

# Highlights from the Asian Oceanian Congress of Radiology

## AOCR2024, Taipei

### Overview

The 22<sup>nd</sup> Asian Oceanian Congress of Radiology (AOCR 2024) was held in conjunction with the Taiwan Radiology Congress 2024 (AOCR 2024 & TRC 2024) from March 22<sup>nd</sup> to 25<sup>th</sup>, 2024 in Taipei, Taiwan. The AOSR member which was the AOCR2024 host and organizer was the Chinese Taipei Society of Radiology (CTSR). AOCR is considered one of the three major international radiology conferences, alongside the RSNA in North America and the ECR in Europe, making it the most significant radiology conference outside of Europe and America. AOCR 2024 took place at the Taipei International Convention Center in Taipei. The congress theme, "The Precision of Radiology," focused on the latest developments in AI and precision medicine. CTSR first hosted this congress in 2010 and it is 14 years later when it hosted its 2<sup>nd</sup> AOCR!

### Conceptualization of congress logo

The conference underwent over a year of preparation. The main visual for the congress was designed by Dr. Ta-Yu Wu, a Taiwan board-certified radiologist. The hand on the left symbolizes the iconic X-ray radiograph of Anna Bertha Ludwig, spouse of Wilhelm Röntgen, adorned with her wedding ring, and the hand on the right embodies the composition of information flow. The two interlocking hands represent the collaboration between humans and machines, and the transition of knowledge from the past to present.



Figure 1. AOCR 2024 congress logo

## Participants

The conference attracted a total of 2,699 participants from 47 different countries, with Taiwan having the highest number of attendees at 1,916, followed by South Korea, India, Indonesia, and Thailand (Table 1). A total of 542 abstracts were submitted, including 164 oral presentations, with Taiwan having the highest number of submissions at 63, followed by India, South Korea, and Thailand (Table 2). A total of 378 e-posters were submitted, with Taiwan having the highest number of submissions at 172, followed by India, South Korea, and Indonesia (Table 3). The conference also offered various awards, including 3 winners for the Best Exhibition Awards, 3 winners for the Best Oral Presentation Awards, and 10 recipients received the AOCR Young Scholarship Award of 150 USD each.

**Table 1.** AOCR 2024 participants

#	Country	Attendees	#	Country	Attendees
1	Australia	35	25	Macau	2
2	Bahamas	2	26	Malaysia	39
3	Bangladesh	7	27	Monaco	2
4	Belgium	1	28	Mongolia	23
5	Bulgaria	1	29	Myanmar	1
6	Cambodia	3	30	Nepal	4
7	Canada	5	31	Netherland	3
8	Chile	1	32	New Zealand	5
9	China	14	33	Nigeria	15
10	Czech Republic	1	34	Oman	1
11	Finland	2	35	Pakistan	2
12	France	2	36	Philippines	38
13	Gambia	3	37	Samoa	1
14	Germany	1	38	Singapore	46
15	Hong Kong	48	39	South Korea	107
16	India	81	40	Sri Lanka	5
17	Indonesia	78	41	Taiwan	1,916
18	Iran	1	42	Thailand	73
19	Ireland	1	43	United Arab Emirates	1
20	Italy	2	44	United Kingdom	4
21	Japan	46	45	United States	35
22	Kazakhstan	6	46	Uzbekistan	6
23	Kyrgyzstan	1	47	Vietnam	21
24	Laos	4			
<b>Total</b>			<b>2,699</b>		

**Table 2.** Abstracts submission – Oral presentation

No.	Country	No. of Abstracts	Percentage
1	Bulgaria	2	1.2%
2	China	3	1.8%
3	Germany	1	0.6%
4	Hong Kong	5	3.0%
5	India	35	21.4%
6	Indonesia	5	3.0%
7	Iran	1	0.6%
8	Japan	2	1.2%
9	Kazakhstan	2	1.2%
10	Malaysia	7	4.3%
11	Nigeria	1	0.6%
12	Philippines	6	3.7%
13	Singapore	1	0.6%
14	South Korea	10	6.1%
15	Taiwan	63	38.5%
16	Thailand	9	5.5%
17	United States	5	3.0%
18	Vietnam	6	3.7%
<b>Total</b>		<b>164</b>	<b>100%</b>

