

# Lessons Learned: Building Infrastructure & Support for Family Medicine Research

**Research Directors and Chairs** 



#### **Overview**

- Understand Your Department
- Methods & Analysis Support
- Academic or Research Time
- Mentorship and Training Programs
- Leveraging primary care strengths for institutional support
- Examples of Internal and External Research Resources



## **Understanding Your Department**

- What are your research goals and vision?
- What research is currently being performed?
- What infrastructure and resources do you currently have?



# Understanding Your Department – Research Goals

- Clarify if the focus is:
  - Federally funded, career research programs for career researchers
  - Smaller research and scholarship for clinicians
    - Smaller research projects
    - Scholarship
- Align infrastructure with research vision



# **Understanding Your Department Research Vision**

- Research vision must be realistic
- Align aspirations with current and anticipated future department capacity



# Understanding Your Department – What Research Are You Doing Now?

- Best practices for questions to ask of their staff and faculty:
  - What research do you currently do?
  - What research did you previously do?
  - o How much time do you have for research?
  - Who are you collaborating with?
  - o Who is funding your effort (time)?
  - o How much effort is devoted to this?
  - Who is mentoring / who has mentored you in your research?





# Understanding Your Department – What Research Are You Doing Now?

- Be aware of continuum of research within family medicine
  - $\circ$  "r > R"
  - Scholarship
  - Program Evaluation
  - o QI



# **Understanding Your Department –** What Research Are You Doing Now?

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Item	Description
Time frame	The time frame intended for monitoring is up to each department to determine.
Bibliometrics	Each publication, presentation, or patent is counted once regardless of the number of authors.
Peer-reviewed publications	Number of new original research articles published in the peer-reviewed literature.
2. Publications other than peer-reviewed	Number of new original research contributions published outside of the peer-reviewed literature (eg, book chapters).
3. Presentations (oral and poster)	Number of new oral and poster presentations given at regional, national, or international meetings or conferences. Presentations may be counted more than once if they are delivered more than once.
4. Number of published faculty	Total number of faculty who were listed authors on a publication in the peer-reviewed literature.
5. Number of presenting faculty	Total number of faculty who gave an oral or poster presentation at a regional, national, or international meeting or conference.
6. Patents filed	Number of new patents filed.
7. Patents issued	Number of new patents issued.
Impact	Researchers include doctoral level and other research faculty as defined under "Personnel."
8. New citations	Number of new citations in peer-reviewed literature of articles written by researchers in the department. This includes new citations for all articles of current researchers, regardless of when the article was published.
9. Median h-index	Median h-index for researchers in the department.

Ongoing research	Ongoing research includes projects approved or deemed exempt by an IRB.
10. New projects with IRB approval	Number of projects newly approved or deemed exempt within the past year.
11. Active projects with IRB approval	Number of projects actively under way. This includes new projects listed above.
Collaboration activities	Activities involving participation with organizations outside the department.
12. Joint activities with other research organizations	Number of activities as described under "Bibliometrics" or "Ongoing research" which involved direct participation from researchers outside the department (eg. other departments, other schools, or other organizations).
13. Peer-review panels for research funding proposals	Number of department faculty who have served on a peer-review panel at the national or international level for extramural/external research or research training funding proposals in the past year.
14. Personnel participating in national/international research leadership	Number of department faculty serving in leadership roles in national or international research-focused organizations. This can include committee service with regular meetings (at least twice yearly), committee chair, board of directors, or similar level of leadership.
Funding	Funding is defined as total direct dollar or in-kind support for activities intended to lead to external and pererdeficially reviewed presentations, publications, and dissemination. This includes start-up costs, bridge funding, core funding, pilot project funding, staff time, investigator support, consultation, and supplies.
15. Internal funding	Funding that the department or institution contributed to research activities.
16. External funding (including grants)	Funding-derived sources external to the department and external to the institution such as outside grants, industry funding, contracts, or philanthropy designated for research.
17. Other funding	Funding that does not fit in the above categories (eg, endowments, royalties).
18. Total funding	Sum of the 3 funding sources listed above.

