2021 Annual meeting of CAOS - Taiwan
International congress on computer-assisted orthopedic surgery
Academic activity of the 41th anniversary of CMUH

Time: Nov.6 and Nov.7, 2021 Venue: China Medical University, Taichung, Taiwan

Agenda

Date：Nov. 6

Venue：International Lecture Hall, Classroom 102, 103 and 104, China Medical University

International Lecture Hall (B1F)

Time	Topic	Speaker/Institute
0800-0830	Registration	
0830-0840	Open ceremony	周德陽院長/中國附醫 林啓禎理事長/中華民國骨科醫學會
0840-0850	Welcome adress	許弘昌理事長
Section 1 : Special Lecture (I) Moderator：許弘昌理事長、郭繼陽副理事長		
0850-0910	Image free hand held Robotic knee Replacement-evolution or revolution.*	Dinesh Nathwani MBChB,MSc,FRCS /President, CAOS - UK
0910-0930	How CAOS is changing our practice：the example of the shoulder surgery. *	Marc-Olivier Gauci,MD,PhD /President, CAOS - France
0930-0950	Computerized Pre-operative Planning for THA. *	Nobuhiko Sugano MD, PhD /Osaka university, Japan
0950-1010	CAS TKA in case of extra-articular deformities of lower limb. *	Seung-Suk Seo MD, PhD /Haeundae Bumin Hospital, Korea
1010-1030 Coffee break		
Section 2 : Navigation-assisted arthroplasty Moderator：陳健煜院長、黃國欽部長		
1030-1050	Accuracy of computer-assisted navigation knee arthroplasty.	黃贊文主任 /嘉義長庚
1050-1110	Complications and benefit of computer-assisted navigation knee arthroplasty：a molecular based comparison with conventional knee arthroplasty.	詹舜文醫師 /高雄長庚
1110-1130	Overview of navigation and robotics in knee arthroplasty.	黃國欽部長 /嘉義長庚
1130-1150	Revision of unicompartmental knee arthroplasty to total knee arthroplasty with computer-assisted navigation.	蕭家傑副院長 /博田國際醫院

1150-1200	Discussion	
1200-1210 Group Photo (B1F 國際會議廳)		
1210-1330 Lunch/理監事會議**		
Section 3 : Robot-assisted arthroplasty Moderator：吳濬哲院長、吳明峯院長、洪誌鴻主任		
1330-1350	Preliminary clinical outcomes and accuracy of MAKOplasty TKA: a 5-year CMUH cohort study.	謝尚霖醫師 /中國附醫
1350-1410	MAKOplasty medial unicondylar knee replacement：correction or postoperative angle matters?	Dr.Abhishek Kumar /中國附醫
1410-1430	Total hip arthroplasty using MAKO robotic system：a midterm series report.	曾柏凱醫師 /郵政醫院
1430-1440	Discussion	
1440-1500 Coffee break		
Section 4 : PSI-assisted arthroplasty Moderator：詹益聖部長、葉祖德部長、徐慶琪教授		
1500-1520	3D technology and PSI for RSA.	徐郭堯醫師 /林口長庚
1520-1540	Hip spinal relationship in total hip artrhoplasty-Individulize appraoch with 3-D printing PSI guide.	黃揆洲副院長 /亞大附醫
1540-1600	3D PSI application in joint reconstruction：Built the base before construction.	楊傑思醫師 /臺北榮總
1600-1610	Discussion	
Section 5 : Special Lecture (II) Moderator：黃揆洲副院長、張至宏副院長		
1610-1630	Robotics and personalized alignment (iKA) in TKA. *	Philip Winnock de Grave, MD. /AZ Delta Hospital, Belgium
1630-1650	Reproducibility：Virtual Robotic TKA Surgery. *	Sebastien Parratte, MD, PhD. /International Knee & Joint Centre, Abu Dhabi, UAE
1650-1710	Optimizing Robotic：TKA Surgery workflow. *	

