Faculty in a Research University: Expectations, Opportunities, Challenges





February 7, 2013

Dr. Garnett S. Stokes

Provost and Executive Vice President for Academic Affairs

Dr. Karen Laughlin
Dean of Undergraduate Studies
Associate Professor of English

The Undergraduate Student

Faculty in a Research University: Expectations, Opportunities and Challenges

Karen L. Laughlin
Dean of Undergraduate Studies

4

Challenges

- Juggling Teaching, Research, Service and Personal Commitments

Challenges

2. Understanding who your students are

- **Millennials**? Born between 1982 and 2000
  - Optimistic, team-oriented, High-achieving rule-followers
  - Special, Sheltered, Confident; Team-Oriented, Conventional; Pressured; Achieving (Howe and Strauss, *Millennials Go To College)*
- OR is this a convenient set of stereotypes?
- "Generational thinking is just a benign form of bigotry, in which you flatten out diversity. This is debilitating to the job of trying to work with young people." ("The Millennial Muddle" *Chronicle of Higher Education*)

6

a1

- **Altruistic/Service-Oriented**?
- OR Narcissistic. Doing service to earn scholarships, recognition?
- "Today's students are not significantly busier, more confident, or more positive than they were in recent decades. Though more say they want to contribute to society, more also cite "being well off financially" as a goal. ("American Freshmen: Forty Year Trends" cited in *"The Millennial Muddle*)

7

- **Wired and Plugged in**? **Tech Savvy**?
- OR ***"The Dumbest Generation"***
  - Reading less and absorbing fewer facts than their predecessors
  - Less interested in culture, in wrestling with ideas. "Many of them have a mercenary attitude about the university, and they regard humanities as an interruption." (Marc Bauerlein, Cited in *"The Millenial Muddle"*)

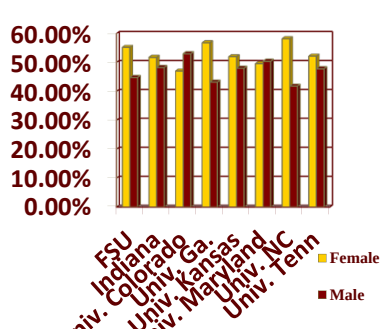
8

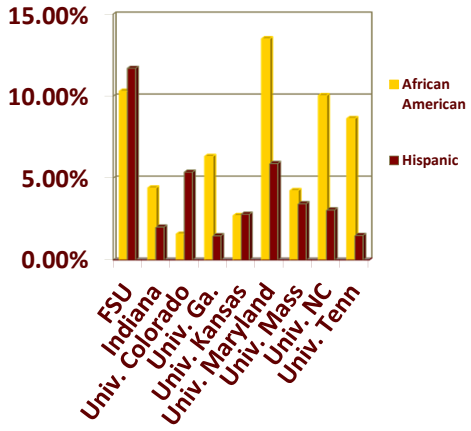
Slide 7

a1 They are only slightly less likely to say they want to go to college to get a job, make money, or go to graduate school. They are not any more or less cooperative or competitive, nor do they seem more interested in developing a meaningful philosophy of life”

aearp, 3/29/2011

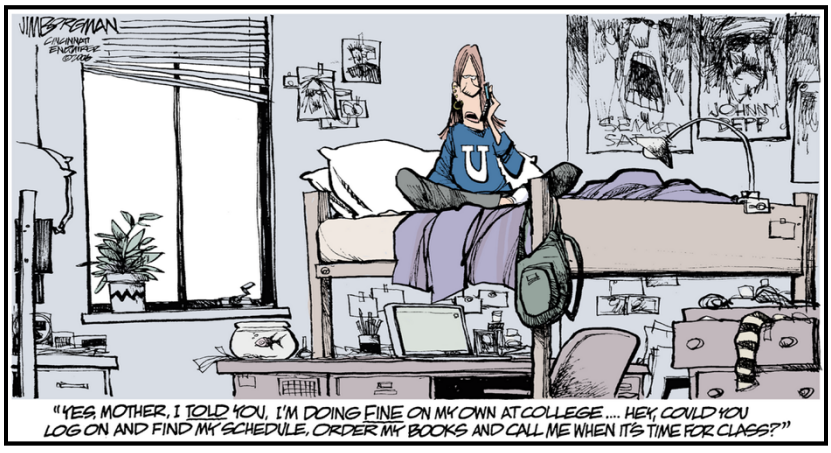
- At the very least, we know they are
  - Racially and Ethnically Diverse
  - Many First-Generation (30+% self-reported @ FSU)