One research FTE includes 40 hours of work per week from personnel in the department whose time is intended to lead to external and peer/editorially reviewed presentations, publications, and dissemination.
Total research FTE of doctoral-level faculty (not including trainees) with primary academic appointments in the department. This includes FTE (paid time designated or paid effort allocated) directed loward research, regardless of the funding source, for their salary compensation in the specified time frame.
Total research FTE of other research faculty with bachelor's or master's level degree (not including trainees) with primary academic appointments in the department. This includes FTE (paid time designated or paid effort allocated) directed loward research, regardless of the funding source, for their salary compensation in the specified time frame.
Total nonresearch FTE of all department personnel at or above master's level education. This can include time spent for administration, teaching, patient care, or other activities.
Total FTE for administrative time of all staff with research leadership roles.
Total of the above 4 items
Total FTE for research activities of all faculty who perform or support research activities (even if not their whole) (op, not including trainees). This includes onl faculty directly reporting within the department and obes not include research faculty in other departments or organizations paid for with grant funds.
Total FTE for research activities of all staff who support research activities (even if not their whole job, not including trainees). This includes only staff directly reporting within the objectment and does not include research supports staff in other depentments or organizations paid for with great funds. This may include staffsicions, study coordinators, or research aides.
Trainee publications and presentations are included in this section, as well as in the "Bibliometrics" section. Each publication or presentation is counted onc in this section regardless of the number of trainee authors.
Number of trainees who were actively involved in research during the past year, even if research is not the primary focus of their education. This include trainees at all graduate levels who are actively contributing to original research or publication activities and does not include trainees not participating in any such activities.
Number of publications (peer-reviewed or other than peer-reviewed as define above under Bibliometrics) with a trainee as a listed author.
Number of presentations (oral or poster) with a trainee as a listed author.
Number of research faculty with the academic rank of Assistant Professor or equivalent.
Number of research faculty with the academic rank of Associate Professor or equivalent.
Number of research faculty with the academic rank of Professor or equivalent

# Understanding Your Department – What infrastructure do you currently have?

- Inside Department:
  - Research space
  - Grants internal & external
  - Total research FTE
    - How much time do clinicians have to pursue research?
    - PhDs
  - Research support staff
  - Informatics staff



# Understanding Your Department – What infrastructure do you currently have?

- Outside Department:
- Research support staff
  - Other departments
  - o Centralized in institution?
- Informatics support
  - Other departments
  - Centralized in institution
- Research centers
- CTSI



# Understanding Your Department – What Do You Need to Accomplish Research Vision

- Vision what you want your research program to become
- Perform gap analysis
  - Difference between where you are now and your desired future state
  - What additional resources are needed to get there?
    - Query your faculty



#### **Research Resources**

- Access to
  - Successful IRB protocols
  - Funded grant applications
  - Secure templates
  - Have examples of successful grant applications



### **Methods & Analysis Support**

- Essential methodological expertise
  - Quantitative methods
  - Qualitative methods
  - Mixed methods
- Important for both study design and analysis
- Incorporate PhD-level expertise
- Evaluate collaboration opportunities
- All above can be internal or external



### **Academic / Research Time**

- Determine what levels of FTE support are needed to accomplish your goals
  - Use your gap analysis
- Academic / Research Time vs. Clinical Time
  - Build research time into job descriptions
  - Not just extra work "done outside your regular job"
- Allocate resources to make above time productive
- Include time for mentorship



### **Academic / Research Time**

- Resources to make time productive
  - Research support staff
  - Financial support
    - salaries, equipment, computers, software
  - Administrative support
  - Coordination support (IRB, grants office, etc)



## **Mentorship and Training**

- Include mentorship time
  - Time to be mentored
  - Time to mentor others
- Mentors can be internal and/or external
- Define pathways and mentorship
  - Residency to Faculty
  - Faculty to K grant
  - K grant to R grant
- Each step above requires different mentorship



### **Mentorship and Training**

- Support resident research and scholarship
  - Research training including a formal research curriculum
  - QI training including a formal curriculum
  - Support exploration of curiosity and development of scholarship
- Explore how medical students can be incorporated into resident and faculty research and scholarship programs
  - Helps foster research culture department-wide



### **Academic / Research Time**

- Remember not all faculty will be traditional researchers
- Facilitate the creation of less intensive scholarly activity
  - o QI
  - o FPIN
  - Clinical pearls
  - Case reports
  - Systematic reviews
- Fosters a culture of curiosity where all faculty participate in research & scholarship
- How can you take what faculty are already doing and transform it into scholarship?
  - Harmonization of missions



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# Leveraging Strengths of Primary Care for Institutional Support

- Community engagement
- Shared decision-making
- Team-based care
- Mixed methods
- Accessing primary care patient networks
  - Creating a learning health system approach



### **Examples of Research Resources**

- Can be internal or external
  - Study design expertise
  - Statistics
  - Pre / Post Award management
  - Grant writers
  - Data managers
  - Research coordinators
  - Informatics experts
  - Research centers
  - CTSI

- Stop recreating the wheel
- Create a map of internal and external resources
  - Where located
  - How to access them
- Include case examples of how these resources facilitated faculty research
- Make the resource map widely available



### **Summary**

- Know the current state of your department's research
  - Productivity
  - Resources
- Understand where resources are located
- Determine what resources need to be accessed to accomplish your research vision
- Provide time to do the work of research
- Develop mentorship and faculty development pathways
- Leverage family medicine's strengths to obtain institutional resources
- Create a resource map and share it often

