

Professional Development and Mentoring Committee

Mission

To provide the environment, counseling, encouragement and guidance for faculty in the Center for Musculoskeletal Research to become successful independent investigators.

Vision

Faculty in the Center for Musculoskeletal Research represent some of the most highly respected and accomplished researchers in the field. The faculty group is interactive, supportive, collegial and aggressive in advancing musculoskeletal research. Major scientific and clinical breakthroughs will come from this group.

Professional Development and Mentoring Committee

Focus areas

- 1. Establishment of a mentoring team and plan for early stage faculty**
- 2. How to evaluate research relevance and significance (role of Friday PI meetings)**
- 3. Responsibilities associated with training students and fellows (role of Wednesday meetings)**
- 4. Formation of a tenure and promotions committee to monitor progress of early stage faculty**
- 5. Methods for preparing successful grant applications and dealing with critiques**
- 6. How to spend research money and build and maintain a team**
- 7. How to balance research, teaching and institutional service**
- 8. Work/life balance; how to manage the stresses of your job, family, outside interests, etc**

1. Establishment of a team and plan for early stage faculty

TEAMWORK
1+1=3

6 Parts of a Successful Team *(Forbes)*

1. Be Aware of How You Work

Be flexible. Know who you are as a leader. We all have different strengths. For the good of the team. ~~Personal agenda~~

2. Get to Know the Rest of the Team

Think of your team as puzzle pieces that can be placed together in a variety of ways.

3. Clearly Define Roles & Responsibilities

A team should operate as a mosaic whose unique strengths and differences convert into a powerful united force. Money Ball. Individual wisdom is frequently flawed. A diverse collection of independently deciding individuals makes better decisions than an expert. Wisdom of Crowds (Surowieki).

4. Be Proactive with Feedback

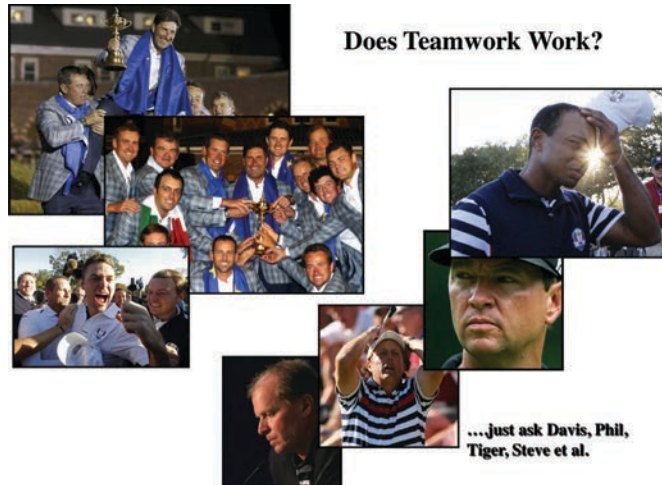
Take the time to remind someone of how and what they can be doing better. Learn from them. Feedback is two-way communication.

5. Acknowledge and Reward

When people are acknowledged, their work brings them greater satisfaction and becomes more purposeful. SDT? *Selfdeterminationtheory.org*

6. Always Celebrate Success

Don't ignore it. Take the time to live in the moment and remember what allowed you to cross the finish line.



All members must be committed to open sharing of thoughts/beliefs/ideas.

