

国際シンポジウムのご案内

3D+ Heart United (3DHU):

先駆的画像技術を用いた先天性心疾患診療の探求

概要

本シンポジウム「3D+ Heart United (3DHU)」では、最先端の3D+技術を用いた先天性心疾患の診断、治療、および研究に焦点を当てます。3D+技術は、心臓CTやMRI等の3D画像を3Dプリンティング、仮想現実VR、拡張現実AR (AR: augmented reality) に活用する高度技術の総称です。医療専門家、研究者、技術者が一堂に会し、知識と経験を共有し、業界の最新動向を学び、国内外の研究者とのコラボレーションの機会を提供します。

参加者は、Ryan Moore、Mahesh Kappanayil それぞれが開発した術前VRシミュレーション、Shai Tejman-Yarden の術前ARシミュレーション、David R. Buyck の学生教育VRプログラムを経験することになります。また、日本で開発された軟質心臓モデルを実際に手に取り実感できます。これらの基礎となる心臓CT・MRI画像のセグメンテーションのワークショップやVRを操作する場も設けています。

小児から成人の先天性心疾患患者さんの診療に携わる小児科医、循環器内科医、心臓外科医、看護師、放射線技師、臨床工学士、検査技師、薬剤師など、広い職種の皆様のご参加をお待ちいたします。

海外講演者

- Ryan Moore (Cincinnati Children's Hospital, USA)
- Ben Maoz (Tel Aviv University, Israel)
- Mahesh Kappanayil (Amrita Institute of Medical Sciences, India)
- Carlos-Eduardo Guerrero-Chalela (Fundación Cardioinfantil, Colombia)
- Shai Tejman-Yarden (Sheba Medical Center, Israel)
- David R. Buyck (University of Minnesota, USA)

開催日時

- 日付: 4月25日 (金) - 4月26日 (土)
- 時間: 午前9時から午後5時まで

開催場所

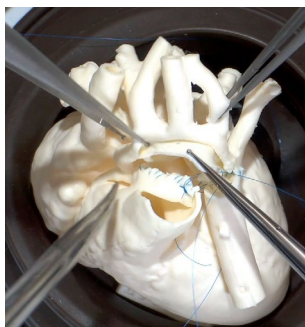
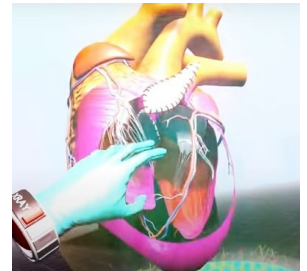
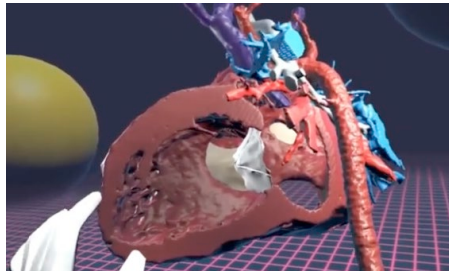
- 場所: 慶應義塾大学医学部 (北里講堂・北棟ラウンジ、〒160-8582 東京都新宿区信濃町35番)
<https://www.med.keio.ac.jp/maps/>

申し込み・参加費

- Virtual Reality 実技含む 3,000円 (申し込みの詳細は後日通知いたします)

連絡先

- **Organizer : 小平真幸 (慶應義塾大学医学部 循環器内科) <mskodaira@keio.jp>**
- Vice Organizer : 白石 公 (国立循環器病研究センター 小児循環器内科) <shiraishi.isao.hp@ncvc.go.jp>



3D+ Heart United (3DHU):

Exploring the use of pioneering imaging technology in the diagnosis and treatment of congenital heart disease

This symposium, "3D+ Heart United (3DHU)", will focus on the diagnosis, treatment and research of congenital heart disease using cutting-edge 3D+ technology. 3D+ technology is a general term for advanced technologies that utilize 3D images, such as cardiac CT and MRI for 3D printing, virtual reality VR, and augmented reality AR. This symposium brings together medical professionals, researchers, and engineers to share knowledge and experience, learn about the latest trends in the industry, and provide opportunities for collaboration with researchers from Japan and overseas. Moreover, this group has focused on the outreach of these technologies to resource-limited settings, helping to reduce the innovation and knowledge gap in Latin America and Asia.

Participants will experience the preoperative VR simulation developed by Ryan Moore and Mahesh Kappanayil, the preoperative AR simulation developed by Shai Tejman-Yarden, and the VR program for student education developed by David R. Buyck. They will also be able to hold and feel the soft heart model developed in Japan. We will also have workshops on segmenting cardiac CT and MRI images, which form the basis of these technologies, and opportunities to operate the VR.

We look forward to welcoming participants from various professions, including pediatricians, cardiologists, cardiac surgeons, nurses, radiology technicians, clinical engineers, laboratory technicians, and pharmacists, who treat patients with congenital heart disease, from children to adults.

Overseas Speakers

- Ryan Moore (Cincinnati Children's Hospital, USA)
- Ben Maoz (Tel Aviv University, Israel)
- Mahesh Kappanayil (Amrita Institute of Medical Sciences, India)
- Carlos-Eduardo Guerrero-Chalela (Fundación Cardioinfantil, Colombia)
- Shai Tejman-Yarden (Sheba Medical Center, Israel)
- David R. Buyck (University of Minnesota, USA)

Date and Time

- Date: Friday, April 25 - Saturday, April 26 (9:00 a.m. to 5:00 p.m.)

Venue

- Venue: Keio University School of Medicine (Kitasato Auditorium, North Wing Lounge)
<https://www.med.keio.ac.jp/maps/>

Registration and participation fee

- 3,000 yen (including practical skills of virtual reality, details TBA)

Contact

- **Organizer: Masaki Kodaira** (Cardiology, Keio University School of Medicine) <mskodaira@keio.jp>
- Vice Organizer: Isao Shiraishi (National Cerebral and Cardiovascular Center) <shiraishi.isao.hp@ncvc.go.jp>

