Summary of Discussion Technical Committee on Translational Engineering and Healthcare Innovation (TEHI)

Teleconference Meeting January 5, 2017 12.00 PM – 1.15 PM

Agenda

- 1. Welcome and Greetings
- 2. Report from the HI-POCT 2016 Conference
- 3. JTEHM Special Issue HI-POCT September 2017 CFP on <u>http://health.embs.org/call-for-papers/jtehm-2017-special-issue-ieee-nih-healthcare-innovations-point-care-technologies-hi-poct16/</u>
- 4. Planning of HI-POCT 2017 Conference at NIH-Bethesda: November 6-7, 2017
- Special Sessions/Workshops/Tutorial for Theme 12: 2017 EMBS Annual Conference: Translational Engineering for Healthcare Innovation and Commercialization; <u>http://embc.embs.org/2017/</u> Any invited session or miniSymposium proposal should be proposed as soon as possible by December 31, 2016. Please see the Call for Proposals on the website <u>http://embc.embs.org/2017/proposals-for-workshops-tutorials-invited-sessions-minisymposia-and-special-sessions/</u>
- 6. Any Nominations for EMBS awards?
- 7. GHCN Priority Issues and Networking
- 8. Other issues

The teleconference meeting started with the greetings of Happy New Year.

Atam thanked technical committee members for their input and participation in HI-POCT 2016 conference. It was a great success. The core theme for the HI-POCT 2017 was set in the HI-POCT 2016 conference panel sessions as "Translation in Technology" to address healthcare needs.

Atam discussed previous experiences and feedback from HI-POCT 2015 and Hi-POCT 2016 conferences. The draft agenda, "Program at a Glance" was the discussed that incorporated feedback from two previous conferences and combined formats to add another half-day program extending the conference to November 8 from 8.30 AM to 12.00 PM to include technical sessions and final Strategic Directions Panel Discussion session.

Atam described the conference leadership team for HI-POCT 2017. NIBIB was the lead NIH institution in 2015; NCI was the lead institution in 2016. NHLBI is the lead institution for NIH-IEEE EMBS Strategic Conference on Healthcare Innovations and Point-of-Care Technologies (HI-POCT 2017) with the core theme: "Technology in Translation". George Mensah, MD, Director,

NHLBI Translational Center will co-chair the conference with Atam Dhawan. Tiffani Lash, PhD from NIBIB and Steven Schachter, MD from CIMIT/Harvard Medical School will be co-program chairs. Another co-program chair from NHLBI will be added.

Atam requested input for breakout sessions to be relevant to the conference theme. Jie, Srini, Steve, Paul, Julian, Tom, Omar and Dorin made excellent suggestions to define the format and scope of breakout sessions. The following format was agreed:

1. We should keep 4 bleakout sessions but focused of relevant themes as.				
3.45 – 5:30 PM	3.45 – 5:30 PM	3.45 – 5:30 PM	3.45 – 5:30 PM	
Breakout Session 1	Breakout Session 2	Breakout Session 3	Breakout Session 4	
Developing Internal	Clinical Translational	Technology	Validation,	
and External	Challenges	Translation and	Standards and	
Resources For	Co-Chair:	Regulatory Issues	Security	
Translation	Steve Schechter	Co-Chairs:	Co-Chairs:	
Co-Chair:		TBD	Julian Goldman, MD	
Jody Black, NHLBI			TBD	

1. We should keep 4 breakout sessions but focused on relevant themes as:

- 2. We should have a breakout selection checkbox at the conference registration webpage to select one of the four breakout sessions.
- 3. Each breakout session will then be assigned a folder with pre-conference information and material related to the respective breakout sessions scope and questions in a dropbox or Google Document environment so that participant can review the material, post heir questions, issues and comments and be better prepared for more productive discussions at the breakout sessions.
- 4. If any one of the breakout sessions receives a low participation, the questions from the low-attendance session will be rolled over to other breakout sessions to cancel the low-attendance breakout session. Participants will be notified in advance.

Atam then discussed a new initiative of having a Translational Showcase Demo Session at the conference. There was a good discussion on the specific stakeholder groups and their participation to discuss facilitation of the later part of translation science and engineering into clinical and healthcare applications. Paul pointed out that the demo session is a good idea but the security clearance has to be taken well in advance for participants to bring their prototypes or devices for demonstration. Paul, Steve, Srini, Jie and others also pointed out that we should reach out to the following group of stakeholders and invite them to come to the conference. These include:

- People in Translational Science and Engineering
- Angel Investors
- Public Health People

- Non-Profit organizations for the development, NGO: (Paul Pearlman's suggestion)
- Patient Advocacy Groups
- Regulatory Groups

We need to discuss a process to organize the Translation Showcase Demo Session with respect to Call For Proposals for Demo Session: one page abstract; review process, and sponsorships on resources. These will be discussed with the HI-POCT 2017 planning committee teleconference meeting on January 9 and 19.

