## 2002 Chief Resident Survey

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

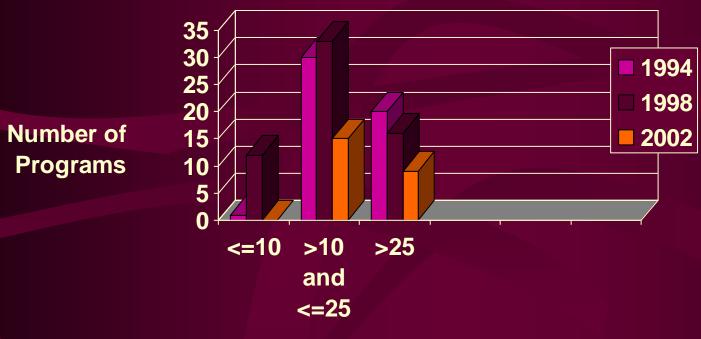
## Distribution and Response

- 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 (<= 10) : 0</p>
  - Medium Programs (>10 and <=25) : 15</p>
  - Large Programs (>25): 9

## Program Size

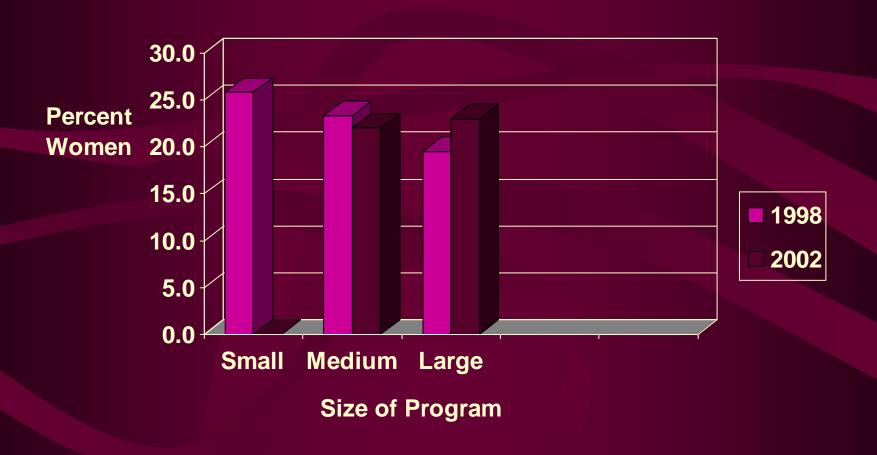


**Number of Residents / program** 

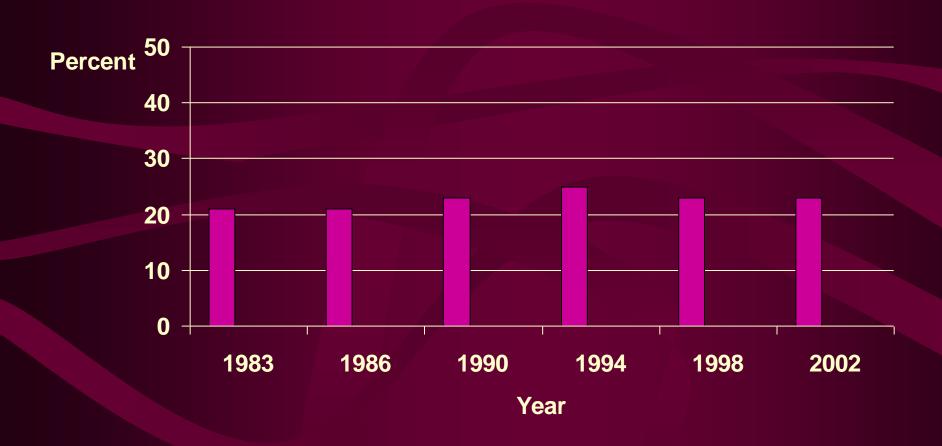
#### Number of Residents

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

## Women in Radiology



## Women in Radiology



#### Benefits

- Salary
  - First Year
    - Average \$37,913
    - Range 34K-45K
  - Fourth Year
    - Average \$43,130
    - Range 37.5K-60K

