

Technical Committee on Healthcare and Medical Systems (TC-HMS)

First semi-annual meeting 2017

ACC 2017 Seattle

Wednesday, May 24, 2017

4:00pm – 6:00pm

Room: Capitol Hill

Preliminaries

- Introductions
- Collect attendance

Activities for Jan 2017-May 2017

Special Issue: System identification and control in biomedical systems.
Guillaume Mercere.

Theme: “Control and data-driven modeling in biomedicine”,

Alexander Medvedev, Daniel Rivera, and Caterina Scoglio, members of this TC, are part of the proposers of a *Special Issue for the IEEE Transactions on Control Systems Technology*. The proposed title of the special issue is “Control and data-driven modeling in biomedicine”, and it is sponsored by the IEEE CSS Technical Committees on

- 1) Healthcare and Medical Systems,
- 2) System Biology,
- 3) System Identification and Adaptive Control.

Deadline November 1, 2017

Officially approved, consider submitting papers and publicize the effort!

Activities During Jan 2017-May 2017

- **ACC 2017 invited session accepted**

- Computational models in health and care WeA04

- **CCTA 2017 invited session**

- Proposed a session on “Control and estimation in health and care.” Not enough contributions.

Activities During Jan 2017-May 2017

- **CDC 2017 invited sessions**

- 1) *Dynamics in neuroscience: modeling, estimation, and control*. Organizers: Alexander Medvedev and Warren Dixon ; highlights the role of dynamical systems in neural system
- 2) *Individualization and optimization of therapies*. Organizers: Levente Kovacs , Alexander Medvedev, and Pasquale Palumbo; aims to give an update of the latest developments in individualization and optimization of therapies in a number of medical fields.
- 3) *Systems Medicine*. Organizers Ryan Zurakowski, Pablo S. Rivadeneira, Esteban A. Hernandez-Vargas; aims to overcome competitive barriers and produce a roadmap for systems medicine in the frame of control engineering.

Activities During Jan 2017-May 2017

- Yannis Paschalidis (TC member) was the chair and organizer of the Smart and Connected Health (SCH) PI Workshop in Boston, Massachusetts on March 20-22, 2017. The goal of the Workshop was to identify new opportunities, meet others in the field, enhance and strengthen multidisciplinary directions, develop a longer-term agenda for SCH research areas that include the potential scientific benefits, novel exploration, and challenges involved in advancing smart health, especially in connected communities.
- Column for the IEEE Control System Magazine:
 - https://docs.google.com/document/d/16hjvLAefx6N-WiO_TyhvwdXTwlnGe-NmFTVCU0AhxAo/edit
- New chair of the TC

Discussion

- Time for TC meetings
- Webpage updates
 - Abstract of papers of invited sessions?
 - TC columns?

Other Activities

- Video contest
- Wikipedia project
- Develop special issues for journals
- Organize summer school
- Organize workshops

Next meeting -- CDC 2017 Melbourne

- Minutes of this meeting will be available on the TC webpage soon
- Other activities likely to be reported?