Contribution vs. Commitment

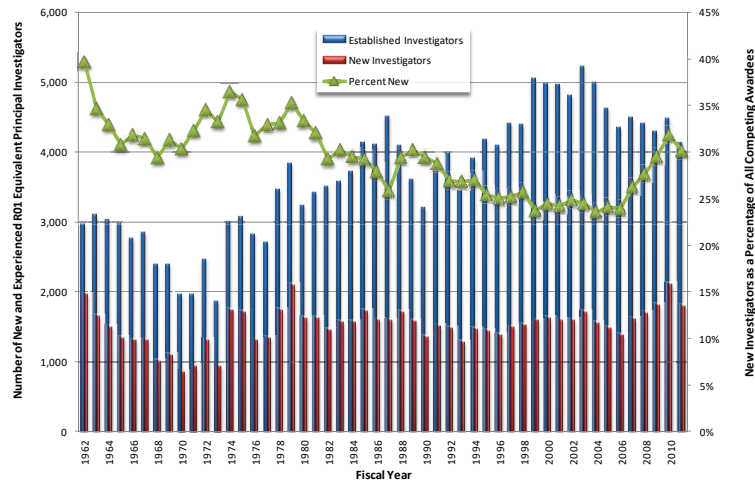
Bacon and egg breakfast



Be the pig!!!

2. How to evaluate research relevance and significance (role of Friday PI meetings)

Figure 2. Number of New and Experienced Investigators on R01 Equivalent Grants and New Investigators as a Percentage of All Competing R01 Awardees (FY 1962 - 2011)



NIAMS

RO1 13%
RO1 es 22%
R21 13%
RO3 22%

- A good idea is critical, but not enough.
- A poorly written grant will never be funded, even if it's the best idea in the world.
- A compelling question
- Clarity of thought and expression
- A strong, testable hypothesis
- Appropriate scope
- Logical aims to answer the question
- Rigorous experiments to answer the Aims

Specific Aims Page

The most important page of a project!

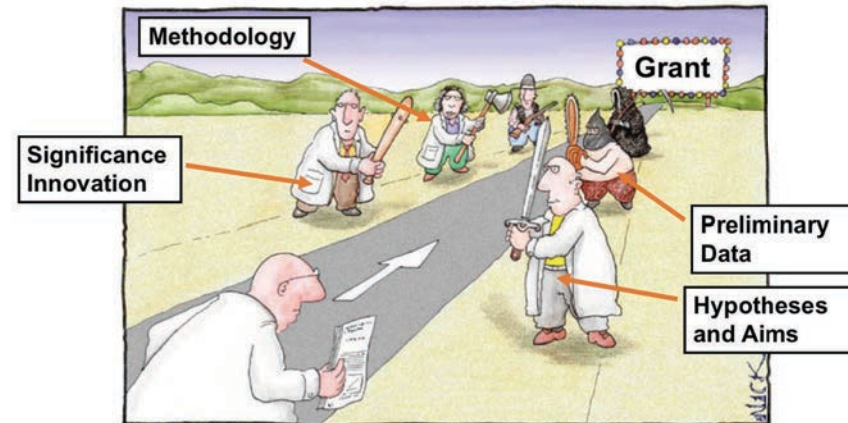
Only page most reviewers not assigned to the grant read

This is your “blink”. ([Blink: The Power of Thinking Without Thinking](#); Malcolm Gladwell; Why are some people brilliant instantaneous decision makers?...those that have perfected the art of “filtering” the things that matter)

~30% grant preparation time should be spent on Hypotheses and Specific Aims page

Remainder of proposal follows

Write, re-write, present on Friday morning, re-write, write Significance and Innovation, re-write, write Approach, re-write, etc.



Do's & Don'ts

3. Responsibilities associated with training students and fellows (role of Wednesday meetings)

Wednesday morning meetings help students and fellows learn how to:

- Organize a presentation (background, hypothesis/SA's, data, analysis, conclusion)
- Develop communication skills
- Demonstrate a command of the subject (*answer questions on your feet*)
- Take constructive suggestions

Advisor and/or mentor MUST be involved in the process of preparing Wednesday morning presentations (i.e. rehearsals, meet ahead of time, practice questions, etc.)

