

IEEE Control Systems Society Technical Committee on Medical and Health Care Systems Report

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The IEEE CSS Technical Committee on Medical and Healthcare Systems (TC-MHCS) was officially approved by the CSS Board of Governors during the 51st IEEE CDC in Maui, and became effective on January 1, 2013. During the time period prior to that it had operated under the auspices of the CSS Technical Activities Board as an “interest group” in control applications in healthcare and medicine. I am pleased to report on activities undertaken by the technical committee during the past six months (December 2012 – May 2013).

TC meetings and membership update

1. The “interest group” held an informational meeting on Wednesday, December 12, 2012 during the CDC in Maui. The inaugural meeting of the Technical Committee will be held on **Tuesday, June 18**, from **2:30 – 3:30 pm** in **Rooms 10/11** of the Renaissance Washington, DC Hotel, as part of the 2013 American Control Conference.
2. The TC recently issued an open call to CSS members to join as founding members. As of the date of this report, 16 CSS members have responded, but we expect this number to grow rapidly as information regarding the organization of the TC becomes more widely disseminated, and as the upcoming ACC and TC meeting serve as vehicles for active, personalized recruitment.

Upcoming Activities / Activities in Progress:

1. *TC-sponsored special and invited sessions at the 2013 American Control Conference (Washington).*

The TC is sponsoring a Special Session on *Expanding the Scope of Control Systems Science into the Domain of Human Behavior: Opportunities and Challenges* which will be held on Monday, June 17th, from 11:40 am – 1:20 pm in Room 2 of the conference hotel (Fahmida Chowdhury and Daniel Rivera, organizers). Later that day, a related invited session (**MoC11: Modern Control Approaches in Human Behavior, Social Networks, and Behavioral Health**; Daniel Rivera, Daniel Davison, and Fahmida Chowdhury, organizers) will be held in Room 15.

2. *TC-sponsored activities proposed at the 52nd IEEE CDC in Florence.*

Two activities have been proposed by the TC, organized in conjunction with the TC for System Identification and Adaptive Control (TC-SIAC), led by Diego Regruto. One is an invited session on PK/PD modeling for decision support in healthcare (Teresa Mendonça, Universidade do Porto and Alexander Medvedev, Uppsala University, organizers). The

second is a pre-conference workshop entitled, “Recent advances in semi-algebraic geometry: applications in system identification, estimation and filtering” (Diego Regruto and Daniel Rivera, organizers).