



## RESIDENT RESEARCH SEMINARS

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- ### Outline
- Why teach residents about research?
  - History of PM+R resident research seminars
  - Case method approach
  - Practical components of our series
  - Early results from our experience

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- ### Why do we teach residents about research?
- Somebody says we have to
  - Assess quality of literature
  - Become researchers

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What does FORES stand for?

- Didactic seminar series:
  - 10 seminars
    - Ethics, IRB matters, statistics, library use...
    - Faculty and others

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There were problems

- No evaluation of student
- Not specific to their specialty
- Information either over or under whelmed
- Presenters over or under prepared
- No point to it all

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How did we know?

- Very little resident publication
- No funded research
- Few graduates became academics

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||| We needed some new ideas.

Principles for improving resident research series

- Goals
  - Program
  - Student
- Specialty specific
- Place onus of learning on student

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||| We needed some new ideas.

Principles for improving resident research series

- Goals
  - Program
    - Increase resident publication
    - Increase resident funded research
    - Advance residents in to research fellowships / faculty positions
  - Student
    - Link to research mentor
    - Evaluation with written examination
- Specialty specific
  - Need PM+R faculty to lead
- Place onus of learning on student
  - Be prepared and participate

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Some specific goals were set.

- Increase resident publication
- Increase resident funded research
- Advance residents in to research fellowships / faculty positions
- At least one manuscript including a resident author annually
- At least one resident grant submitted annually
- At least one resident annually to academic fellowship and at least one resident in five years to K funded program

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Content areas were refined

- Academic life
- Research designs
- Grants and publications
- Research ethics
- Research statistics

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What teaching techniques?

- Lectures
- Lecture with discussion
- Expert panel
- Class discussion
- Case studies
- Case method
- Role play
- Small group report-back

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What is the case method?

- Used extensively in law and business
- Edited real cases
- Socratic / elenchus method

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### What do you need?

- Edited real cases
- Actual research projects / proposals / papers
- Socratic technique
- Faculty with enough knowledge to guide discussion / handle spontaneous questions

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### What else do you need?

- Students have to prepare by reading cases and essential references
- Both student and teacher agree to any reasonable answer
- Teacher builds errors and fallacies in to material to stimulate discussion

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### What did we do?

- Prepared student and teacher syllabi
  - Publications, references, responses from IRB, grant proposals
  - Major points for discussion
- Pre-class homework
- No powerpoint

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### What about an exam?

<b>Resident presentation</b>	<b>Written examination</b>
<ul style="list-style-type: none"><li>▪ 10 minutes</li><li>▪ Brief summary of proposed research project or progress update</li></ul>	<ul style="list-style-type: none"><li>▪ Taken from homework questions</li></ul>

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### What problems did you have?

- Refine references
- Sustain faculty involvement
- Refresh examination
- Refined expectations for scholarly activity follow up

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### Are we meeting goals after 2 years?

<ul style="list-style-type: none"><li>◦ At least one manuscript including a resident author annually</li><li>◦ At least one resident grant submitted annually</li><li>◦ At least one resident annually to academic fellowship and at least one resident in five years to K funded program</li></ul>	<ul style="list-style-type: none"><li>▪ On track</li><li>▪ On track, one successful</li><li>▪ Fellowship on track, not yet K funded</li></ul>
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## Want to try?

- Faculty who are clinical researchers
- Clinical researchers with time to commit
- Be prepared to be flexible
- Be realistic
- Access free resources:

- [http://hbsp.harvard.edu/multimedia/pcl/pcl\\_1/start.html](http://hbsp.harvard.edu/multimedia/pcl/pcl_1/start.html)

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