

ARO
Association for Research in Otolaryngology

2025 ARO MIDWINTER MEETING

Renaissance Seaworld ● Orlando, Florida

February 22-26, 2025 | aro.org

Executive Summary

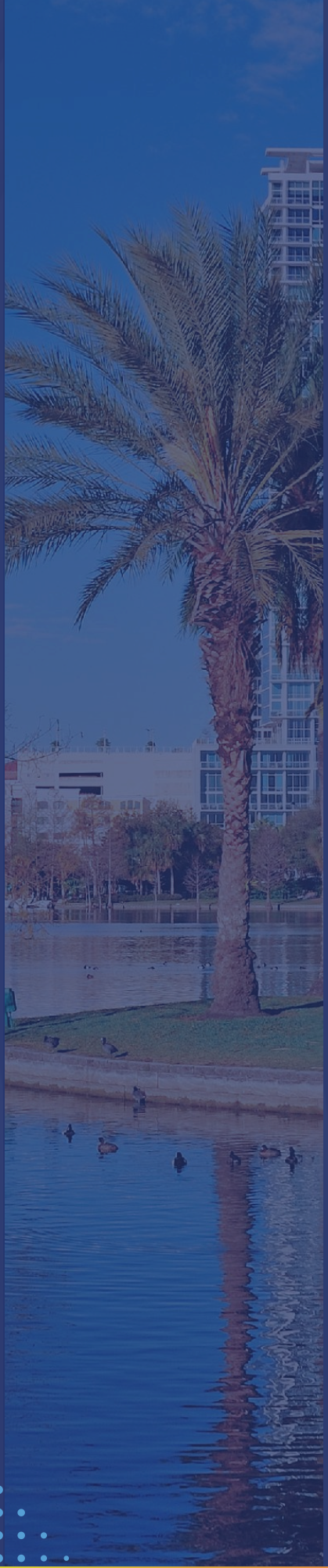


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Midwinter Meeting Highlights

Conference Highlights

Meeting Attendance

1616 Attendees
34 Countries

Highest Attended Sessions

Presidential Symposium - Part 2 – 505

Presidential Symposium - Part 1 - 427

Podium 3: Hair Cell Anatomy and Physiology: Molecular Dynamics, Structural Components, and Pathways to Protection - 315

89.1% Respondents liked the change in timing of the afternoon events which included no programming during lunch and a 1.5 hour dedicated poster time before the afternoon talks start.

88.3% Respondents liked the Mini-Podium format introduced in 2025.

76.6% Respondents liked the Special Session format introduced in 2025.

Conference Highlights

Science of the Meeting Evaluation

Attendees were given the opportunity to complete a post-meeting survey, which yielded the following conclusions regarding educational value, quality of content, and speakers. There were 451 respondents to the evaluation resulting in a response rate of 27.9%. Of those that responded to the meeting evaluation, 84.5 % were current ARO members with 22% being international members.

Respondent Break Down

2023 Total Respondents = 655 (37.3% of all attendees responded to the evaluation).

2024 Total Respondents = 574 (33.2% of all attendees responded to the evaluation).

2024 Location Only Total Respondents = 181 (7.6% of all non-attendees responded to the Location Only survey.)

2025 Total Respondents = 435 (26.9% of all attendees responded to the evaluation).

Attendance by Country: Top 5 countries:

- United States - 1144
- South Korea - 71
- Japan - 61
- Germany - 59
- China - 45

Financial Overview

The 2025 financial reconciliation shows a slight decrease in revenue from the budgeted $855,730 due to fewer registrants than anticipated as a result of the federal government freeze. Even with a $41,094 difference in income between the budgeted amount, there is no negative effect on the bottom line due to controlling audio visual and catering expenses. The 2025 meeting concluded with a gain of $58,066 to the society, which is a 417.5% above the budgeted gain of $11,219.60.

