Survey Topics

• Annual Topics:
  – Staffing
  – Residents
  – Salaries

• Rotating Topics:
  – ABR Exam Preparation
  – Curriculum
  – Socioeconomics
Results

- 150 Diagnostic Radiology Resident Training Programs
- 56 Responded (37.3%)
Prior Survey Response Rates
Programs - Region

- Pacific
- West
- Central
- Northeast
- Southeast

1996-97 vs 2000-01
Programs - Size

- Small (<14)
- Medium (14-25)
- Large (26-40)
- Jumbo (>41)

1996-97
2000-01
Total Residents Represented

- Small: 61
- Medium: 586
- Large: 531
- Jumbo: 189
Annual Topics

• Change in program size
• Exams/Resident
• Fellows/Resident
• Representation of women in residency
• Salaries/Allowance
### Average Change in Match Positions: Size

<table>
<thead>
<tr>
<th>Size</th>
<th>1996-97</th>
<th>2000-01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>0</td>
<td>-1</td>
</tr>
<tr>
<td>Medium</td>
<td>-0.5</td>
<td>0</td>
</tr>
<tr>
<td>Large</td>
<td>0</td>
<td>0.5</td>
</tr>
<tr>
<td>Jumbo</td>
<td>2</td>
<td>1.5</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

**Diagram:**
- Y-axis: Number of Residents
- X-axis: Grouping (Small, Medium, Large, Jumbo, Total)
- Bar colors: Purple for 1996-97, Green for 2000-01
### Average Change in Match Positions: Region

<table>
<thead>
<tr>
<th>Region</th>
<th>1996-97</th>
<th>2000-01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific</td>
<td>-1</td>
<td>0.5</td>
</tr>
<tr>
<td>West</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Central</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Northeast</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Southeast</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Legend:**
- **1996-97**
- **2000-01**
Average Class Size: Size

![Average Class Size Chart]

- **Small**
- **Medium**
- **Large**
- **Jumbo**
- **Avg. Total**

**Number of Residents**

- **1996-97**
- **2000-01**

Legend:
- Purple: 1996-97
- Green: 2000-01
Average Class Size: Region

Number of Residents

1996-97
2000-01

Pacific West Central Northeast Southeast

Number of Residents

Pacific  West  Central  Northeast  Southeast

1996-97
2000-01

1996-97
2000-01

Legend:
- **1996-97**
- **2000-01**
Average Exams per Resident: Program Size

- Small
- Medium
- Large
- Jumbo
- Total

Exams

<table>
<thead>
<tr>
<th>Year</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
<th>Jumbo</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996-97</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2000-01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1996-97

- 1996-97
  - 1996-97

2000-01

- 2000-01
Average Exams per Resident: Region

Exams

Pacific  West  Central  Northeast  Southeast

1996-97  2000-01

0  2000  4000  6000  8000  10000  12000  14000

1996-97  2000-01
Average % Cases Read by Staff Only: Size

- **Small**
- **Medium**
- **Large**
- **Jumbo**
- **Total**

**Percentage**

- **1996-97**
- **2000-01**

![Bar Chart](chart.png)
Average % Cases Read by Staff Only: Region

<table>
<thead>
<tr>
<th>Region</th>
<th>1996-97</th>
<th>2000-01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>West</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Central</td>
<td>30</td>
<td>28</td>
</tr>
<tr>
<td>Northeast</td>
<td>25</td>
<td>24</td>
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<tr>
<td>Southeast</td>
<td>20</td>
<td>18</td>
</tr>
</tbody>
</table>
Average % Cases Read by Residents Only: Size

- Small
- Medium
- Large
- Jumbo
- Total

Percentage

1996-97
2000-01

Legend:
- **1996-97**
- **2000-01**
Average % Procedures by Residents Only: Size

- **Small**
- **Medium**
- **Large**
- **Jumbo**
- **Total**

**Percentage**

- **1996-97**
- **2000-01**

<table>
<thead>
<tr>
<th>Size</th>
<th>1996-97</th>
<th>2000-01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jumbo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
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</tbody>
</table>

- **1996-97**
- **2000-01**
Average % Procedures by Residents Only: Region

<table>
<thead>
<tr>
<th>Region</th>
<th>1996-97</th>
<th>2000-01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific</td>
<td>15</td>
<td>10</td>
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<tr>
<td>West</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Central</td>
<td>5</td>
<td>5</td>
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<tr>
<td>Northeast</td>
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<td>3</td>
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<tr>
<td>Southeast</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>
Average Fellows: Region

1996-97 vs 2000-01 Fellows by Region

- Pacific
- West
- Central
- Northeast
- Southeast
Average % Female Residents: Size

1996-97
2000-01
Average % Female Residents: Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage 1996-97</th>
<th>Percentage 2000-01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>West</td>
<td>20</td>
<td>19</td>
</tr>
<tr>
<td>Central</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>Northeast</td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td>Southeast</td>
<td>22</td>
<td>23</td>
</tr>
</tbody>
</table>
Women in Radiology Residency Programs

% of Women Residents


1991: 26
1994: 25
1996: 25
1997: 25
1998: 26
2000: 25
2001: 24
Average Salaries: Size

