

# Promoting a Research Culture in a Family Medicine Residency: Five Years of SWAG

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# PART 1. OVERVIEW

# Objectives

- Participants will identify their own scholarly goals in the context of their broader career goals.
- Participants will identify strategies to engage with other faculty members in their environment on scholarly works.
- Participants will learn how a monthly faculty Scholarly Works and Activities Group (SWAG) has promoted a research culture in a Family Medicine residency.

# Background

- The professional advancement of Family Medicine faculty requires contributions in the form of:
  - Clinical service
  - Teaching
  - Scholarly activity
- Scholarly activity can be a challenge as it is generally not built into our schedules and our demands in a residency.
- The broader literature base indicates that a research culture can be a challenge to build and to maintain in a Family Medicine residency.

# Our Interest: The Challenge in our Residency

- There is an infrastructure for clinical service and clear leaders/champions there (e.g., our chair, our administrator)
- Ditto for teaching (e.g. program director, associate program director, residency coordinator)
- No such infrastructure exists for scholarly works
- How do we meet scholarly goals?
  - Institutional
  - Departmental
  - Individual



## PART 2. YOUR INTERESTS

# Questions RE: Career and Scholarly Goals

- DISCUSSION TOPICS

- What would you like to gain from this presentation?
- What are your career goals?
- How can scholarly work fit into your career goals?



# PART 3 SCHOLARLY WORK IN FM RESIDENCIES



# Scholarly Activity

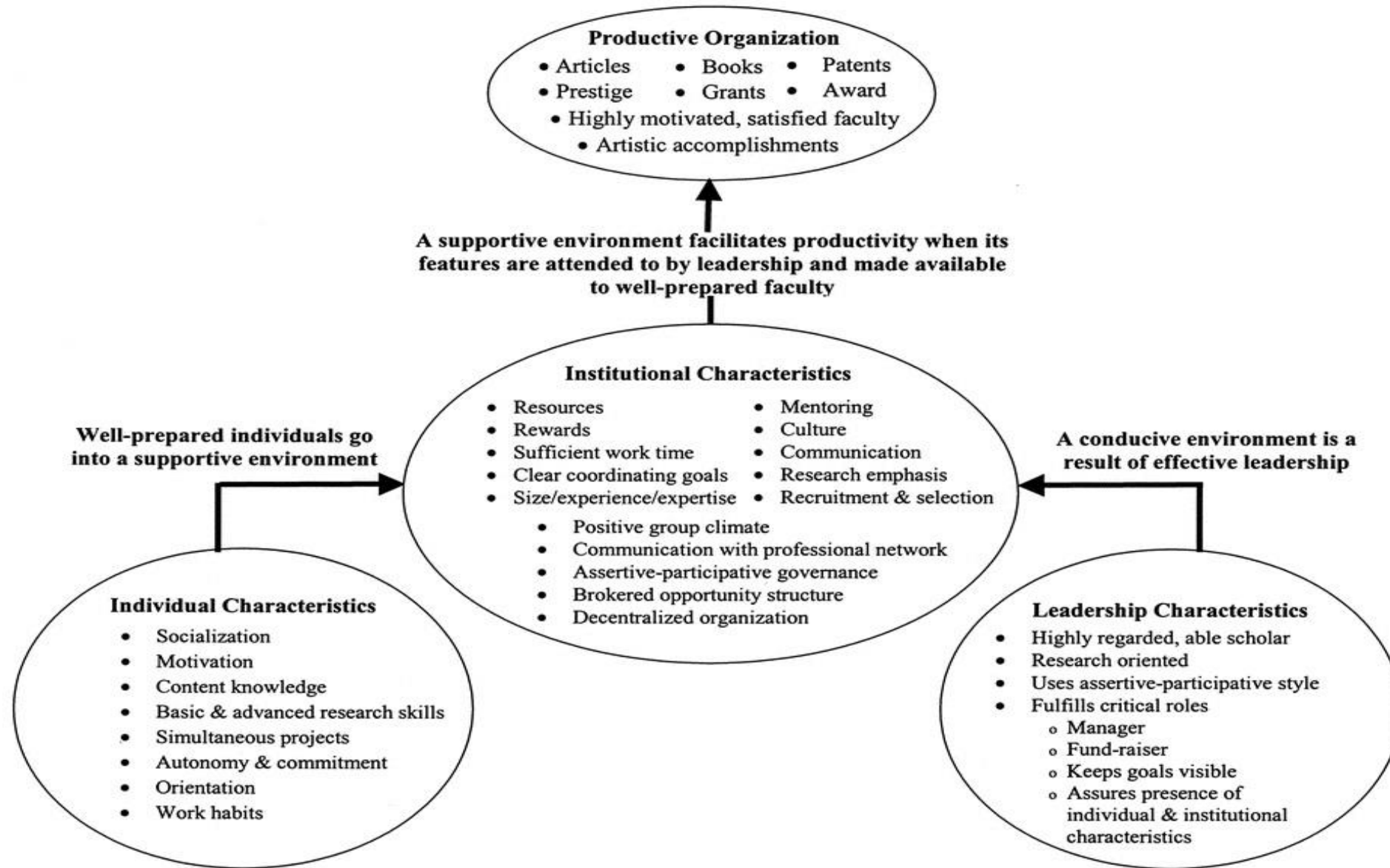
- Grady, et al. (2012)
  - Discovery
    - Paper                      Abstract
  - Integration
    - Case study                      Patient education project
  - Application
    - National guidelines                      Professional societies
  - Teaching
    - Lectures                      Curriculum