**Table 3.** Abstracts submission – E-Poster

No.	Country	No. of Abstracts	Percentage
1	Australia	1	0.3%
2	Bangladesh	2	0.5%
3	China	7	1.9%
4	Hong Kong	6	1.6%
5	India	29	7.7%
6	Indonesia	24	6.3%
7	Iran	1	0.3%
8	Japan	11	2.9%
9	Kazakhstan	2	0.5%
10	Laos	2	0.5%
11	Malaysia	17	4.5%

No.	Country	No. of Abstracts	Percentage
12	Mongolia	16	4.2%
13	Philippines	19	5.0%
14	Singapore	17	4.5%
15	South Korea	28	7.4%
16	Sri Lanka	1	0.3%
17	Taiwan	172	45.5%
18	Thailand	12	3.2%
19	United States	5	1.3%
20	Uzbekistan	2	0.5%
21	Vietnam	4	1.1%
<b>Total</b>		<b>378</b>	<b>100%</b>

### Opening ceremony

The congress commenced amidst the resounding beats of the captivating performance by the Chio-Tian Folk Drums & Art Troupe, a traditional Taiwanese temple fair parade team (Fig 2).

**Figure 2.** Drum performance at the opening ceremony



## Plenary Sessions

A total of three plenary sessions and an honorary lecture were given by esteemed scholars of international renown during the congress. The opening plenary lectures were delivered by Prof. Curtis Langlotz, President of RSNA, and Prof. Andrea Rockall, President of ESR. Prof. Jeong Min Lee, immediate past president of KSR delivered his plenary lecture on the second day of the congress. Prof. Shigeki Aoki, president of JRS, gave his speech as the keynote speaker for Prof. Yi-Hong Chou's lecture session.

## Scientific programs and conjoint sessions

The scientific programs for AOCR 2024 were notably comprehensive, featuring ten sub-specialty programs scheduled over the course of three and a half days. These encompassed neuroradiology, abdominal radiology, musculoskeletal radiology, chest radiology, cardiovascular radiology, breast imaging, emergency radiology, pediatric imaging, interventional radiology, and ultrasound. In an effort to enhance AOCR's influence, the congress also hosted conjoint sessions and educational courses in collaboration with 11 significant international academic organizations, including those from North America, Europe, and Asia. A total of 100 sessions and 424 lectures were presented during AOCR 2024 (Table 4). The speakers and chairpersons invited were distinguished leaders in the field of radiology, renowned for their expertise in both domestic and international contexts. In total, 278 faculties from 16 countries were invited by the congress, with 159 from domestic institutions and 119 from international institutions (Table 5).

**Table 4.** Scientific sessions in AOCR 2024

No.	Session Name	No. of Sessions	No. of Lectures
<b>Plenary Lectures</b>			
1	Opening Plenary Lecture I	1	2
2	Opening Plenary Lecture II	1	1
3	Prof. Yi-Hong Chou's Lecture	1	1
<b>Scientific Sessions</b>			
4	Abdomen	6	18
5	Advanced Imaging Technique	1	4
6	Breast	5	19
7	Cardiovascular	3	12
8	Chest	3	12
No.	Session Name	No. of Sessions	No. of Lectures

Scientific Sessions			
9	Emergency	3	9
10	Intervention	3	13
11	Musculoskeletal	6	24
12	Neuroradiology	6	18
13	Pediatrics	2	6
14	Thyroid RFA	1	4
15	Ultrasound	2	6
AOCR 2024 Highlights			
16	AI Challenge Presentation	1	5
17	AI Scientific Session	3	9
18	Precision Radiology in Lung Disease	1	4
19	Precision Radiology in MSK Disease	1	2
20	Precision Radiology in Neurological Diseases	1	3
21	Safety in Radiology	3	9
Joint Sessions and Educational Courses			
22	AOSOR-APIWG Session	4	16
23	AOSR-AOCR Value-Based Radiology	1	3
24	AOSR-AOSOR Educational Symposium	1	4
25	AOSR-ISR Joint Session	1	3
26	AOSR-RSNA Joint Session	1	4
27	CTSR-ASTR Joint Session	1	4
28	CTSR-ASAR Joint Session	1	4
29	CTSR-ICIS Joint Session	1	3
30	CTSR-IRIA Joint Session	1	4
31	CTSR-RANZCR Joint Session	1	4
32	CTSR-RST&RCRT Joint Session	1	4
33	Image Interpretation Session	1	4
Oral Presentation Sessions			
34	Abdomen	2	22
35	Breast	2	15
36	Cardiovascular	2	19
37	Chest	1	10
38	Emergency Radiology & Other	1	8
No.	Session Name	No. of Sessions	No. of Lectures