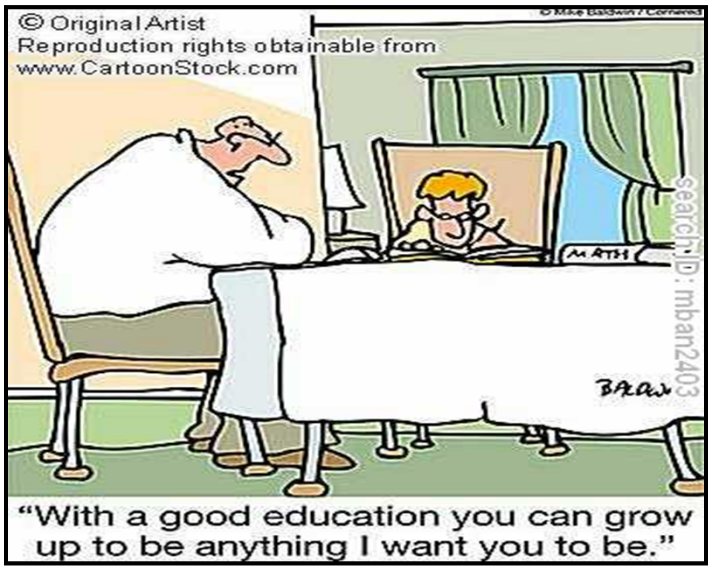




9

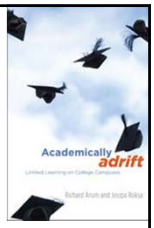
-(Dependent) Children of Helicopter Parents!





a2

Challenges cont.



2. The Academy is Under Fire

- 45 % "did not demonstrate any significant improvement in learning" during the first two years of college.
- 36 %"did not demonstrate any significant improvement in learning" over four years of college.
- Improvements are modest at best.
- Culprit is “lack of rigor”; too much emphasis on retention and social engagement and not enough on teaching reasoning and critical thinking

"If the outcome is student retention and student satisfaction, then engagement is a great strategy. If, however, you want to improve learning and enhance the academic substance of what you are up to, it is not necessarily a good strategy.“

[Academically Adrift: Limited Learning on College Campuses]

Slide 12

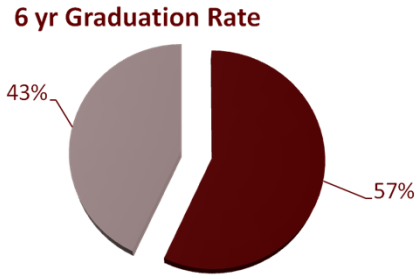
a2 Those students who do show improvements tend to show only modest improvements. Students improved on average only 0.18 standard deviations over the first two years of college and 0.47 over four years. What this means is that a student who entered college in the 50th percentile of students in his or her cohort would move up to the 68th percentile four years later -- but that's the 68th percentile of a new group of freshmen who haven't experienced any college learning.]

aearp, 3/29/2011

Challenges cont.

3. Graduating "Well-Educated" Students

- National 6-year graduation rate for full-time students attending 4-year institutions is 57% (FSU rate is 71.4%)



13

Expectations

How is student learning/engagement being assessed?

- CLA, CAAP, MAP
- Outside Satisfaction Assessment
- Internal Surveys
- NSSE questions
  - 603 colleges and universities participated in NSSE 2010. 1,451 have participated since 2000.

14

National Survey of Student Engagement (NSSE) Sample Questions

- Received prompt written or oral feedback from faculty on your academic performance
- Number of written papers or reports of 20 pages or more
- Discussed grades or assignments with an instructor
- Worked harder than you thought you could to meet an instructor's standards or expectations
- Memorizing facts, ideas, or methods from your courses and readings so you can repeat them in pretty much the same form

NSSE continued

- Culminating senior experience (capstone course, senior project or thesis, comprehensive exam, etc.)
- Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)
- How would you evaluate your entire educational experience at this Institution?
- If you could start over again, would you go to the same institution you are now attending?

16

OPPORTUNITIES

1. **Engage Undergraduates in the Research Mission**

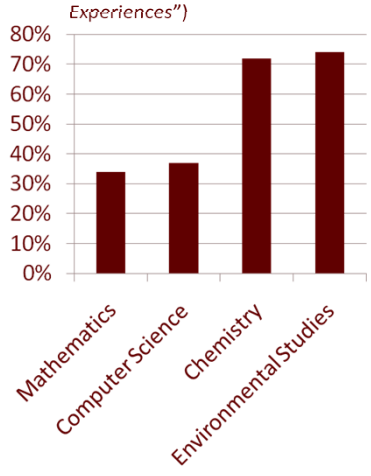
- Report on Survey of 3400 STEM graduates:
  - 53% participated in undergraduate research
  - For 7 in 10 respondents undergraduate research was fairly or extremely important to their career decision, and about 6 in 10 said that their interest in a STEM career increased as a result of their undergraduate research experiences.
- CUR (Council on Undergraduate Research) website lists nearly 70 undergraduate research journals
- Research Experiences Are Especially Valuable for Underrepresented Groups.