# Weidner, et al. 2019

- Analyzed a 2016 cross-sectional survey with responses from 109 US chairs of allopathic departments of family medicine (77% response rate) regarding research capacity, research experience, and perceptions of research in the FM department.
- **RESULTS:** Chairs agreed that research is important (91%). Perceptions varied by chair research experience and department research capacity.
- **CONCLUSIONS:** Research is important to department chairs. Those departments that do not currently have major research enterprises may have the type of leader(s) to help it grow.

# Bland et al. 2012

- This study tested the ability of Bland's model (pictured next slide) to explain individual and group (department) research productivity within the context of a large medical school.
- Research productivity is influenced by the interaction of the three broad groupings, and it is the dynamic interplay of:
  - Individual characteristics
  - Institutional characteristics
  - Supplemented with effective leadership



# Rosser, et al. 2010

## Research Training

- Research Capacity Building
  - Ontario College of Family Physicians
    - 5 weekend workshops designed to stimulate research among family physicians
    - Has been utilized in residencies and in private practices
    - Had some success, attendees rated it 8.5/10

# Research Training

- Ontario College of Family Physicians
  - Research Capacity Building Objectives
    - Improve research appreciation
    - Improve sophistication and critiquing as consumers
    - Augment research review for introduction purposes in paper
    - Learn about quantitative and qualitative measures
    - Design and write grant applications
    - Submit grant applications and collaborate with other professionals on research



# Ryan, et al. 2019

- Descriptive qualitative study where participants role-played and were asked to imagine strategies that would encourage the clinical faculty members to engage in research.
- The following themes emerged as important:
  - Confidence in conducting research
  - Finding research topics with personal relevance
  - Presenting clear expectations
  - Fostering collaborative relationships
  - Using a tailored approach
  - Providing resources, structures, and processes
  - Having leadership and vision



# PART 4 SWAG AND SWAG OUTCOMES



# What is SWAG?

- WVU-Charleston Family Medicine residency started a Scholarly Works and Activities Group (SWAG) in 2016.
- Group's aim is to promote a collegial, collaborative research culture within the department.
- SWAG meetings occur monthly
- Faculty discuss new and ongoing scholarly projects in the department.
  - Research
  - Case Reports
  - Conference Presentations

# What is SWAG?

- SWAG group also includes:
  - Discussion of promotion and tenure goals where each individual can get support and feedback from faculty members.
  - Minutes from each meeting are sent to all faculty members in the department.
  - Discussions about what to include on CV, P&T narrative, and Digital Measures (our university's digital platform used for P&T).
  - A current projects dashboard
  - Outcome data on department scholarly works
    - Tallied campus research day, and all faculty CV for publications, presentations, and collaborations.