Oral Presentation Sessions			
39	Intervention	2	15
40	IT/AI	2	17
41	Musculoskeletal	2	17
42	Neuroradiology	3	28
43	Pediatric & Safety	1	13
Workshops			
44	AI Workshop	2	2
45	AOSR-AOCR Value-Based Radiology Workshop	2	3
46	Thyroid RFA Hands-on Workshop	1	5
Others			
47	Lunch Symposium	7	12
<b>Total</b>		<b>100</b>	<b>423</b>

**Table 5.** Invited speakers and chairpersons of AOCR 2024

#	Country	Attendees	#	Country	Attendees
1	Australia	6	9	Korea	29
2	Canada	1	10	Malaysia	5
3	China	8	11	Philippines	1
4	India	7	12	Singapore	13
5	Indonesia	2	13	Taiwan	159
6	Ireland	1	14	Thailand	7
7	Italy	2	15	UK	2
8	Japan	17	16	USA	18
<b>Total</b>			<b>278</b>		

Additionally, with AI being the main focal point of this conference, the Organizing Committee collaborated with the Emerging Trends Committee of AOSR and planned three 90-minute AI symposiums, including *Developing AI: Emerging applications in Radiology*, *Implementing AI: From code to bedside*, and *Advancing AI: Generative AI and beyond*.

## Workshops

The three hands-on workshops are part of the highlights of the congress.

### *AOSR-AOCR Value Based Radiology Workshop*

The first workshop, titled "AOSR-AOCR Value-Based Radiology: Leading the Way Towards Visible Radiologists," was led by esteemed speakers Dr. Frank J. Lexa, Chief Medical Officer of the Radiology Leadership Institute at the ACR, and Dr. Geraldine McGinty, Chair of the Commission on Radiology Education at the International Society of Radiology. During the first 90-minute segment, the workshop delved into leadership fundamentals, coaching and mentoring concepts, negotiation strategies, navigating challenging conversations with patients, colleagues, and administration/management, and covered the nuances of building, leading, and managing diverse medical teams. Following the presentation, 31 participants engaged in dynamic small group discussions, which were met with enthusiastic responses. (Fig 3).

**Figure 3.** Small group discussion at the AOSR-AOCR Value Based Radiology workshop





## Thyroid RFA Hands-On Workshop

Thyroid ablation is emerging as a pivotal interventional technique. Led by Professor Wei-Che Lin, the Thyroid RFA session featured a lineup of internationally acclaimed experts who shed light on the theory and techniques of thyroid RFA. In addition to scientific lectures, the session encompassed a hands-on workshop, offering participants an invaluable opportunity for personalized guidance from these experts, and garnered keen feedback. (Fig 4).

**Figure 4.** Hands-on practice at the Thyroid RFA workshop



## AI Workshops

The congress also extended an invitation to NVIDIA to conduct a workshop on medical imaging AI. NVIDIA, a global leader in AI innovation, has strong ties to Taiwan. Given the pressing need for the medical imaging field to grasp the latest advancements in artificial intelligence, this collaboration was a natural fit. The two AI workshops - *acute appendicitis*, which was closely linked to the theme of AI challenge, and the *chest X-ray imaging*— were both fully registered. Participants utilized their personal laptops to execute commands, train a segmentation model, and instantly observe the AI-generated results. NVIDIA also generously provided numerous AI code snippets, greatly benefiting all participants. (Fig 5).

**Figure 5.** AI workshop presentation



### AI Challenge

The AI Challenge at AOCR 2024 was the very first medical imaging AI competition to be held in the field of radiology in Asia and Oceania. The challenges presented for the competition, along with the corresponding database, were meticulously prepared by Dr. Kuei-Hong Kuo of Far Eastern Memorial Hospital. The primary focus was on acute appendicitis, a common emergency condition. The competition boasts a substantial total prize pool of 400,000 NTD. The competition commenced on November 1, 2023, on the Kaggle platform, with 122 groups actively participating. Following two competitive stages, the top 10 contenders were unveiled on the website. The top 5 teams have earned the privilege to present at AOCR 2024, with awards slated for presentation at the gala dinner. (Fig 6).

