

Saturday, May 21, 2022 NTUH International Convention Center			
Place Time	2 樓 202 會議室 (80 席)	2 樓 203 會議室 (80 席)	2 樓 205 會議室 (100 席)
	報到地點：台大醫院國際會議中心 3 樓 / 報到時間：08:00~15:00		
08:30~10:00 (90 min)	Scientific Oral Presentation	Physics-I Machine Learning in MRI: design acquisition, and analysis	MSK-I Muscle / Cartilage
10:00~10:30 (30 min)	Coffee Break		
10:30~12:00 (90 min)	ASMRM 2022 Opening Ceremony Plenary Lectures (Room 205)		
12:15~13:15 (60 min)	Lunch Symposium		
13:30~15:00 (90 min)	JS-I ASMRM-ACAR Abbreviated MR	CV-I T1 map and more	Physics-II Chemical Exchange Saturation Transfer: Singnal origin animal model, and human application
15:00~15:30 (30 min)	Coffee Break		
15:30~17:30 (120 min)	NR-I acute stroke	CV-II Flow and motion	Physics-III Diffusion MRI: from basic principles to advanced application
18:30~20:30 (120 min)	Gala Dinner		

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08:30~10:00 (90 min)	CV-III Ischemic Heart	NR-II AI in NR	JS-II ASMRM-AOCR MR Safety
10:00~10:30 (30 min)	Coffee Break		
10:30~12:00 (90 min)	E-Poster	E-Poster	
12:15~13:15 (60 min)	Lunch Symposium		
13:30~14:30 (60 min)	MSK-II Bone marrow	JS-III ASMRM-TRS CMR Practical Tutorial (PPT: English/ Lecture: Mandarin)	Physics-IV Quantitative MRI: from parametric mapping to multi-parametric application
14:30~15:30 (60 min)	Special Focus Screening Whole-Body MRI	JS-III ASMRM-TRS CMR Practical Tutorial (PPT: English/ Lecture: Mandarin)	Physics-V Novel MRI modalities
15:30~16:00 (30 min)	ASMRM 2022 Closing Ceremony (Room 205)		

MAY 21 [SATURDAY]

ROOM 205

PLENARY SESSION—ASMRM 2022 OPENING CEREMONY
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10:40~11:00 *Welcome Message from ISMRM*

Scott B. Reeder, M.D., Ph.D.

11:00~11:30 *Value of MRI*

James Pipe, Ph.D.

11:30-12:00 *ML-empowered Cardiac MR*

Tim Leiner, M.D., Ph.D.

MAY 21 [SATURDAY]

ROOM 203

PHYSICS-I (MACHINE LEARNING IN MRI: DESIGN ACQUISITION, AND ANALYSIS)

Moderator: 黃騰毅 (Teng-Yi Huang) 吳明龍 (Ming-Long Wu)

08:30~09:00 *Deep-designed Radiofrequency Wave from in MRI*

Jongho Lee

09:00~09:30 *Acceleration of Dynamic MRI in the Lung and Abdomen in Free-breathing Empowered by Machine Learning*

Yiping Du

09:30~10:00 *Combining analysis of Multi-parametric MRI into a convolutional neural network: Precise target delineation for vestibular schwannoma treatment planning*

吳育德

MAY 21 [SATURDAY]

ROOM 205

MSK-I (MUSCLE IMAGING)

Moderator: 陳榮邦 (Wing P. Chan) 林宇旌 (Yu-Ching Lin)

- 08:30~08:45 *Imaging of Muscle disorders with Phosphorus MR Spectroscopy*
Jim Wu
- 08:45~09:15 *Muscle Injury MRI and Differential Diagnosis*
Robert Downey Boutin
- 09:15~09:25 *The Novel MR Imaging in Quantifying Skeletal Muscle Fibrosis*
Yu-Ching Lin
- 09:25~09:30 *Q & A*

MSK-I (CARTILAGE IMAGING)

Moderator: 陳榮邦 (Wing P. Chan)

- 09:30~09:45 *AI in Osteoarthritis*
Sharmila Majumdar
- 09:45~09:55 *Radial T2* mapping of human meniscus*
Ping-Huei Tsai
- 09:55~10:00 *Q & A*

MAY 21 [SATURDAY]

ROOM 205

PHYSICS-II (CHEMICAL EXCHANGE SATURATION TRANSFER: SIGNAL ORIGIN ANIMAL MODEL, AND HUMAN APPLICATION)

Moderator: 林吉晉 (Gigin Lin) 蔡尚岳 (Guo-Shu Huang)