# SWAG 5 Year Outcomes

## Charleston Area Medical Center Research Day Family Medicine Faculty Precepting - 5 Year Comparison

	<b>Pre SWAG (2011-2015)</b>	<b>SWAG 5 Year (2016-2019, 2021)*</b>
Presentations	16	26
Awards**	2	8

Notes: Faculty who precepted at least one project (N=12)

\*Research Day 2020 cancelled due to COVID-19: 4 proposals accepted

\*\*Awarded 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, or honorable mention



# SWAG 5 Year Outcomes – The Method

## SWAG Outcomes 10 years - Sample

Faculty Member: 2

Active Years: 2011-2020

	Pre Swag (2011-2015)	SWAG (2016-2020)
<b>Peer Reviewed Publications</b>	1	2
<b>Total Presentations</b>	5	9
National Presentations	2	1
Local Presentations	3	8
<b>Promoted</b>	0	1*
<b>Total Collaborations</b>	9	15
Faculty	4	3
Residents	5	6
Med Students	0	6

\***Note:** Associate Professor

## SWAG 5 Year Outcomes

	Pre Swag (2011-2015) Number (Faculty)	SWAG (2016-2020) Number (Faculty)	Effect Size (Cohen's d)
<b>Peer Reviewed Publications</b>	<b>14 (3)</b>	<b>31 (8)</b>	<b>.304</b>
<b>Total Presentations</b>	<b>74 (11)</b>	<b>99 (10)</b>	<b>.141</b>
National	23 (3)	30 (6)	.122
Local/Regional	51 (11)	69 (10)	.198
<b>Promoted</b>	<b>0</b>	<b>2</b>	<b>---</b>
<b>Total Collaborations</b>	<b>64 (10)</b>	<b>54 (8)</b>	<b>-.109</b>
Faculty	29 (3)	17 (5)	-.216
Residents	31 (9)	30 (7)	-.085
Medical Students	4 (2)	7 (2)	.154

Faculty Members: 15; Active Years: Mode = 10, Mean= 7.40; Current Faculty = 12

Note: Special thanks for assistance with data analysis to Angeline Bottera, M.S., Psychology Intern

# Summary – 5 Year Outcomes

- Two faculty were promoted (Professor & Associate Professor)
- Peer reviewed publications increased 121%
- National presentations increased 30%
- Regional/Local presentations increased 35%
- The number of faculty involved in research more than doubled (166% increase)
- Number of faculty involved in national presentations doubled (100%)
- The total number of collaborations with med students increased (250%)
- Total number of faculty (-41%) and resident collaborations (-3%) decreased
  - Time spent on publications may have decreased intra-department faculty collaborations
  - Faculty collaborations with other departments and other schools was not tracked

# PART 5 DISCUSSION; REVISITING YOUR GOALS

How can you achieve your goals discussed earlier today?

How do you improve the research culture in your department?

How feasible are your plans to do so?



# References

- Bland, C., Center, B., Finstad, D. et al. (2012). A theoretical, practical, predictive model of faculty and department research productivity. *Academic Medicine*, 80, 225-237.
- Grady, E., Roise, A., Barr, D. et al. (Dec. 2012). Defining scholarly activity in academic medical education. *Journal of Graduate Medical Education*, 558-561.
- Rosser, W., Godwin, M. & Seguin, R. (2010). Family medicine research capacity building. Five-weekend programs in Ontario. *Canadian Family Physician*, 56, e94-100.
- Ryan, B. Thorpe, C., Zwarenstein, M. et al. (2019). Building research culture and capacity in academic family medicine departments: Insights from a simulation workshop. *Canadian Family Physician*, 65(1): e38-e44.
- Weidner, A. Peterson, L., Mainous, A. et al. (2019). The current state of research capacity in US Family Medicine departments. *Family Medicine*, 51(2): 112-119.