**Figure 6.** Award ceremony for the AI Challenge



Through these competitions, we have discovered the latent talents of young radiologists who possess the capability to independently operate AI and utilize strategies of their own to enhance diagnostic accuracy. This process has highlighted that while many AI competitions focus on information, mathematical ability, and hardware computing power—attributes typically associated with engineering—the involvement of radiologists is crucial for improving AI performance in the medical field. It has become evident that the optimal approach lies in the seamless collaboration between engineers for their technical expertise, and radiologists for their professional knowledge to excel in such competitions.

### **Guided tours for medical students**

To enhance the medical students' understanding of the evolution of medical imaging and their learnings of relevant knowledge, the congress has arranged two guided tour sessions. Dr. Jung-Hsuan Chen from Taipei Veterans General Hospital took the lead in introducing the congress theme, highlights, lecture contents of each specialty, as well as the latest trending topics in the radiological field to the attendees. Through these activities, the congress aims to educate medical students who are interested in medical imaging about the future development and potential of radiology.

## The 9th Asian Oceanian Radiology Forum

Hosted by Dr. Hong-Jen Chiou, President of CTSR, the 9th Asian Oceanian Radiology Forum (the 9th AORF) focuses on the theme of 'Radiology Workload and Coverage Hours in Asian Oceanian Countries'. Presidents and delegates of 18 AOSR member societies were invited to participate and share first-hand experiences regarding working hours and burden faced by radiologists in their respective countries. The forum facilitated face-to-face communication about the challenges encountered, as well as discussions on potential responses and solutions. A total of nineteen countries were represented at the event. (Fig 7).

**Figure 7.** Group photo for the 9<sup>th</sup> AORF



## Social Events

During the conference, various social events were arranged for invited guests and attendees, including the Welcome Party on March 21 (Fig 8), the President's Dinner on March 22 (Fig 9), and the Gala Dinner on March 23 (Fig 10).

**Figure 8.** Welcome Party at the Residence, Grand Hyatt Taipei



**Figure 9.** Presidential Dinner at the Grand Ballroom, Grand Hyatt Taipei



**Figure 10.** Gala Dinner: a joyful moment dancing the Taiwanese indigenous dance



It is worth noting that during the Gala dinner, Prof. Noriyuki Tomiyama, the President of AOSR, awarded Prof. Adrian Brady, Chair of the ESR Board of Directors, as the Honorary Member of AOSR (Fig 11), and Dr. Evelyn Ho, the AOSR Immediate Past President, as the AOSR Gold Medalist of 2024 (Fig 12). Dr. Hong-Jen Chiou also awarded the Honorary Fellowship of the Taiwan Radiology Society to Prof. Noriyuki Tomiyama (Fig 13). The awarding ceremony was a touching moment beyond academia.

**Figure 11.** Prof. Adrian Brady awarded as the Honorary Member of AOSR



**Figure 12.** Dr. Evelyn Ho awarded as the AOSR Gold Medalist of 2024



**Figure 13.** Prof. Noriyuki Tomiyama awarded as the Honorary Fellowship of the Taiwan Radiology Society



In addition to the official social events, several half-day city tours were planned for our invited guests, including the Taipei Restaurant Bus tour, Taipei 101 tour, and the Dihua street tour. The congress also arranged four self-funded guided tours around Taipei City for all attendees of AOCR 2024, including tours to the Yangmingshan National Park and Tien Lai Hot Spring Resort, Jiufen Village and Sky Lantern, the National Palace Museum, and Yingge and Sanxia Old Street.

Fortunately, thanks to the good weather, our participants all seemed to enjoy their tours in Taipei!  
(Fig 14)




















Figure 14. Group photo in front of the Taipei Xia-Hai City God Temple



### Exhibition

AOCR 2024 has a total of 35 vendors, including 15 sponsors and 20 exhibitors, as well as 6 complimentary booths for scientific societies.

Vendors	Company Name
Diamond sponsors	  老達利貿易股份有限公司 ROTARY TRADING CO., LTD.
	 
Silver sponsors	 
Others sponsors	  
	  
	   

Exhibitors	
Societies	<p>European Society of Radiology (ESR)</p> <p>The Radiological Society of Thailand (RST) and the Royal College of Radiologists of Thailand (RCRT)</p> <p>International Cancer Imaging Society (ICIS)</p> <p>Korean Society of Radiology (KSR)</p> <p>Asian Oceanian Society of Radiology (AOSR)</p> <p>Indian Radiological &amp; Imaging Association (IRIA)</p>