copenhagen	
2:15	BREAK					
2:30	Healthy Gamers Report Out Ben Sawyer, Games for Health	Robotic Therapy Utilizing Gaming Principles Adapted for Neurological Populations Grace Kim, New York Presbyterian Hospital	The Gambit Hate Speech Project : Hate Speech in Game Communities Generoso Fierro, MIT Gambit Lab	The Bubble Drum Project: Experimental Prototypes for Active Rhythm Games Jay Alan Jackson, RIT		
3:00	BREAK					
3:15	Health Games Everyone Must Play: A 2.0 Strategy for Games for Health Ben Sawyer, Games for Health			Research Report Out : Where Exergaming Research is in 2011 Barbara Chamberlin, New Mexico State University		
3:45	BREAK					
4:00	Ending Plenary w/Special Guest: Mel Chin of Operation Paydirt					
4:30	End					

Save The Date!



8th Annual

Games for Health Conference

June 6-8, 2012
Boston, MA
Hyatt Harborside