Midwinter Meeting
Financials

Conference Financials

Ordinary Income/Expense						
	Income					
		4200 · Sponsorships				
			4200.3 · Exhibitors	$	20,000.00	$ 25,000.00
			4200.4 · Prospectus Packages	$	8,800.00	$ 19,112.50
		Total 4200 · Sponsorships		$	28,800.00	$ 44,112.50
		4210 · Grants		$	60,000.00	$ 60,000.00
		4215 · Henderson Funds		$	6,000.00	$ 6,000.00
		4500 · Registration		$	610,000.00	
			4500.1 · Regular Member Reg			$ 408,335.00
			4500.2 · Student/Post Doc/Res Member Reg			$ 148,220.00
			4500.3 · Senior Member Reg			$ 2,400.00
		Total 4500 · Registration		$	610,000.00	$ 554,955.00
		4550 · Abstract Fee		$	57,000.00	$ 57,195.00
		4620 · Satellite Symposia		$	30,000.00	$ 30,200.00
		4630 · YI Luncheon Sales		$	1,680.00	$ 1,270.00
		4640 · Pocket Guide Sales		$	2,250.00	$ 2,492.00
		4800 · Meeting Commissions/Rebates		$	60,000.00	$ 58,411.18
	Total Income			$	855,730.00	$ 814,635.68
Gross Profit				$	855,730.00	$ 814,635.68
	Expense					
		5000 · Professional Fees				
			5000.3 · Management Fees	$	163,221.05	$ 157,003.08
			5000.5 · Temporary Help	$	600.00	$ 445.50
		Total 5000 · Professional Fees		$	163,821.05	$ 157,448.58
		6015 · Printing/Copying		$	2,537.00	$ 2,798.97
		6025 · Supplies		$	4,000.00	$ 2,602.67
		6130 · Wifi		$	42,000.00	$ 20,368.97
		6200 · Insurance		$	1,500.00	$ 1,379.00
		7100 · Council/Committee T/F/L		$	6,500.00	$ 3,906.76
		7115 · Staff T/F/L		$	14,904.00	$ 10,672.71
		7117 · JARO Editor T/F/L		$	5,000.00	$ 3,938.79
		7120 · Site Visits		$	1,739.00	$ 1,877.31
		7500 · Abstracts Collection		$	17,000.00	$ 17,000.00

	7510 · Audio Visual		$ 203,424.80	$ 194,352.10
	7515 · Child Care		$ 5,500.00	$ 2,891.00
	7521 · Accessibility/Accommodations		$ 3,100.00	
		7521.1 · AI Captioning	$ 14,587.00	
		7521.2 · Human Captioning		$ 16,537.50
		7521.3 · Assisted Listening Devices		$ 2,663.57
		7521.4 · Translation Services		$ 4,100.94
	Total 7521 · Accessibility/Accommodations		$ 17,687.00	$ 23,302.01
	7525 · Exhibit Booth Decor		$ 3,000.00	
	7540 · F&B - Conference		$ 189,000.00	$ 178,583.80
	7580 · Speaker Funding			
		7580.1 · Non-Member Speaker	$ 15,000.00	$ 15,750.00
		7580.2 · Pres Symposium Spea	$ 7,000.00	$ 4,200.00
	Total 7580 · Speaker Funding		$ 22,000.00	$ 19,950.00
	7585 · Award of Merit Expenses		$ 2,000.00	
	7595 · Event - Hair Ball		$ 2,500.00	$ 2,000.00
	7600 · spARO at MWM		$ 500.00	
		7600.1 · Poster Blitz Gift Cards		$ 111.90
		7600.2 · Steering Committee Dinner		$ 522.85
		7600.3 · Session F&B	$ 2,000.00	
	Total 7600 · spARO at MWM		$ 2,500.00	$ 634.75
	7610 · Poster Boards		$ 18,000.00	$ 14,626.00
	7650 · MWM Shipping/Freight		$ 3,200.00	$ 2,639.82
	7655 · Signs		$ 6,000.00	$ 4,999.82
	7660 · Travel Awards			
		7660.1 · Audiologist	$ 2,500.00	$ 2,250.00
		7660.2 · Grad/Post Doc	$ 41,250.00	$ 38,000.00
		7660.3 · Med Student/Res	$ 7,250.00	$ 6,500.00
		7660.4 · DMAC	$ 2,000.00	$ 2,250.00
	Total 7660 · Travel Awards		$ 53,000.00	$ 49,000.00
	7680 · ARO Scholars Awards		$ 20,000.00	$ 9,617.17
	7691 · Mobile App		$ 3,300.00	
	7695 · Henderson Travel Award		$ 6,000.00	$ 6,000.00
	7710 · Misc Council Expenses			
		7710.1 · Expense at Council's D	$ 1,245.00	$ 1,888.42
		7710.2 · Committees Requested	$ 3,320.00	$ 3,320.00
	Total 7710 · Misc Council Expenses		$ 4,565.00	$ 5,208.42
	8105 · Merchant Processing Fees		$ 23,832.55	$ 20,760.26
Total Expense			$ 844,510.40	$ 756,568.71
Net Ordinary Income			$ 11,219.60	$ 58,066.97