- 13:30~14:00 *Cholesterol-weighted imaging based on chemical exchange saturation transfer signal at -1.6ppm*
林群欽 (Eugene C. Lin)
- 14:00~14:30 *Using NMR&MRI to trace Glucose Metabolism of Brain Tumor in Mice*
黃聖言 (Dennis W. Hwang)
- 14:30~15:00 *Downfield rNOE suppressed amide proton CEST imaging from 7T to 3T*
Yi-Cheng Hsu

PHYSICS-III (DIFFUSION MRI: FROM BASIC PRINCIPLES TO ADVANCED APPLICATION)

Moderator: 林慶波 (Ching-Po Lin) 郭立威 (Li-Wei Kuo)

- 15:30~16:00 *What you need to know about Diffusion MRI*
Hiroyuki Kabasawa
- 16:00~16:30 *Advances in quantitative diffusion MRI of white matter microstructure and connections*
Chun-Hung Yeh
- 16:30~17:00 *Processing Algorithms for Diffusion MRI*
Yung-Chin Eric Hsu

MAY 21 [SATURDAY]

ROOM 202

JS-I ACAR-ASMRM JS ABBREVIATED MR

Moderator: 吳志宏(Chih-Horng Wu) 王俐人(Li-Jen Wang) 周春平(Chen-Pin Chou)

13:30~13:35 *Introduction of the Symposium*

Li-Jen Wang

13:35~13:55 *Abbreviated prostate MRI*

Antonio C. Westphalen

13:55~14:15 *The role of Abbreviated Breast MRI*

Ji Soo Choi

14:15~14:35 *Abbreviated MRI for HCC and metastatic disease*

Dow-Mu Koh

14:35~15:00 *Discussion*

MAY 21 [SATURDAY]

ROOM 202

NR-I (MRI IN ACUTE ISCHEMIC STROKE MANAGEMENT: PARADIGM SHIFT)

Moderator: Kei Yamada 陳震宇(Sandy Cheng-Yu Chen)

15:30~15:51 *Perfusion-Diffusion Mismatch in Acute Ischemic Stroke*

Kohsuke Kudo

15:51~16:12 *Intra-arterial thrombectomy and role of acute MRI management*

Kevin Li-Chun Hsieh

16:12~16:33 *MRI imaging of acute stroke and mimics*

Lim Choie Cheio, Tehoyoson

MAY 21 [SATURDAY]

ROOM 203

CV-I (T1 MAP AND MORE)

Moderator: Hajime Sakuma 惲純和(Chun-Ho Yun)

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|-------------|--|
| 13:30~14:00 | <i>T1 Map, the basics</i>
Teng-Yi Huang |
| 14:00~14:30 | <i>Stress T1 Mapping</i>
Chun-Ho Yun |
| 14:30~15:00 | <i>Virtual LGE by ShMOLLIT1 Mapping</i>
Vanessa M. Fereirra |

CV-II (CARDIAC: FLOW AND MOTION)

Moderator: 彭旭霞(Hsu-Hsia Peng) Wahl Lee

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|-------------|---|
| 15:30~15:50 | <i>Physics of 4D Flow MRI</i>
Michael Markl |
| 15:50~16:10 | <i>Strain Analysis by Cardiac MRI</i>
Liang Zhong |
| 16:10~16:30 | <i>Kinetic Energy in Cardiac MRI</i>
Hsu-Hsia Peng |
| 16:30~16:50 | <i>AI in Cardiac MRI</i>
Albert Hsiao |
| 16:50~17:00 | <i>Q & A</i> |

MAY 22 [SUNDAY]

ROOM 202

CV-III (CARDIAC: ISCHEMIC HEART)

Moderator: Randy Yang 李文正 (Wen-Jeng Lee)

08:30~09:00 *New Frontiers of Cardiac Oxygenation MRI*

Randy Yang

09:00~09:30 *CMR Multitasking for ischemic heart disease*

Anthony G. Christodoulou

09:30~10:00 *Cardiac MRI Driving Innovation in Hemorrhagic Myocardial Infarction*

Rohan Dharmakumar

MAY 22 [SUNDAY]

ROOM 202

SPECIAL FOCUS SCREENING WHOLE-BODY MRI

Session 1. Screening Whole-Body MRI: Current and Future

Moderator: 柯世琦(Shi-Chi Ko) 林重榮(Chung Jung Lin)

- 14:30~14:35 *Opening Remarks- The golden age of WH-MRI Screening*
Shi-Chi Ko
- 14:35~14:55 *The Evidence and Current Status of Screening*
Chung Jung Lin
- 14:55~15:15 *WB-MRI as a powerful precision medicine tool*
David S. Karow

SPECIAL FOCUS SCREENING WHOLE-BODY MRI

Session 2. Experience sharing and Discussion

Moderator: Cher Heng Tan Hiroshi Shinmoto

- 15:15~15:22 *WB-MRI in preventive healthcare: experience and challenges*
Yen-Chun Shen
- 15:22~15:30 *Practical issues of WB-MRI for health screening*
Yu-Chen Cheng