1st Year Salaries

4th Year Salaries
Average Salaries: Region

1st Year Salaries

4th Year Salaries
Average Salaries: Size
Average Salaries: Region

- Pacific
- Central
- Northeast
- Southeast

- 1997 - 1st Year
- 1997 - 4th Year
- 2001 - 1st Year
- 1997 - 4th Year
Average Salaries

Salary in Dollars

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>2001</td>
</tr>
<tr>
<td>1st</td>
<td>2nd</td>
</tr>
</tbody>
</table>

- Year 1: 1997
- Year 4: 2001
Book and Travel Allowance 2001

- No Book Fund: 18%
- Book Fund < $250: 9%
- Book Fund $251 - $1000: 62%
- Book Fund > $1000: 11%
Conclusion: Annual Topics

- Programs sizes slightly increased, along with slightly increased number of positions offered in the residency match.

- Continued trend of increased Exams/Resident: ~10584
  - No significant change in percentage of cases read by staff by themselves.
  - Decreased number of cases/procedures done by residents by themselves.

- Women in residency: No overall change.

- No significant change in Book and Travel Funding with expected rise in salaries.
Rotating Topics:

- ABR Exam Preparation
- Curriculum
- Socioeconomics
Physics Course: Size

Bar chart showing the percentage distribution of course sizes for two different years (1996-97 and 2000-01). The categories are Small, Medium, Large, and Jumbo.
Quality of Physics Course

2000-01

1996-97
Physics: Access to “remembered questions”
Physics: Old questions useful?

![Bar chart showing the percentage of usefulness of old questions for different categories (Small, Medium, Large, Jumbo) for the years 1996-97 and 2000-01.](chart.png)
Physics: Most important resource

2000-01

1996-97
Written: Most important resource

- Syllabi
- Books
- Old tests
- Literature

2000-01

1996-97
Oral: In house review?
Oral: Mock Boards

![Bar chart showing percentage of Small, Medium, Large, and Jumbo boards for 1996-97 and 2000-01.]
How many go to review courses?

- Small: 100%
- Medium: 80%
- Large: 60%
- Jumbo: 10%
Allowed time for review courses?

- 0%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%

- Small
- Medium
- Large
- Jumbo

1996-97
2000-01
Funds for review course

- Small
- Medium
- Large
- Jumbo

1996-97
2000-01
Rotating Topics:

- ABR Exam Preparation
- Curriculum
- Socioeconomics
Sufficient background for equipment purchases?

- Small
- Medium
- Large
- Jumbo

- 1996-97
- 2000-01
Should programs provide such training (equip. purchases)?
Sufficient background to supervise QC?
Should programs provide such training (QC)?
Can you explain risks and benefits?
How much conference time?

Hours of Didactic/week

Hours of Case Conference/week
Adequacy of Training

Cardiology
Neuro
Neuroangio
MR Angio
Intervention
VIR
OB/GYN

<table>
<thead>
<tr>
<th>Category</th>
<th>1996-97</th>
<th>2000-01</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiology</td>
<td>Poor</td>
<td>Adequate</td>
</tr>
<tr>
<td>Neuro</td>
<td>Adequate</td>
<td>Adequate</td>
</tr>
<tr>
<td>Neuroangio</td>
<td>Adequate</td>
<td>Adequate</td>
</tr>
<tr>
<td>MR</td>
<td>Adequate</td>
<td>Adequate</td>
</tr>
<tr>
<td>Angio</td>
<td>Adequate</td>
<td>Adequate</td>
</tr>
<tr>
<td>Intervention</td>
<td>Adequate</td>
<td>Adequate</td>
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<tr>
<td>OB/GYN</td>
<td>Adequate</td>
<td>Adequate</td>
</tr>
</tbody>
</table>
Adequacy of Training

Vasc US
US Peds Nucs Chest B/J GU GI
Poor Adequate Good 1996-97
2000-01
Rotating Topics:

- ABR Exam Preparation
- Curriculum
- Socioeconomics
Well informed about business or political issues?

How much instruction in business or political matters?

2000-01

1996-97
Problems with Academia

- Salary
- Vacation
- Publish Pressure
- Academic time
- Job Security

Comparison between 1996-97 and 2000-01
Problems with Private Practice

- **Salary**
- **Vacation**
- **Volume**
- **Business Issues**
- **Job Security**

Comparison between 1996-97 and 2000-01
Will concerns change practice plans?
Private Practice vs. Academia

![Graph comparing Private Practice and Academia]

- Private Practice
  - 1996-97
  - 2000-01

- Academia
  - 1996-97
  - 2000-01
Summary: Rotating Topics

- Increased number of programs offering physics courses and quality has improved
- Use of mock oral boards and tuition-required review courses increased
- Overall, few residents are comfortable purchasing equipment or supervising QC program.
- Residents want more instruction in these areas
Summary: Rotating Topics

» 8-9% decrease in amount of didactic and case conferences

» Quality of instruction decreased in 11 of 18 sections

» Fewer residents choosing academics because of concerns regarding salaries, vacation, and amount of academic time