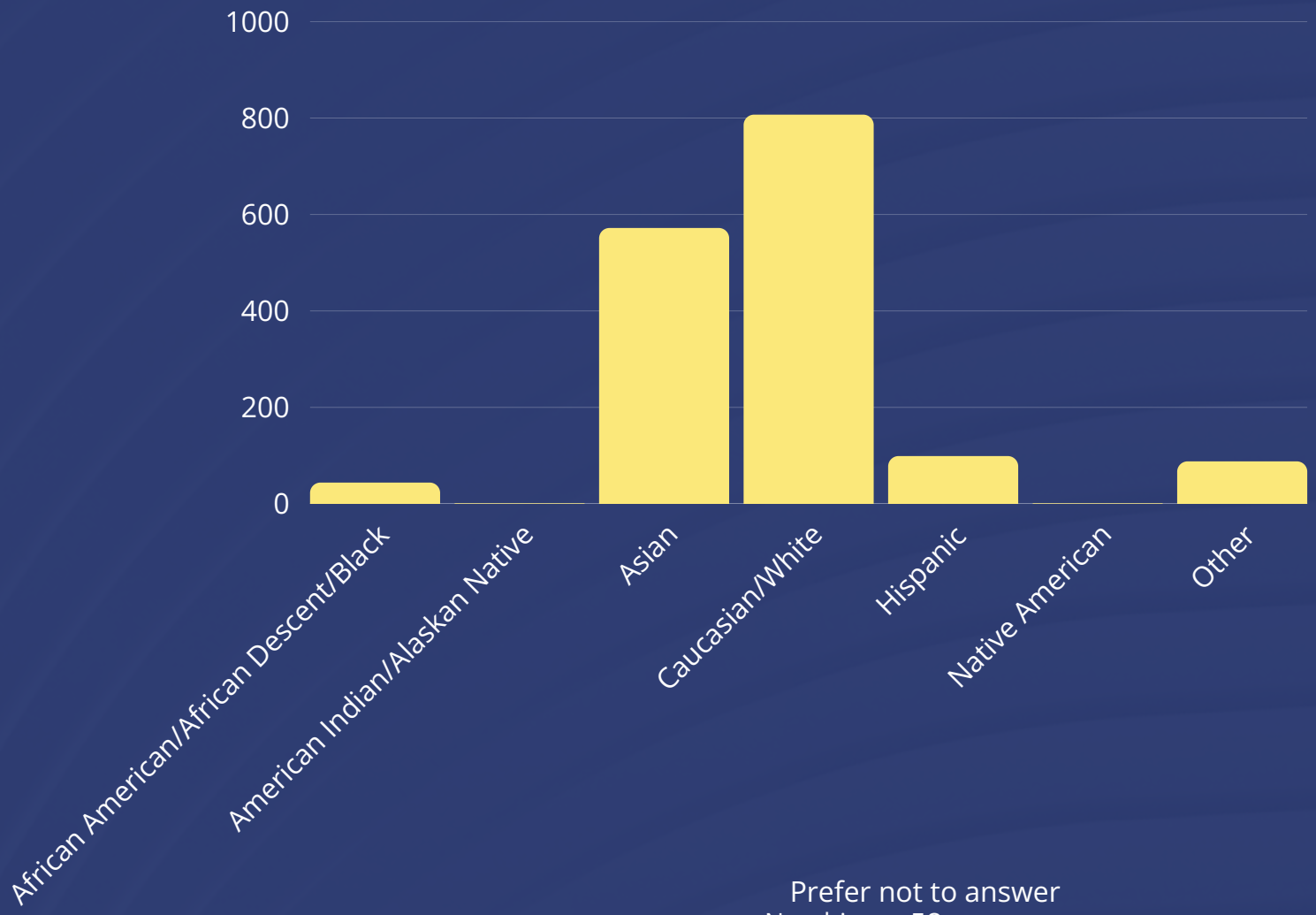
Attendee Breakdown

ARO Association for Research in Otolaryngology

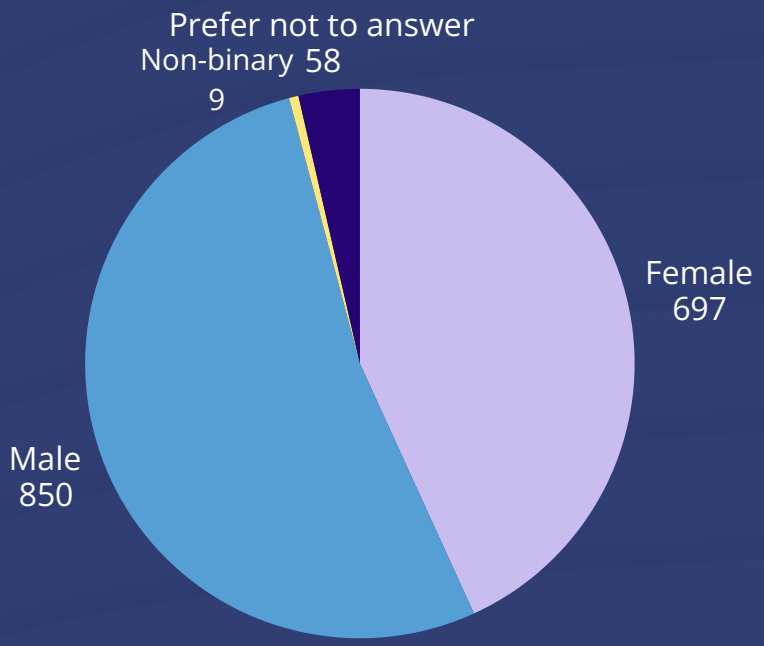
Breakdown By Type

Registration Category	2023	2024	2025
Total Registrants	1755	1731	1616
Member	705	750	704
Student Member	658	648	610
Non-Member	129	178	162
Student Non-Member	124	109	85
Main Session Recordings	38	21	25
Senior Registration	27	25	17