4. Formation of a tenure and promotions committee to monitor progress of early stage faculty

- Form a standing T and P committee in the CMSR composed of senior faculty (rotating)
- T and P committee should have a member(s) from outside the SMD when appropriate
- T and P committee must be familiar with the “Regulations of the Faculty”
- T and P committee makes a recommendation to the Director and Chair regarding P

5. Methods for preparing successful grant applications and dealing with critiques

Interpreting the “Pink Sheet”

PROGRAM CONTACT: Faye Chen 301-594-9997 chenf1@mail.nih.gov	SUMMARY STATEMENT (Privileged Communication)	<i>Release Date:</i> 02/18/2010												
<hr/>														
Principal Investigator TROY, KAREN L. PHD	<i>Application Number:</i> 1 R01 AR059686-01													
Applicant Organization: UNIVERSITY OF ILLINOIS AT CHICAGO														
<i>Review Group:</i> SBSR Skeletal Biology Structure and Regeneration Study Section														
<i>Meeting Date:</i> 02/08/2010 <i>Council:</i> MAY 2010 <i>Requested Start:</i> 07/01/2010	<i>RFA/PA:</i> PA07-070 <i>PCC:</i> 6 B <i>Dual PCC:</i> 1BMSKJW <i>Dual IC(s):</i> AG													
<hr/>														
<i>Project Title:</i> Short-term responses to mechanical loading in the bone of mice and humans														
<i>SRG Action:</i> ++														
<i>Human Subjects:</i> 30-Human subjects involved - Certified, no SRG concerns														
<i>Animal Subjects:</i> 30-Vertebrate animals involved - no SRG concerns noted														
<hr/>														
<table><thead><tr><th>Project Year</th><th>Direct Costs Requested</th></tr></thead><tbody><tr><td>1</td><td>250,000</td></tr><tr><td>2</td><td>250,000</td></tr><tr><td>3</td><td>250,000</td></tr><tr><td>4</td><td>250,000</td></tr><tr><td>TOTAL</td><td>1,000,000</td></tr></tbody></table>	Project Year	Direct Costs Requested	1	250,000	2	250,000	3	250,000	4	250,000	TOTAL	1,000,000		
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What to do upon receipt

- Read the summary statement quickly
- Underline what you CAN fix
- STAR the big problems
- Distribute the summary statement with your colleagues
- DO NOT get paranoid
- Put the summary statement away for a few days or weeks
- Get over it!

What to do upon reflection

- Read the reviews carefully
- Look for consistency between reviewers
- Categorize into major and minor concerns
- Draft a strategy for response

Tips in Dealing with the Resubmission

- The reviewer is always right.....
- Do not ignore a critique.....
- Remember, make it easy for the reviewer.....
- Do not pick a fight.....

6. How to spend research money and build and maintain a team

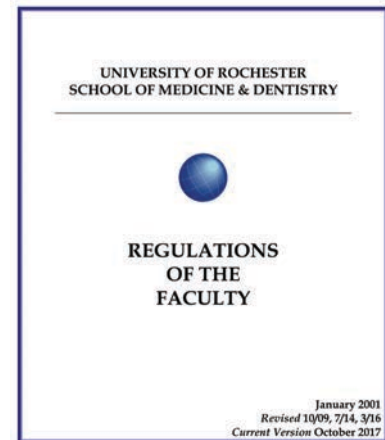
On what should you spend your money?

- Personnel (technicians? students? fellows? RAP's?) (in order of importance)
- Equipment (how to leverage existing core equipment)
- Supplies (buy in bulk with others in CMSR)
- Core services, collaborators expertise