## Figure 6: Resident Salary Trend



1st year4th year

## 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

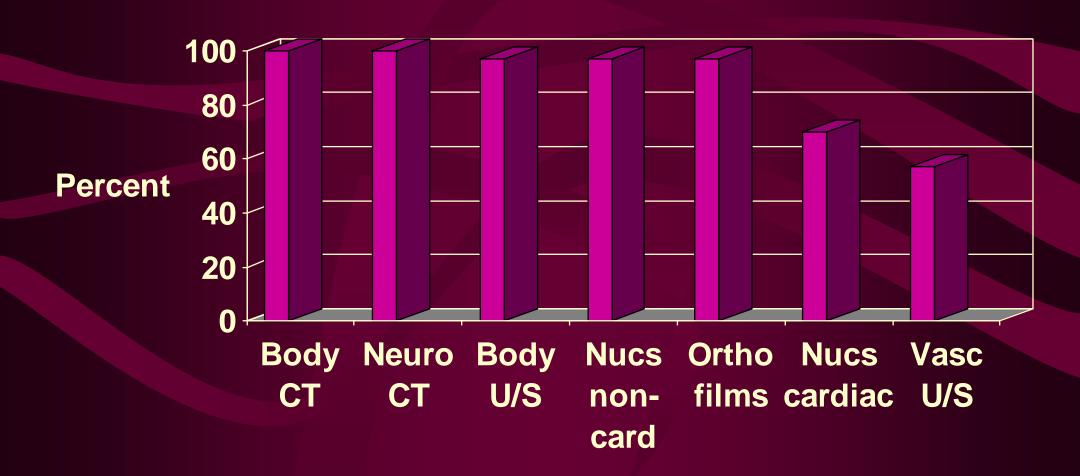
### Teleradiology

- 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

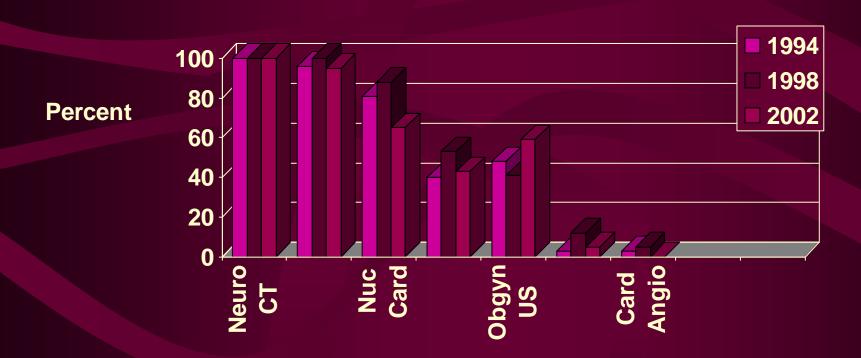
- Emergency Room
  - Nuclear Medicine (cardiac)
    - Radiology interpretation : 70%
    - Several programs did not have nuclear cardiac studies available on-call
  - Nuclear Medicine (non-cardiac)
    - 97% Radiology interpretation

#### 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**



## 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%

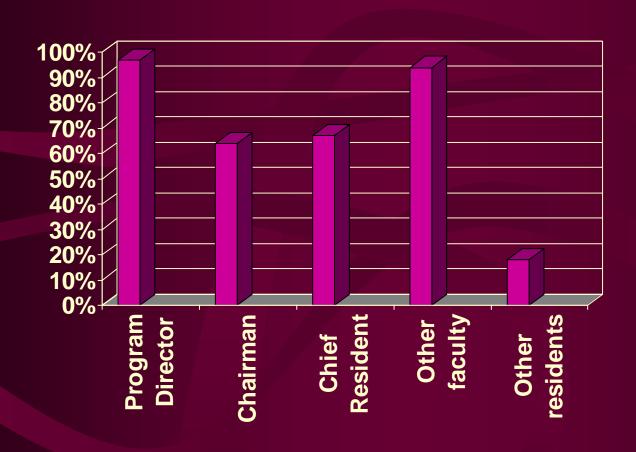
#### Resident Selection

- 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%

## Residency Selection



#### 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%