Breakdown by Ethnicity/Race

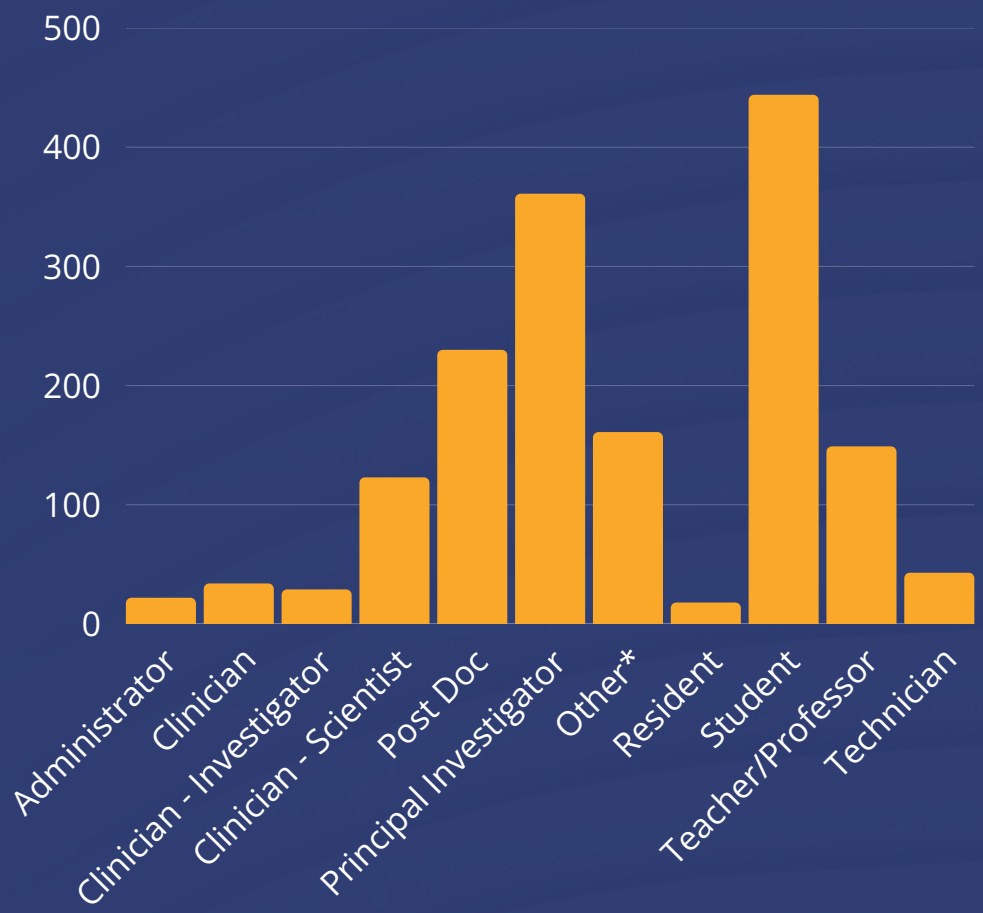


Breakdown by Gender



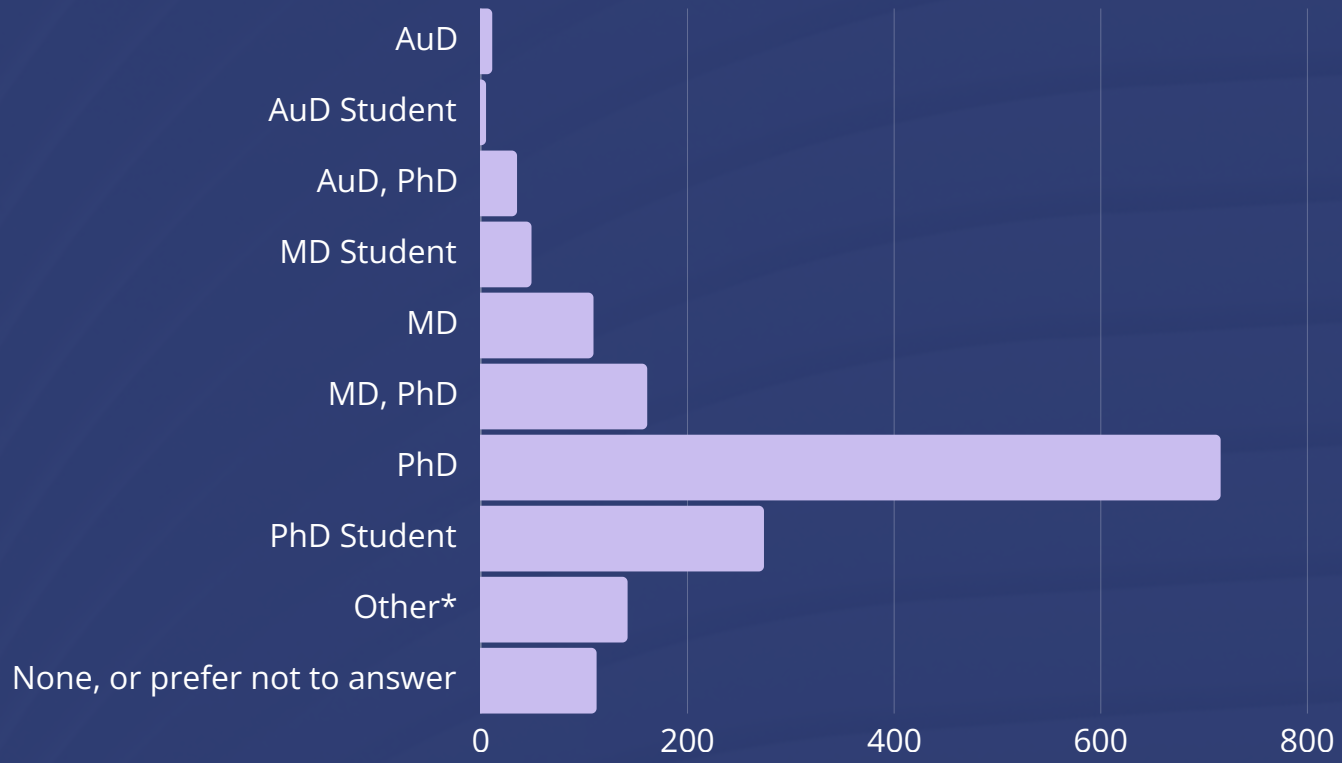
Breakdown by Career Level

*Other:



Breakdown by Degree

*Other:



Breakdown by Areas of Interest

	2025
Auditory (CNS)	544
Auditory (Inner Ear/Neural)	925
Auditory (Outer/Middle Ear)	316
Auditory Neuroscience	899
Biochemistry	148
Chemical Senses (Smell/Taste)	36
Developmental Biology	276
Genetics	389
Hair Cells	663
Immunology	159
Implantable Prostheses	236
Laryngology	38
Otology / Neurotology	408
Pathology	180
Pharmacology	187
Psychophysics	240
Regeneration	302
Speech/ Voice	182
Vestibular	356
Gene Therapy	410
Multisensory processing/interactions	217
Other*	52

Previous ARO Meetings:

How many ARO Meetings have you attended in the past?

The numbers below are based on 435 evaluation respondents.

	2023	2024	2025
0	100	45	97
1-3	311	306	116
4-6	216	211	50
7-9	N/A	N/A	37
10-12	N/A	N/A	31
More than 12	N/A	N/A	103

Of the past ARO meetings, which have you attended?

The numbers below are based on 1616 registrants

Anaheim, CA in 2024	792
Orlando, FL in 2023	720
Virtual in 2022	565
Virtual in 2021	512
San Jose, CA in 2020	550
Meeting(s) prior to 2020	620

ARO Membership

The numbers below are based on 1616 registrants

Are you an ARO member?	89.4% - Yes
If you are not an ARO member, what are the major reasons for not joining?	68 - Financial burden 17 - Few obvious benefits of membership 15 - Already a member of many societies 69 - Have only just begun attending ARO meetings 51 - Do not often attend ARO meetings 6 - Forgot to renew 6 - It takes too long to both register and join 21 - Other*

Registration Breakdown by Country

Argentina	2	Japan	61
Australia	23	Netherlands	18
Austria	12	New Zealand	2
Belgium	12	Poland	4
Brazil	1	Saudi Arabia	1
Canada	33	Singapore	7
Chile	1	Slovakia	2
China	45	South Africa	1
Czech Republic	1	South Korea	71
Denmark	13	Sweden	8
France	30	Spain	4
Germany	59	Sweden	6
Hong Kong SAR China	3	Switzerland	4
India	2	Taiwan	5
Iran	1	Turkey	1
Israel	12	United Kingdom	41
Italy	1	United States	1144

