2002 Chief Resident Survey

- Mallinckrodt Institute of Radiology
  - Doug Curry, MD.
  - James Goddard, MD.
  - Sailen Naidu, MD.
Distribution and Response

• 150 Resident Training Programs
• 37 Responded (25%)
  – 24 Annual and Rotating Topics
  – 13 Rotating Topics Only
  – Decreased response rate
    • 41% in 2001
Demographics

• Residency Program Size
  – Small Programs (\(\leq 10\)) : 0
  – Medium Programs (\(>10 \text{ and } \leq 25\)) : 15
  – Large Programs (\(>25\)) : 9
Program Size

Number of Programs

Number of Residents / program

0 <=10 >10 >25 and <=25

1994 1998 2002

35 30 25 20 15 10 5 0
Number of Residents

• Total: 1217 (24 programs responding)
• Percent Women: 22.5%
  – Slight increase from 1986 (20%)
  – No change from 1998
Women in Radiology

![Bar chart showing the percentage of women in different sized radiology programs in 1998 and 2002. The y-axis represents the percentage of women, ranging from 0 to 30. The x-axis represents the size of the program, categorized as Small, Medium, and Large. The chart shows a comparison between 1998 and 2002 for each size category.](chart-image)
Women in Radiology

![Bar chart showing the percent of women in radiology over different years: 1983 to 2002. The percent increases over these years.](chart.png)
Benefits

• Salary
  – First Year
    • Average $37,913
    • Range 34K-45K
  – Fourth Year
    • Average $43,130
    • Range 37.5K-60K
Figure 6: Resident Salary Trend

- 1992: $28,400
- 1997: $32,366
- 2002: $37,913

Salary increases over time:
- First year: $28,400
- Fourth year: $43,130

Salary range:
- $0 to $50,000
Demographics

• Number of Faculty / Program
  – Average 41
  • Range 13 - 125
  – Staff / Resident Ratio : 1.6

• Number of Fellows / Program
  – Average 6.5
  • Range 0-40
  – Resident / Fellow Ratio : 3.9
Demographics

• Diagnostic Procedures
  – 11,582 procedures per resident
    • Medium programs 9,332 per resident
    • Large programs 13,497 per resident
  – Overall, 35.6% increase from 1994
    • 8,539 procedures / resident (1994)
Benefits

• Book and Travel Fund
  – 92% offer benefit yearly
  – $1,243 per resident (average)
    • Range $0 - $5200
    • Benefits range from books, travel, conferences, AFIP and subsidized housing.
On-Call Coverage

- Attending Coverage
  - Coverage 5-10pm
    - 62.5% provide in-house coverage
  - Coverage 10pm-6am
    - 4% provide in-house coverage
On-Call Coverage

• Residents
  – Coverage 5-10pm
    • All programs have resident coverage
  – Coverage 10pm-6am
    • All programs have resident coverage
Teleradiology

- A total of 51% of programs use teleradiology
  - Daytime Use (7am-5pm) : 27%
  - On-Call Use (after 5pm) : 46%
Teleradiology

• For What Studies?
  – Body CT  94%
  – Neuro CT  89%
  – Plain Films  63%
  – Ultrasound  53%
  – Nuclear Medicine  42%
  – Neuro MRI  53%
ER Turf Issues

Percent Interpreted by Radiologist
ER Turf Issues

• Emergency Room
  – Body Ultrasound
    • Radiology interpretation : 97%
  – Vascular Ultrasound
    • Radiology interpretation : 57%
ER Turf Issues

• Emergency Room
  – Nuclear Medicine (cardiac)
    • Radiology interpretation: 70%
    • Several programs did not have nuclear cardiac studies available on-call
  – Nuclear Medicine (non-cardiac)
    • 97% Radiology interpretation
ER Turf Issues

- Orthopedic plain films
  - 97% Radiology interpretation
- Body CT
  - 100% Radiology interpretation
- Neuro CT and MRI
  - 100% Radiology interpretation
Hospital Turf Issues

Percent Interpreted by Radiologist

- Neuro CT
- Nuc Card
- Obgyn US
- Card
- Angio

Percent

Hospital Turf Issues

• Hospital
  – Nuclear Medicine (general)
    • Radiology performed 95%
  – OB/Gyn Ultrasound
    • Radiology performed 59%
  – Vascular Ultrasound
    • Radiology performed 43%
Hospital Turf Issues

• Cardiac Imaging
  – Cardiac Angio
    • Performed by cardiologists 100%
  – Cardiac ECHO
    • Performed by cardiologists 95%
  – Cardiac MR
    • Radiology performed 86%
  – Nuclear Medicine (cardiac)
    • Radiology performed 65%
Resident Selection

• Number of Committee Members
  – Average 7.7
  – Range 1-24
Resident Selection

• Committee Members
  – Program Director 97%
  – Chairman 64%
  – Chief Residents 67%
  – Other Faculty 94%
  – Other Residents 18%
Resident Selection

• Interview
  – Applicant to interview ratio : 5.5
  – Interview to position available ratio : 10.6
  – Average number applicants : 385
  – Average number interviewed : 70
Resident Selection

- Recruitment Techniques
  - Evening Entertainment: 27%
  - Subsidized housing: 18%
  - Follow-up Telephone Calls: 18%
  - Subsidized travel: 6%
New Rotating Topic: Physician Assistants in Radiology

- Concerns were raised at the 2001 RSNA Steering Committee about the involvement of Physician Assistants in Radiology. Residents at several programs feel that the use of PAs is negatively impacting their educational experience, especially with regard to procedures and biopsies.
Physician Assistants

• 27% of responding programs have Physician Assistants in their radiology department

• Physician Assistants are in the following sections:
  – Interventional Radiology - 62%
  – Body Ultrasound - 15%
  – Body CT - 8%
  – Nuclear Medicine - 8%
  – Neuroradiology - 8%
Physician Assistants

• The primary role of the PAs in the radiology department is as follows:
  – History and Physical - 62%
  – Biopsy - 31%
  – Image Interpretation - 7%