* Video presentation

** 理監事會議時間：1210-1330、地點：第一醫療大樓 B1F 第八會議室

Agenda

Classroom 102

Time	Topic	Speaker/Institute
Section 1 : Navigation-assisted spine surgery Moderator： 呂衍謀教授、陳衍仁副院長、陳祥和教授		
1030-1050	2D C-arm navigation in spine difficult position surgery, planning and pitfalls sharing.	林英超主任 /台中慈濟
1050-1110	Spinal surgery in Hybride OR.	陳建民主任 /彰基醫院
1110-1130	O arm navigation in spine surgery.	張建鈞醫師 /中國附醫
1130-1150	AI based spine and hip feature point analysis and health insurance review.	蔡宗廷主任 /林口長庚
1150-1200	Discussion	
1200-1210 Group Photo (B1F 國際會議廳)		
1210-1330 Lunch/理監事會議		
Section 2 : Robot-assisted spine surgery Moderator： 李政鴻副院長、張明超部長、顏炳郎教授		
1330-1350	Mazor Robotic Spine Surgery, Specific Consideration & Application-VGHTC Experience.	陳昆輝主任 /台中榮總
1350-1410	Robotic Spine Surgery using Mazor Renaissance™ System.	呂衍謀教授 /高醫大醫院
1410-1430	ROSA ONE® spine surgery：How we learn and What we learn.	劉恆維醫師 /雙和醫院
1430-1440	Discussion	
1440-1500 Coffee break		
Section 3 : AR-assisted spine surgery Moderator： 古鳴洲副總裁		
1500-1520	AR navigation in spine surgery.	胡名賢部長 /彰濱秀傳
1520-1540	Integrated Application of Robotics, Force Sensors , Optical Tracker and Virtual Reality for Spinal Surgery.	王文騰營運長 /炳碩生醫
1540-1600	Discussion	

Agenda

Classroom 103

Time	Topic	Speaker/Institute
Section 1 : Professional dialogue：engineer and orthopedic surgeon Moderator：呂東武教授、孫瑞昇院長		
1030-1050	How I collaborate with orthopedic surgeons in CAOS.	徐慶琪教授/臺科大 commentator:釋高上部長/新光醫院
1050-1110	How I collaborate with orthopedic surgeons in CAOS.	戴金龍教授/長庚大學 commentator:賴伯亮主任/林口長庚
1110-1130	How I collaborate with orthopedic surgeons in CAOS.	顏炳郎教授/臺灣大學 commentator:洪碩穗主任/臺北慈濟
1130-1150	How I collaborate with orthopedic surgeons in CAOS.	陳怡文教授/中國附醫 commentator:許弘昌副院長/中國附醫
1150-1200	Discussion	
1200-1210 Group Photo (B1F 國際會議廳)		
1210-1330 Lunch/理監事會議		
Section 2 : PSI-assisted spinal surgery (I) Moderator：林志隆副院長、楊曙華理事長、戴金龍教授		
1330-1350	Overviews of 3D printing in supine surgeries：literature surveys and current status.	林瑞模榮譽院長 /安南醫院
1350-1410	Computer-aided surgical planning, customized guiding devices and its validation.	方晶晶教授 /成功大學
1410-1430	The 3D printing assistance in spinal deformity surgery.	陳賢德部長 /中國附醫
1430-1440	Discussion	
1440-1500 Coffee break		
Section 3 : PSI-assisted spinal surgery (II) Moderator：林瑞模榮譽院長、陳賢德部長、賴伯亮主任		
1500-1520	Customized 3D printing guiding template for pedicle screw fixation in upper cervical spine.	林志隆副院長 /高醫中和
1520-1540	Using customized guiding template for cervical pedicle screws insertion in severe cervical deformity.	張志儒主任 /國泰綜合醫院
1540-1600	Medical 3D printing for pediatric spine surgery-surgeon, technology, reimbursement.	奉季光醫師 /臺北榮總
1600-1620	Evaluation of the stiffness of spinal screw using screw-contact bone areas.	施政廷教授 /中國醫
1620-1640	Discussion	