Spending money MUST lead to production of manuscripts

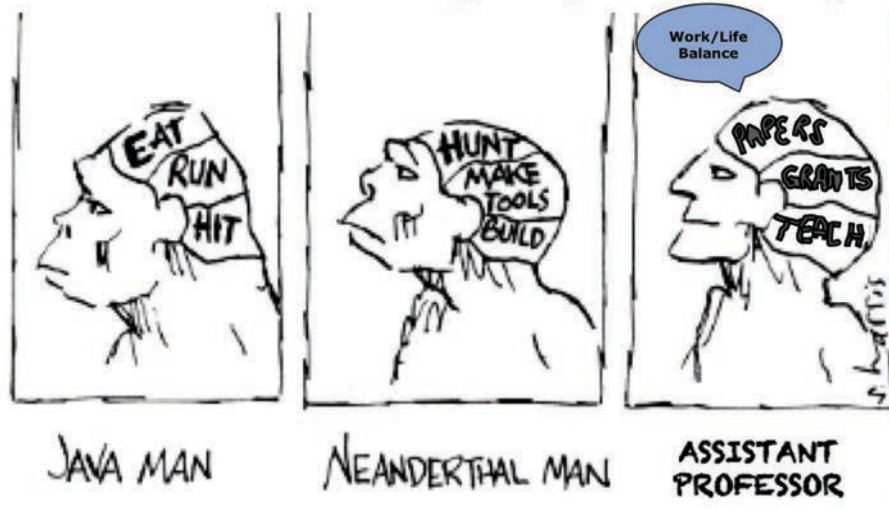
7. How to balance research, teaching and institutional service

- Read the “Regulations of the Faculty”
- Research, teaching, service (in order of importance)
- Minimize unneeded travel, book chapters, editing invitations
- Accept all opportunities to review grants



8. Work/life balance; how to manage the stresses of your job, family, outside interests, etc

The Pressures Facing Early Stage Faculty



- How to balance your early career
- When to take on other professional activities, such as editorial board of a journal before tenure or promotion
- Time and project management – how to juggle multiple research projects/interests and balance with other commitments
- Using professional organizations
- Budgeting percent effort when on multiple grants
- Accounting for time on unfunded research projects

Set a pace you can keep for 30 years!!!

Training the Next Generation of Musculoskeletal Investigators: A Report on the Activity of the USBJI's Young Investigator Initiative

J. Edward Puzas¹, Toby King², Nancy E. Lane³

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² United States Bone and Joint Initiative, Rosemont, IL

³ University of California Davis Health System, Sacramento, CA

ABSTRACT

Developing the skills to become an effective grant writer for the purpose of establishing a funded independent research career typically requires a long learning curve. Mastering the art of posing hypotheses, writing high-information-content aims, responding to critiques, etc. can be a formidable undertaking. Many grant writing seminars exist, and although most provide valuable information, few include a mentoring process that continues throughout the learning curve. To address this issue the United States Bone and Joint Initiative (USBJI) has launched a different type of program that has met with excellent success in training new scientists. This grant mentoring and career development program, the Young Investigator Initiative (YII) is now completing its 12th year.

Young scientists (from the US and Canada) are assigned two or more seasoned mentors and over the course of two weekends, usually separated by 12-18 months, the scientists learn how to construct a hypothesis-driven research project and submit it for competitive funding. Of note, early stage investigators who are members of ASBMR have taken particular advantage of the program. We present our data for the first time.

The YII is a competitive program. Since 2005, 761 young investigators have applied to enter the program and 378 have been accepted (49.7%), 51% of the attendees are female. 84% are American and 16% are Canadian. Most are between the ages of 30 and 40 (72%).

The YII attendees are from a wide spectrum of disciplines and belong to a number of related specialty societies, including ASBMR. Attendees from the top five societies are:

American Academy of Orthopaedics	73
American College of Rheumatology	64
American Society for Bone and Mineral Research	61
Orthopaedic Research Society	51
American Physical Therapy Association	30

208 of the 378 participants (55%) have received funding. Total grant monies awarded exceeds \$283M, for more than 1,100 MSK research studies. The top four awarding agencies are NIH (177 grants), Canadian Institutes of Health Research (64 grants), Orthopaedics Research and Education Foundation (26 grants) and the Department of Defense (14 grants).

In summary, although the YII faculty (9 of which are members of ASBMR) are pleased with the success of the program, they continue to evolve the content of the curriculum to respond to the changing climate of biomedical research funding.

More information on the YII can be found at: www.usbji.org.