Registration Breakdown by State

Alabama	3	Louisiana	6	North Carolina	13
Arizona	2	Maine	4	Ohio	29
California	112	Maryland	149	Oklahoma	13
Colorado	19	Massachusetts	130	Oregon	16
Connecticut	12	Michigan	46	Pennsylvania	44
Delaware	4	Minnesota	14	Rhode Island	1
District of Columbia	7	Mississippi	12	South Carolina	20
Florida	71	Missouri	18	Tennessee	14
Georgia	6	Nebraska	36	Texas	46
Idaho	2	New Jersey	17	Utah	13
Illinois	64	Nevada	2	Vermont	1
Indiana	28	New York	101	Virginia	16
Iowa	30	New Hampshire	8	Washington	17
Kansas	2	New Jersey	17	West Virginia	1
Kentucky	10	New York	79	Wisconsin	8

Meeting Logistics

Meeting Logistics

Please rate the following aspects on the meeting venue.

The percentages below represent the percent of respondents who rated the question or statement with “excellent” or “satisfactory”.

	2024	2025
Awards Reception	68.8% Excellent or Good	90.4% Excellent or Satisfactory
Airport Accessibility	49.2% Excellent or Good	94.5% Excellent or Satisfactory
Audio/visual services	86.9% Excellent or Good	91.6% Excellent or Satisfactory
Childcare arrangements	N/A	95.2% Excellent or Satisfactory
Closed captioning	73.8% Excellent or Good	82.5% Excellent or Satisfactory
Exercise options	61.6% Excellent or Good	87.6% Excellent or Satisfactory
Exhibitors	73.4% Excellent or Good	95.3% Excellent or Satisfactory
Hair Ball	73.7% Excellent or Good	96.7% Excellent or Satisfactory
Hotel Accommodations *Click here to view additional comments about the in-person meeting venue, including barriers you may have encountered.*	68.9% Excellent or Good	86.2% Excellent or Satisfactory

Please rate the following aspects on the meeting venue (continued).

The percentages below represent the percent of respondents who rated the question or statement with “excellent”, or “satisfactory”.

	2024	2025
Informal meeting spaces	69.1% Excellent or Good	95.5% Excellent or Satisfactory
Local food availability	47.7% Excellent or Good	49.3% Excellent or Satisfactory
Local safety	79.1% Excellent or Good	96.3% Excellent or Satisfactory
Local transportation	52.2% Excellent or Good	73.4% Excellent or Satisfactory
Mobile App	53.8% Excellent or Good	79.9% Excellent or Satisfactory
Nursing/pumping accommodations	63.9% Excellent or Good	92% Excellent or Satisfactory
Pre-arranged small meeting spaces	76.9% Excellent or Good	95.3% Excellent or Satisfactory
Speaker Ready Room	93.8% Excellent or Good	99.4% Excellent or Satisfactory

Meeting Logistics - Future Meetings

With the rising costs of meetings and ARO's fairly limited meeting budget, ARO has a narrow range of venues that will accommodate our budget (e.g. many venues have a high required spend on food and beverage). ARO could increase its meeting budget to increase the venue options, or downscale the meeting to keep costs stable despite rising meeting costs. Which of these options do you feel is an acceptable approach for ARO to consider?

	2024	2025
Increasing meeting budget through increased registration fees, to pay for more food and beverage provided by the meeting venue.	321 respondents selected this option	136 respondents selected this option
Control meeting budget by reducing conference features such as coffee/tea/drinks	129 respondents selected this option	53 respondents selected this option
Control meeting budget by reducing the overall length of the MWM meeting	288 respondents selected this option	169 respondents selected this option
Control meeting budget by reducing expenditures on travel awards	89 respondents selected this option	64 respondents selected this option
Control meeting budget by reducing expenditures on invited speaker funding	263 respondents selected this option	137 respondents selected this option
Control meeting budget by reducing expenditures on social events	N/A	92 respondents selected this option
Keep things as they are	N/A	126 respondents selected this option

Meeting Logistics - Future Meetings

The percentages below represent the percent of respondents who rated the question or statement with “excellent”, “good”, or “yes”.

	2025
Are you planning to attend the 2026 ARO MWM meeting in San Juan, Puerto Rico, February 06-11, 2026?	62.7% Yes
What do you like most about the ARO meeting that encourages you to attend? *Resondants were asked to select as many as applied.*	88.9% - Scientific Content 23.7% - Convenient Location 29.0% - Desirable Location 22.2% - Affordable Location 75.6% - Networking with Attendees 53.6% - Sense of Community 1.3% - Other*

Meeting Content

The percentages below represent the percent of respondents who rated the question or statement with “excellent”, “satisfactory”, or “yes”.

