

**Conducting Successful EM
Resident Research:
18 Month Research Plan**

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**The Research
Requirement:
A Plan for EM
Resident Research**

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**A Research Plan:
An Overview of the
18 Step Process**

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Work Completion Timing ***An 18 Month Schedule***

- Focus on work when E.D. month
- Know the end work product
- Push forward during res shift
- Plan to work during off hours
- Communicate, update
- Email, page often

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Work Completion Timing ***An 18 Month Schedule***

- Two 6 hour shifts each month +/-
- One research shift, one off-line
- 12 hours/month x 18 months
- Approx 240 hours over three years
- Keep track of hours
- This info promotes success

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18 Month Work Schedule ***Month 1: Write the Abstract***

- Talk to us
- Get an article
- Talk to us again
- Get another article
- Copy a well done study
- Write an abstract

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18 Month Work Schedule ***Month 2: Literature Search***

- Go to index medicus
- Use reference manager
- Ask us for key words
- Show us the articles
- Find a few more articles
- Select the best 10

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18 Month Work Schedule ***Month 3: Bib, Exec Summary***

- Examine methods, pt population
- What were the results, conclusions?
- What is left unanswered?
- How will your study help?
- Write a two paragraph overview
- Write one paragraph to summarize each of the 10 articles

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18 Month Work Schedule ***Month 4: 2 Page Summary***

- Why is the study compelling?
- What will it tell us?
- How will you do it?
- What data will be collected?
- What do you expect to find?
- What's the upshot?

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18 Month Work Schedule

Month 4: 2 Page Summary

- Introduction
- Study question
- Methods
- Major data elements, analysis
- Expected conclusions
- Clinical impact

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18 Month Work Schedule

Month 5: Data Collect Tools

- Use access database
- Use formatted data sheets
- Modify what exists
- Use the same variables, codes
- Get input here!!! Danger!!
- Consider your data tables

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18 Month Work Schedule

Month 6: IRB Application

- UIC documents on line
- Other sites have format in place
- Expedited review is likely
- Consider training requirement
- Patient protections paramount
- We can help to promote success

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18 Month Work Schedule

Month 7: Identify Cases

- E.D. logs must be used
- There are no shortcuts
- Pound thru the log to find the cases
- Consider the medical records dept
- Consider other logs (OR, ICU)
- Consider lab, radiology computers

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18 Month Work Schedule

Months 8-9: Chart Review

- Four 6 hour sessions per month
- Most intensive work period
- Talk with us if help is needed
- Key planning with medical records
- Review within days of being pulled
- Consider food, music, rewards

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18 Month Work Schedule

Month 10: Data Entry

- Use a computer at the office
- Caution with a home computer
- Save and copy files
- Put onto the office computer
- Need to run a frequency count
- Need to clean data set

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18 Month Work Schedule

Month 11: Data Analysis

- Work with the faculty
- Let us guide your efforts
- Learn how easy the process is
- Expect both sessions at office
- Expect to use 2 x 2 tables
- Produce summary tables

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18 Month Work Schedule

Month 12: Data Tables

- Standard format for tables
- Demographics, equal groups
- Main interventions, outcomes
- Results of analyses
- Cost information
- Other interesting information

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18 Month Work Schedule

Month 13: Abstract

- Go to the pre-written abstract
- Fill in the numbers
- Use a standard format
- Give enough numbers to inform
- Conclude based on the info
- Suggest public health importance

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18 Month Work Schedule

Month 14: Intro, Methods

- What's the issue?
- Why is your study important?
- What is your study question?
- What did you do?
- How did you do it?
- Address pt protections issues

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18 Month Work Schedule

Month 15: Discussion Data

- Look at the data from the 10 articles: what did others find?
- Compare your data with theirs
- Compare other factors (demographics)
- Explain your results relatively
- Be able to state why your results differed, or didn't

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18 Month Work Schedule

Month 16: Results, Discuss

- Results highly structured
- Explain your main results
- Written results augment tables
- Summarize data differently
- Parallel construction in discussion
- Focus on your study results, impact

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18 Month Work Schedule

Month 17: Presentation

- Format in place for oral & poster
- 18 power point slides for poster
- 30 power point slides for oral
- Fill in your data, no new work
- Print your poster or presentation

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18 Month Work Schedule

Month 18: Paper Edit, Ref

- Push to get your paper reviewed
- Make the necessary changes
- Modify the table, text
- Put in the references
- Build the reference list
- It's Miller time!

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18 Month Work Schedule

Big Picture

- Allows for incremental work
- Easier to follow
- Easier to catch up
- Provides framework for binder
- Allows for ongoing assessment
- Makes success likely

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Conclusions

- Master plan
- Discreet steps
- No one step or phase is overwhelming
- Greater likelihood for success
- Can be developed in detail with EM residents or faculty

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Recommendations

- Keep it simple
- Follow the steps
- Publish successfully
- Have a clinical impact
- Improve patient care

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Thank you.

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