

Background

- Research training is an important area of medical education
- Many community based programs lack formal research training
- Phoenix is the 5th largest city in the USA
- No 4-year allopathic medical school in the city!
- 7 teaching hospitals in the city
- Multiple post graduate residency and fellowship programs represented

Purpose/Relevance

- A competitive academic excellence day was started by Mayo Clinic Arizona and Maricopa Medical Center with goals of fostering research and exposing the learner to research methodology

Process

- Announcements to citywide GME programs
- Abstract collection and review
- Selection and notification of poster and/or oral presentations
- Day long oral and poster presentations
- Awards ceremony

Institutions

- Mayo Clinic Arizona*
- Maricopa Medical Center*
- St. Joseph Hospital/Barrow Neurological Institute
- Banner Good Samaritan Medical Center
- Scottsdale Healthcare
- Phoenix Baptist Hospital
- Phoenix Children's Hospital

Sponsors

- Origins
 - Mayo Clinic Arizona
 - Maricopa Medical Center
- AZMEC (Arizona Medical Education Consortium)
 - Committee/quarterly

Participants

- Residents
- Research Associates
- Fellows
- Nurses

Residencies Represented

- Internal Medicine
- Family Practice
- Transitional
- Pediatrics
- Emergency Medicine
- Surgery
- Neurology
- Dermatology
- Radiology

Fellowships

- Transplant Medicine
- Cardiology/Vascular Surgery
- Gastroenterology
- Burn Medicine
- Movement Disorders
- Biology/Genetics/Basic Science
- CNP/Epilepsy/NM
- Pulmonology
- Urology
- Toxicology
- Molecular
- Med Oncology / Rad Oncology

Format of the Competition

- One Day
- Keynote Speaker
- Abstract Submissions
- Posters
 - Studies
 - Case Reports
- Oral Presentations
 - Studies
 - Case Reports

Posters

- Displayed
 - One location
 - 0700-1430
 - Posters prepared by learners' institutions
 - Poster wall / stands rented for the day

Poster Presentations



Oral Presentations

- Held in Public Auditorium
- 10 minute time limit
 - 4 minute discussion and questions
 - Judges in audience
 - Judges quiz the presenters

Oral Presentations



Judges

- Each Institution provides three judges
 - Program directors
 - Clinical and basic science
- Typically...
 - Judge oral
 - Judge
 - Poster research
 - Poster case presentation

Oral Presentation Judging Criteria

- Clarity
- Design
- Relevance
- Interpretation
- Literature Review
- Delivery
- Originality
- Methodology
- Organization

Oral Scoring Grid

RATING SCALE: 1 = EXCELLENT 2 = VERY GOOD 3 = GOOD 4 = SATISFACTORY 5 = POOR							
Author	Topic	Design	Relevance	Organization	Delivery	Originality	Methodology
1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5

Poster Presentation Judging Criteria

- Design / Graphics
- Relevance
- Organization
- Originality of Content
- Methodology

Research Poster Scoring Grid

RATING SCALE: 1 = EXCELLENT 2 = VERY GOOD 3 = GOOD 4 = SATISFACTORY 5 = POOR							
Author	Topic	Design	Relevance	Organization	Delivery	Originality	Methodology
1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5

Attendees

- Public Display
- Physician staff – all locations
 - Employees – all locations
 - Open to the public and patients

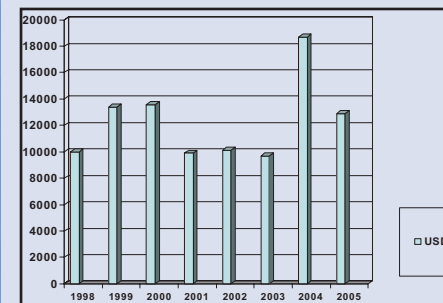
Prizes

- Separate resident and fellow
- Prizes
 - Certificates
 - Trophy
 - Money
 - Research > Case
 - Oral > poster
- Prizes are awarded the same day
 - "Checks are mailed"

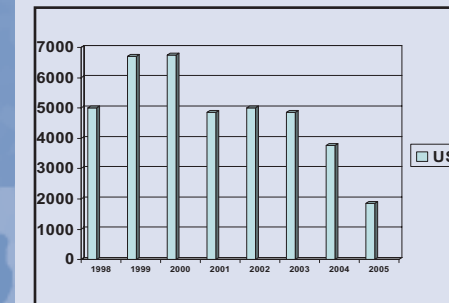
Awards Presentation



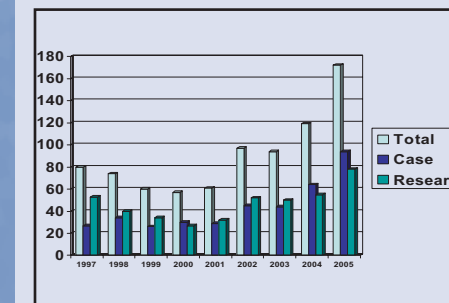
Budget



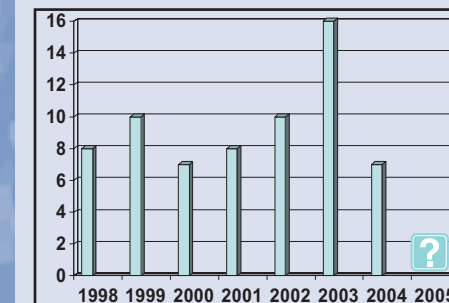
Cost/Institution



Submissions



Peer Reviewed Publications



Journals Where Research Was Published

- Mayo Clin Proc
- AJR Am J Roentgenol
- Arch Surg
- J Neurosurg
- Arch Dermatol
- Proc Natl Acad Sci USA
- Am J Obstet Gynecol
- J Emerg Med
- Pediatrics
- Am J Respir Crit Care Med
- 30 plus overall

Participant Goals

- "Bragging rights"
- "Show me the Money"
- Collegiality
- Collaboration
- Recognition (news releases, letter to CEO, website)
- "Getting One's Feet Wet"
 - Encourage future research
 - Non-threatening forum
- Education
- Potentially improve patient care/outcomes

Education Emphasis

- ACGME requirements
 - Each program must provide an opportunity for residents to participate in scholarly activity
 - Scholarly activity:
 - Active research component
 - Scholarship of discovery (publication of original research in a peer-reviewed journal)
 - Scholarship of dissemination (review articles/chapters in textbooks)
 - Scholarship of application (publication or presentation, ex. case reports or clinical series at local, regional, or national professional and scientific society meetings)

Keynote Presentation Highlights

- "Genomics in Medicine: A 21st Century Approach to Improving Human Health"
- "Strategies for Success in Academic Medicine"
- "Practical Mathematics in Patient Care"
- "Thinking About Research in Your Career"
- "Publishing and Publications"

Results/Outcomes

- An annual academic competition among citywide GME programs has encouraged young investigators to become involved in the academic process
- Awarding monetary prizes to top finishers and recognition of participation of all entrants fosters a sense of pride in the participants and sponsoring institutions

Key Points

- Continue mentorship of young investigators following the program
- Encourage formal journal article submissions
- Evaluate program and outcomes
- Encourage evidence-based research

What the future holds...

- An annual academic day competition can be an effective tool to foster academic development in young investigators
- Expand to all programs in Arizona
- Promote to nurses, physician assistants, and allied health