Atam then requested the TC members to actively participate through proposal submission for workshops and min-symposia at the EMBC 2017 conference, and also submitting papers to Theme 12 of the annual conference.

Atam requested TC members to help promote the JTEHM Special Issue on HI-POCT for 2017. Dorin is submitting a proposal on translational engineering covering IP, regulatory and investment issues.

Atam also requested TC members to nominate worthy candidates for EMBS awards as soon as possible.

Atam thanked everyone for participation. The teleconference ended at 1.15 PM.

Healthcare Innovations and Point of Care Technologies: Technology In Translation

November 6-8, 2017 NIAID Conference Center, 5601 Fishers Lane, Bethesda, MD 20852

Monday November 6, 2017

8:00 – 8:30 AM			
Reception			
8:30 – 8:45 AM			
Welcome and Overview of the Conference Goals			
George Mensah, MD, FACC (NHLBI)			
Atam Dhawan, PhD (NJIT)			
8:45 – 9:45 AM			
Keynote – Precision Health			
TBD			

9:45 – 10:45 AM				
Panel Session I				
Clinical Needs Driving Technology Innovation for Precision Health				
Steve Schachter, MD, CIMIT, Harvard Medical School				
Srini Tridandpani, MD, PhD, Emory University				
TBD: Speaker from NIH				
10:45 – 11:00 AM				
Coffee Break				
10:45 – 11:45 PM				
Panel Session II				
Enabling Technologies: Point-Of-Care Diagnosis and Monitoring				
Rebecca R. Richards-Kortum, PhD, Rice University				
Paul Yager, PhD, University of Washington				
TBD				
11:45 – 1:45 PM				
Lunch, Poster and Demo Session, POC Technologies Demonstrations				
1:45 – 2:45 PM				
Panel Session III				
Translation and FDA Regulatory Issues for POC Technologies				
TBD				
2:45 – 3:45 PM				
Panel Session IV				
Big Data Analytics in Precision Health				
TBD				
3:45 – 4:00 PM				
Break				
4:00 – 5:00 PM				
Panel V: Federal Funding Opportunities and Resources				
Funding Agencies; Angel Investors?,				
TBD				
6:00 – 8:00 PM				
Reception				
IEEE/EMBS				

Tuesday, November 7, 2017

	8:00 – 8:30 AM		
Reception			
	8:30 – 9:30 AM		
Keynote – POC Technologies: Translation to Market			
Rick Ivey, PhD, WW VP R&D Diagnostic Systems, BD Life Sciences			

9:30 – 10:45 AM				
Panel Session VI				
Global Healthcare and POC Technologies				
	Paul Pearlman,	PhD, NCI, NIH		
	Jim Gallarda,	PhD (BMGF)		
TBD: WI	HO Speaker; US-India Pr	ogram; Latin America	Speaker	
	10:45 – 12	1:00 AM		
	Brea	ak		
	11:00 - 12			
	Pane			
	o Market: Standards ar	• •		
	Carey, BSEE, MEng, C3-C	•	(Chair)	
	Julian Goldman, MD, Ha			
	TB			
12.00– 2.00 PM Lunch Break, Poster Session, POC Technologies Demonstrations				
Track 1	Track 2	Track 3	Track 4	
2.00 – 3.30 PM	2.00 – 3.30 PM	2.00 – 3.30 PM	2.00 – 3.30 PM	
Technical Session	Technical Session	Technical Session	Technical Session	
National Institute of	National Cancer	National Heart,	NIAID	
Biomedical Imaging	Institute	Lung and Blood	Co-Chairs:	
and Bioengineering	Co-Chairs:	Institute	TBD	
Co-Chairs:	Vidya Vidham, PhD	Co-Chairs:		
Christine Kelley, PhD	Laura Povlich, PhD	TBD		
Tiffani Lash, PhD				
	3.30 – 3. Brea			
		1	2.45 5-20 DM	
3.45 – 5:30 PM Breakout Session 1	3.45 – 5:30 PM Breakout Session 2	3.45 – 5:30 PM	3.45 – 5:30 PM	
Developing Internal	Clinical Translational	Breakout Session 3 Technology	Breakout Session 4	
and External	Challenges	Translation and	Validation, Standards and	
Resources For	Co-Chair:	Regulatory Issues	Security	
Translation	Steve Schechter	Co-Chairs:	Co-Chairs:	
Co-Chair:		TBD	Julian Goldman, MD	
Jody Black, NHLBI			TBD	
	6:00 - 8:	:00 PM	<u>. </u>	
Reception				
IEEE/EMBS/Wireless Health ?				

Track 1	Track 2	Track 3	Track 4		
8:30 – 10:00 AM	8:30 – 10:00 AM	8:30 – 10:00 AM	8:30 – 10:00 AM		
Technical Session	Technical Session	Technical Session	Technical Session		
	10:00 – 10:15 AM				
Break					
10:15 – 12:00 PM					
Panel VIII					
Strategic Future Directions Panel Discussion					
Keynote: TBD					
Reports from Chairs, Breakout Sessions					

Wednesday, November 8, 2017