Agenda

Classroom 104

Time	Topic	Speaker/Institute
Section 1 : PSI-assisted corrective osteotomy Moderator：王廷明教授、楊傑思醫師、陳怡文教授		
1030-1050	The Application of 3D Technique in the Surgery of Upper Extremity Deformity.	張志豪院長 /臺大醫院
1050-1110	Application of 3D printing techniques in corrective osteotomy around the knee joint.	葉祖德部長 /三軍總醫院
1110-1130	PSI design process: filling the gap between surgeon and engineer.	駱祖安博士 /臺北科技大學
1130-1150	deformity correction with 3D PSI guiding surgery after ankle trauma.	王舜平主任 /臺中榮總
1150-1200	Discussion	
1200-1210 Group Photo (B1F 國際會議廳)		
1210-1330 Lunch/理監事會議		
Section 2 : PSI-assisted orthopedic surgery Moderator：張志豪院長、釋高上部長		
1330-1350	Reconstruction of 3D hip joint structures from single 2D X-ray image using deep neural network.	施政廷教授 /中國醫
1350-1410	3D PSI guiding excision in bone tumor surgery.	陳昭銘醫師 /臺北榮總
1410-1430	malunion or nonunion after tibial plateau fracture treated revision surgery with 3D PSI guiding cut.	詹益聖部長 /林口長庚
1430-1440	Discussion	
1440-1500 Coffee break		
Section 3 : AR/VR in orthopedic surgery Moderator：李佩淵院長、李光申副院長		
1500-1520	AR assisted CRIF in orthopedic trauma.	莊昌翰主任 /彰濱秀傳
1520-1540	Applying augmented and mixed reality to make surgeries ultra precise.	王民良執行長 /台灣骨王
1540-1600	Redefining reality with AR Horuseye Experience.	李建弘博士 /荷魯視科技
1600-1620	Advance surgical training to patient communications through VR.	張庭榕經理 /HTC 健康醫療事業部
1620-1640	Discussion	

※ 繼續教育積分申請中：中華民國骨科醫學會、台灣外科醫學會及中華民國生物醫學工程學會。
※ 本學會會員免會議報名費、非會員報名費 1,000 元（事先報名者提供午餐便當）。
※ Fellow、住院醫師及學生免會議報名費（事先報名者提供午餐便當，請於現場報到時攜帶相關證件）。

Computer-assisted orthopedic surgery：Workshop Courses

Date：Nov.7, 2021

Venue：International Lecture Hall, Classroom 102, 103 and 104, China Medical University

Courses	Topic	Instructor
NO.1	**Robotic TKA Surgery：** RIO® Robotic Arm Interactive Orthopedic System (makoplasty)	許弘昌 醫師
NO.2	**Robotic TKA Surgery：** ROSA Recon (version1.2) system	曾柏凱 醫師
NO.3	**Navigated TKA Surgery：** NAV3i Navigation Platform (OrthoMap ExpressKness2.0)	蕭家傑 醫師
NO.4	**Robotic Spine Surgery：** POINT Robotics Platform	陳敏弘 醫師
NO.5	**Robotic Spine Surgery：** ROSA ONE® Spine system	林乾閔 醫師
NO.6	**Navigated Spine Surgery：** Navigation pedicle screw insertion with "Anatase" Spine Surgery Navigation system (REMEX V1.0)	陳賢德 醫師
NO.7	**PSI for hip Replacement：** 3D printing-aided method	黃揆洲 醫師

Room / Time	國際會議廳	102 講堂	103 講堂	104 講堂
08:30-11:30 (Coffee Break：10:00-10:15)	(08:30-11:30) PSI for hip Replacement：3D printing-aided method **(course NO.7)**	(08:00-12:00) Robotic TKA Surgery：ROSA Recon (version1.2) system **(course NO.2)**	(08:00-12:00) Robotic Spine Surgery：POINT Robotics Platform **(course NO.4)**	(08:00-12:00) Robotic Spine Surgery：ROSA ONE® Spine system **(course NO.5)**
Lunch				
13:30-16:30 (Coffee Break：15:00-15:15)	(13:30-16:30) Navigation pedicle screw insertion with "Anatase" Spine Surgery Navigation system (REMEX V1.0) **(course NO.6)**	(13:30-17:00) Robotic TKA Surgery：RIO® Robotic Arm Interactive Orthopedic System (makoplasty) **(course NO.1)**	(13:30-16:30) Navigated TKA Surgery：NAV3i Navigation Platform (OrthoMap ExpressKness2.0) **(course NO.3)**	