	2025
Please rate the Presidential Symposium *Click here to view comments regarding the Presidential Symposium and suggested topics for future meetings.*	92.3% Excellent or Satisfactory
The Special Session* format was new this year. A special session can take any format such as a workshop, moderated panel, etc. Did you like the format?	76.6% Yes
The Mini-Podium* format, with 4 talks presented in a 1 hour session, was new this year. Did you like the format?	88.3% Yes
This year we have changed the timing of afternoon events with no programming during lunch and a 1.5 hour dedicated poster time before the afternoon talks start. Did you like it? *Click here to view comments about the timing of the afternoon sessions.*	89.1% Yes
Are you satisfied with how ARO and the Awards Committee recognizes and awards excellence in our community? *Click here to view additional comments about ARO awards or how ARO recognizes excellence*.	63.2% Yes
Are there any scientific topics you felt were underrepresented? *Click here to view the list of topics that respondents felt were underrepresented.*	20.4% Yes

**Click here to view comments about the special session or mini podium formats.*

Session Ratings

How would you rate the following spARO-organized mentoring sessions?

The following questions were designed to be answered by the students and post-docs of ARO only. The percentages below represent the percent of respondents who rated the question or statement with “excellent” or “satisfactory”.

	2024	2025
Work/Life Balance & Mentor/Mentee Communication (virtual)	N/A	79.2% Excellent or Satisfactory
Navigating the Grant Landscape (virtual)	74.1% Excellent or Good	71.4% Excellent or Satisfactory
Careers in Academia (virtual)	70.4% Excellent or Good	83.3% Excellent or Satisfactory
Careers in Industry (virtual)	70.0% Excellent or Good	76.2% Excellent or Satisfactory
Poster Blitz	N/A	89.8% Excellent or Satisfactory
Mentor Meet and Greet	N/A	88.9% Excellent or Satisfactory
LGBTQIA+ Social	N/A	80.0% Excellent or Satisfactory
spARO Town Hall	64.8% Excellent or Good	90.3% Excellent or Satisfactory
Buddy System and WhatsApp Group	N/A	65.6% Excellent or Satisfactory

Session Ratings

Committee Activities

The percentages below represent the percent of respondents who rated the question or statement with “very impactful” or “impactful”.

	2025
ARO Scholars Research Program (ARO Scholars Program | ARO - Association for Research Otolaryngology)	73.0% Very impactful or Impactful
Monthly Virtual Coffee Hour Webinars *Click here to view suggested topics or types of content for the year-round virtual content including the ARO Seminar Series and Coffee Hour.*	56.3% Very impactful or Impactful
Symposium or Special Session - e.g. "Making History: Celebrating Black Scientists in Otolaryngology" at the 2025 MWM	66.0% Very impactful or Impactful

Session Counts

Session Name	Count
Friday February 21, 2025	
PIHL Satellite Symposium	72
Ménière's Disease Satellite Symposium	82
gEAR Session: Beginner Workshop - Introduction to gEAR	29
gEAR Session: Advanced Workshop	9
Saturday February 22, 2025	
Presidential Symposium - Part 1	427
Presidential Symposium - Part 2	505
Travel Award Luncheon	80
Special Session 1: Deep Neural Networks and AI for Auditory Modeling	159
Podium 1: Accessing the Inner Ear: Advances in Cochlear Drug Delivery	257
Podium 2: Auditory Nerve: Mechanisms, Damage, and Protective Strategies	226
Poster Blitz Session I	116
Poster Blitz Session II	105
Memorial Symposium for Eric Young: From the Auditory Nerve to Cochlear Nucleus to cortex, and Back	67
Sunday February 23, 2025	
Symposium 1: Inter-Areal Contributions to Auditory-Guided Behavior	104
Young Investigator Symposium 1: Cochlear Health after Cochlear Implants. Biomarkers, Therapeutics, and Outcomes	104
Podium 3: Hair Cell Anatomy and Physiology: Molecular Dynamics, Structural Components, and Pathways to Protection	315
Symposium 2: Vestibular Disorders: Breakthroughs in Diagnosis and Management	104
Podium 4: From Hearing Loss to Functional Hearing	188

