

Medical Device Innovation Center - Creation of new industry from disaster area

Date: March 15, 2015 (Sunday), 13:15-15:45

Place: Tohoku University Kawauchi Campus C201

Organizer: Graduate School of Biomedical Engineering, Tohoku University

Co-organized by: Miyagi Prefecture, Knowledge-based Medical Device Cluster / Miyagi Area,
Miyagi Industrial Consortium on Advanced Mechanics and Electronics

Moderators: Yoshifumi SAIJO, Tsunemoto KURIYAGAWA, Graduate School of Biomedical
Engineering, Tohoku University

Program

13:15-13:20 **Opening Remarks**

Shin-ichi IZUMI, Dean, Graduate School of Biomedical Engineering, Tohoku University

13:20-14:20 **Introduction of Technological Seeds at Medical Device Innovation Center**

Development of PJD handpiece for innovative dental treatment

Tsunemoto KURIYAGAWA, Professor, Grad School Biomed Eng Tohoku Univ

Development of minimally invasive medical devices and healthcare devices using microsystems

Yoichi HAGA, Professor, Grad School Biomed Eng Tohoku Univ

Optical diagnostic systems based on optical fibers

Yuji MATSUURA, Professor, Grad School Biomed Eng Tohoku Univ

14:20-15:10 **Problem Solving Development of Medical Device Based on Clinical Needs**

Education of global human resource on medical device innovation based on clinical needs

Yoshifumi SAIJO, Professor, Grad School Biomed Eng Tohoku Univ

Development of quantitative blood flow evaluation method for single ventricle disease newborns

Ryo NAGAOKA, PhD Student, Development of ultra high resolution ultrasonic probe

Assist device for laparoscopic surgery

Misaki KAWAHARA, MS student, Grad School Biomed Eng Tohoku Univ

Proposal of new splint for children made by 3D printer

Yamato ITO, MS student, Grad School Biomed Eng Tohoku Univ

Disposable cap for otolaryngology units spray

Tsubasa MASTUMOTO, Kosuke FUKAZU, Seitaro MURA, MS students, Grad School Biomed Eng Tohoku Univ

15:10-15:45 **Recent Status of Medical Device Industries in Disaster Area**

Development of ultra high resolution ultrasonic probe

Mabito IGUCHI, Nihon Ceratech Co. Ltd.

Application of MEMS technologies to medical and health monitoring fields

Toshiharu KEIKOIN, MEMS Core Co. Ltd.

Development of ultrasonic embolus detector

Seiichi ZAMA, Finggal Link Co. Ltd.