MAY 22 [SUNDAY]

ROOM 203

NR-II (APPLICATION OF AI IN MAGNETIC RESONANCE IMAGING)

Moderator: Seung Hong Choi 郭萬祐 (Wan-You Guo)

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|-------------|---|
| 08:30~08:51 | <i>AI in Acute ischemic stroke MR imaging</i>
Peter Chang |
| 08:51~09:12 | <i>Deep learning reconstruction for neuroimaging</i>
Koichiro Yasaka |
| 09:12~09:33 | <i>Perfusion MRI analysis for radiogenomics of gliomas: Deep-learning approach</i>
Kyu Sung Choi |
| 09:33~09:54 | <i>Brain age as a potential biomarker for brain disorders</i>
Wen-Yih Isaac Tseng |
| 09:54~10:00 | <i>Q & A</i> |

MAY 22 [SUNDAY]

ROOM 203

JS-III - ASMRM-TRS: CMR PRACTICAL TUTORIAL

Moderator: 陳俊谷 (Chun-Ku Chen)

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|-------------|---|
| 13:30~13:40 | <i>Effective shimming at 3T CMR</i> |
| | Randy Yang |
| 13:40~13:50 | <i>Techniques and Sequence for Arrhythmia Patients</i> |
| | Hsiu-Ning Chang |
| 13:50~14:00 | <i>Avoid Breathing Artifacts in CMR</i> |
| | Ming Hua Chang |
| 14:00~14:15 | <i>Late Gadolinium Enhancement</i> |
| | Chun-Ku Chen |
| 14:15~14:30 | <i>How to do flow 2D/4D flow, anti-aliasing and visualization</i> |
| | Hsu-Hsia Peng |

JS-III - ASMRM-TRS: CMR PRACTICAL TUTORIAL

Moderator:

- | | |
|-------------|---|
| 14:30~14:45 | <i>How to do stress perfusion on CMR</i> |
| | Wei-Ming Huang |
| 14:45~15:00 | <i>CMR imaging in patient with CIED</i> |
| | Ling Kuo |
| 15:00~15:15 | <i>Repaired TOR CMR in 45 min.</i> |
| | Mao-Yuan Su |
| 15:15~15:30 | <i>Non-ischemic Cardiomyopathy CMR in 45 min.</i> |
| | Hsiu-Ning Chang |

MAY 22 [SUNDAY]

ROOM 205

JS-II (MR SAFETY)

Moderator: 王俐人 (Li-Jen Wang) 郭禹廷 (Yu-Ting Kuo)

08:30~08:33	<i>Opening</i>
	Evelyn Ho
08:33~09:03	<i>Overview of MRI Safety: What the Radiologist needs to know</i>
	Leo Tsai
09:03~09:33	<i>MRI Safety: Metallic Implants and Devices</i>
	Scott B. Reeder
09:33~09:45	<i>National Guideline in MRI</i>
	Wing P. Chan
09:45~09:57	<i>AOSR MR Safety Survey</i>
	Rijo Mathew Choorakuttil
09:57~10:00	<i>Q & A</i>

MAY 22 [SUNDAY]

ROOM 205

MSK-II (BONE MARROW IMAGING)

Moderator: 吳宏達 (Hung-Ta Wu) Mahesh Prakash

13:30~13:50 *LBP and Quantitative Imaging*

Sharmila Majumdar

13:50~14:10 *Physiology of bone marrow perfusion and relationship to bone structure*

James F. Griffith

14:10~14:22 *3D Dynamic contrast enhanced MRI in bone sarcoma*

Hung-Ta Wu

14:22~14:30 *Q & A*

MAY 22 [SUNDAY]

ROOM 205

PHYSICS-IV (QUANTITATIVE MRI: FROM PARAMETRIC MAPPING TO MULTI-PARAMETRIC APPLICATION)

Moderator: 彭馨蕾(Shin-Lei Peng) 蔡炳輝(Ping-Huei Tsai)

13:30~14:00 *Quantitative Parametric Mapping using Multiple Echo Pathways in Spin Echo MRI*

Mei-Lan Chu

14:00~14:30 *Multiparametric MR in Prostate Cancer*

Naranamangalam R. Jagannathan

PHYSICS-V (NOVEL MRI MODALITIES)

Moderator: 吳文超 (Wen-Chao Wu) 陳彥廷 (Yen-Ting Chen)

14:30~15:00 *Low-cost and Shielding-free MRI Technologies for more accessible healthcare*

Ed X. Wu

15:00~15:30 *Deep learning-enhanced Ultra-low-dose PET/MR Imaging*

Kevin Tze-Hsian Chen