Session Counts

Session Name	Count
Podium 5: Immunology: Function, Dysfunction, & Treatment	204
Special Session 2: Making History: Celebrating Black Scientists in Otolaryngology	50
Podium 6: Decoding Speech Perception: Insights from Neural, Behavioral, and Technological Perspectives	115
Mini-Podium 1: Otitis Media: Imaging, Immunity and Innovative Therapy	98
Mini-Podium 2: Etiologies and Novel Treatments of Inner Ear Disorders	110
ARO Business Meeting (Members Only)	55
Inner Ear Courses	75
Monday February 24, 2025	
Symposium 3: Inner Ear Immunity: Unraveling the Immune Dynamics in Hearing	142
Podium 7: Cochlear Mechanics: Models, Experiments, and Problems	121
Podium 8: Hair Cell Regeneration in Fish and Mice	211
Symposium 4: Hair-Cell Evolution: Insights from New Model organisms, Comparative studies, and Molecular Analyses	164
Podium 9: Auditory Cortex: Human and Animal Studies	196
Podium 10: Binaural Hearing and Sound Localization	148
Symposium 5: Across Species: The Functional Role of Cochlear Synaptopathy for Speech Coding in the Brain (CoSySpeech)	122
Podium 11: Advances in Vestibular Science and Rehabilitation: From Cellular Mechanisms to Clinical Innovations	71
Podium 12: OTOF Success and GJB2 Progress	262
ARO Awards Ceremony	280

Session Counts

Session Name	Count
Tuesday February 25, 2025	
Young Investigator Symposium 2: Bridging the Senses: Lessons Learned at the Intersection of Audition and Vision	97
Podium 13: Cochlear-Specific Genomics and Gene Regulation	178
Podium 14: New Advances in Tinnitus: Humans and Animal Models	145
Symposium 6: Electric-Acoustic Interactions within and across Ears: Animal, human, and Computational Models from Periphery to Cortex	114
Podium 15: Genetics of Hearing Loss: Determining Causation and Function	136
Podium 16: Decoding the Aging Auditory System: Molecular Mechanisms, Functional Decline, and Therapeutic Prospects	195
Young Investigator Lunch	108
Special Symposium: Young Investigators from the Cross-Disciplinary Otitis Media Mentoring Network towards Diversity (COMMeND): Bridging Gaps in Otitis Media Research	19
Mini-Podium 3: Human Inner Ear Anatomy: Techniques	78
Mini-Podium 4: Auditory Cortex: From Inhibitory Networks and Signal-in-Nose Detection to Categorization and Loudness Perception	85
Mini-Podium 5: Innovative Approaches to Hearing Preservation: From Gene Therapy to Light-Based Therapies	137
Mini-Podium 6: Auditory Midbrain: Structure and Function	96
Honoring the Contributions of Dr. Brenda Lonsbury-Martin to Physiological Measures of Auditory Function	68
ARO Short Course	60
spARO Town Hall	40

Session Counts

Session Name	Count
Wednesday February 26, 2025	
Podium 17: Multisensory Interactions	45
Podium 18: Emerging Gene Therapies for Hearing and Balance Disorders	147
Podium 19: Psychoacoustics: From Acoustic Startle to Auditory Attention	65
Podium 20: Frontiers in Auditory Prostheses	98
Podium 21: Transcription, Metabolomic, and Cellular Dynamics in Inner Ear Development: Mice & Human Organoids	137
Podium 22: Brainstem: Structure & Function	79

Attendee Comments

Attendee Comments

- Please add any additional comments about the in-person meeting venue, including barriers you may have encountered.
- Please write any additional comments you have regarding the Presidential Symposium, including suggestions for topics for future ARO meetings.
- Please write any additional comments about the special session or mini-podium formats.
- Please write any additional comments about the timing of afternoon events detailed in the previous question. (This year we have changed the timing of afternoon events with no programming during lunch and a 1.5 hour dedicated poster time before the afternoon talks start. Did you like it?)
- Please list the scientific topics you felt were underrepresented.
- Please suggest any short course topics you would be interested in attending at a future MWM meeting.
- The ARO Education Committee offers year-round virtual content including the ARO Seminar Series and Coffee Hour. Are there specific topics or types of content you would like to see?
- Please write any additional comments about ARO awards or how ARO recognizes excellence in our community.
- Please write any additional comments or suggestions you may have about the content of the MidWinter Meeting.
- Do you have any suggestions for other activities to support your professional development and sense of belonging with ARO?
- For future ARO meetings, do you have any suggestions for improving accessibility for yourself or other attendees?

Attendee Comments

- Do you have any suggestions for ways to build community and form collaborations at future ARO meetings?
- Do you feel the frequency of emails from ARO is appropriate?
- Do you have any suggestions for how we can improve the ARO meetings in the next 5 years?
- Are there any questions we should add for next year's survey?
- Please provide any comments or suggestions regarding the mentoring sessions.
- What are your future career goals and how can ARO support them?
- Do you have any comments on spARO events at the 2025 MidWinter Meeting, or suggestions for future spARO activities?
- What factors, if any, might discourage you from attending the next ARO MidWinter meeting?



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