Metrics

Number of Applicants (2005-2017)	761
Number of Applicants Accepted	378 (49.7%)
Number of Participants who Received a Grant	208 (55%)
Number of Grants Funded	1,104
Total Dollars of Grants Funded	\$283 million



Steering Committee

Nancy Lane, MD
Howard Hillstrom, PhD
Edward Puzas, PhD
Albert Yee, MD, MSc, FRCS
Kristine Lohr, MD (USBJI Board Liaison)

What is Different About the YII Mentoring Program?

"The Curriculum"

Phase 1: How to construct a grant proposal. (Friday, Saturday and Sunday)

- Hypothesis, Specific Aims, Preliminary Data, Research Design
- Direct "hands-on" critique of good and bad Specific Aims
- Observation of a mock NIH-style study section
- Each attendee is assigned at least two seasoned mentors
- Assignment: Go home and write and submit a grant application

----- 12 to 18 months later return for Phase 2 -----

Phase 2: If you didn't get funded. (Friday, Saturday and Sunday)

- Advanced mentoring
- How to deal with the critique and re-submit
- Work/Life balance
- How to negotiate for a new (or better) position

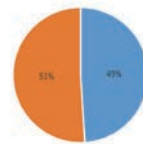


Repeat Phase 2 as often as necessary!



Participant Demographics

Female/Male



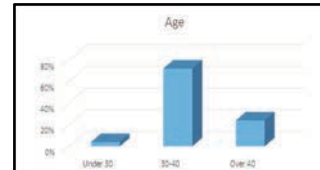
Canadian/US



Race/Ethnicity



Age



Faculty

Nancy Baker, ScD, MPH, OTR/L
Dorcas Beaton, BSc, MSc, PhD
Lauren Beaupre, PT, PhD
Mary Bell, MD, MSc
Leigh Callahan, PhD
Henry Donahue, PhD
Dorothy Dunlop, PhD
Kristine Ensrud, MD, MPH
Stuart Goodman, MD, PhD, FRCS, FACS, FBSE
Edward Greenfield, PhD
Marian Hannan, DSc, MPH
Christopher Jacobs, PhD
Joshua J. Jacobs, MD
Susan Jaglal, PhD
Wendy Katzman, PT, DPTSc, DSc
Braxton Mitchell Jr., MPH, PhD
Fackson Mwale, PhD
Jacques E. Nör, DDS, MS, PhD
Regis J. O'Keefe, MD, PhD
Stephen Robinovitch, PhD
Ann Rosenthal, MD
Stephen Waldman, PhD
Jennifer Westendorf, PhD
Cari Whyne, PhD
Yuqing Zhang, DSc

Top Funding Sources

1. National Institutes of Health
2. Canadian Institute of Health Research
3. Orthopaedic Research and Education Foundation
4. Department of Defense

www.usbji.org/programs/yii



Notification: Annual Performance Reviews

J,

The Employee Self-Review step for the annual performance review period is currently being assigned in MyPath. You are receiving this email because you have one or more direct reports being assigned an annual performance review.

Please Note: Please confirm with your direct report(s) that a review has been launched. If an employee does not receive an annual review by end of day Friday, as expected, please launch an off-cycle review, as appropriate.

HIGHLIGHTS

Based on feedback from last year's annual review period, the following features have been added to the annual performance review form:

- **Structural Enhancement** - Added "Not in Leadership Role or Too New to Rate" as a rating option for Leadership Competencies; this is a non-scored selection (Best Practices: Select for individuals not in a leadership role or for an individual in a newly appointed leadership role)
- **Employee Compliance Verification**- New drop-down selection for managers to indicate annual compliance requirements have been met

Accessing Performance Reviews for Your Team:

- [Login to MyPath](#) using your **NetID** and associated password.
- On the Performance Reviews page, click the desired [review link](#).

Please Note: Upon submission, the employee will have full access to the performance review. Please ensure that you have met with the employee and made final edits prior to submitting the review.

TIMELINE