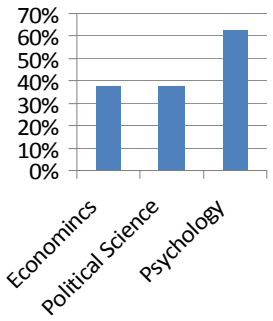
17

a3

Faculty in all disciplines are engaging undergraduates in their research

(Data source: Russell, Hancock and McCullough, "Benefits of Undergraduate Research *Experiences*")





18

Slide 18

a3 social,
behavioral, or economic science
aearp, 3/29/2011

FSU Undergraduate Research 2011-2012

- At least 426 faculty members were involved with undergraduate students in variety of research settings
- 347 students have completed an honors thesis or some HITM coursework since fall 2011
- 2163 Students were enrolled in Directed Individual Studies coursework
- 25% of graduates reported working on a research project on the Graduating Senior Survey
- 94 students participating in Undergraduate Research Opportunity Program

19

2. Foster Engagement in the Classroom

- Require attendance & reach out to students who "disappear"
- Remember that your syllabus is a contract with students. Be clear and professional.
- Give tests and assignments on Thursday and Friday

3. **Discuss Your Institution's General Education philosophy with your students**

- Use assignments that require critical thinking, analytic reasoning and written communication

20

4. **Get involved in the Academic Engagement Activities on Your Campus**

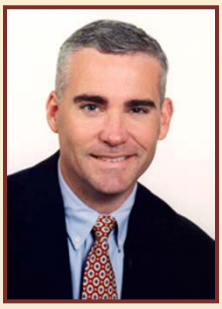
- Direct an Honors Thesis
- Encourage students to apply for Fellowships
- Teach in the Living Learning Communities
- Teach an Honors Course
- Work with a Summer Bridge Program
- Engage with a Freshman Interest Group

21

Comments? Questions?

Sources

- Arum,Richard and Josipa Roksa, *Academically Adrift: Limited Learning on College Campuses.* Chicago: University of Chicago Press, 2011.
- Council on Undergraduate Research (CUR): http://www.cur.org/
- Hoover, Eric, "The Millenial Muddle." *Chronicle of Higher Education (*11 October, 2009)
- Howe, Neil and William Strauss, *Millennials Go To College: Strategies for a New Generation on Campus*. Great Falls, VA: Lifecourse Associates, 2007.
- National Survey of Student Engagement: http://nsse.iub.edu/
- Russell, Susan H., Mary P. Hancock, James McCullough, "Benefits of Undergraduate Research Experiences" *Science* 316 (27 April, 2007): 548-49



Dr. Michael Brady
Carl DeSantis Professor of Business Administration

Teaching the FSU Student

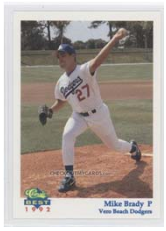
Dr. Mike Brady
Department of Marketing

Who Am I?

- Name: Mike Brady
- Phone: 644-7853 Office: 519
- Email: mbrady@fsu.edu
- Hometown: Jacksonville
- Major: Marketing, FSUx2
- Background:

Who Am I?






Who Am I?

- When I'm not teaching, I do research on frontline service transactions.

MSNBC U.S.News & WORLD REPORT Chicago Tribune Tampa Bay Times tampabay.com

Who Am I?

- Experience: BC, FSU 10 years, taught upper level (marketing research, services marketing) and doctoral classes for most of this time.
- Interesting Facts: Department chair, Australia, minivan, ferret, two kids - Jack and Mary Kate

Jack & Mary Kate




First Point:

- Open up to them as much as you dare
  - Letting them know your background, interests, and perspective doesn't cross the professional line.
- Use the opportunity to get to know something about them

My Teaching Background

- I generally teach quant classes to students who think they don't like quant classes
  - Research Methods, Marketing Research, SEM
- I recently started teaching our intro to marketing class in the 500 seat auditorium
- The GPAs in my classes are among the lowest in the department

Overview of Other Topics We'll Cover:

- Give them the big picture
- Be engaging/Do Your Own Work
- Be relevant
- Make things easy, not hard
- Read your audience
- Enjoy them

The First Day:

- What is Marketing?
  - Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large.
    - *AMA (2007)*

Like Your iPad?

- Apple Stock Price over 10 years:

Like Your Dell?

- Dell Stock Price over 5 years:

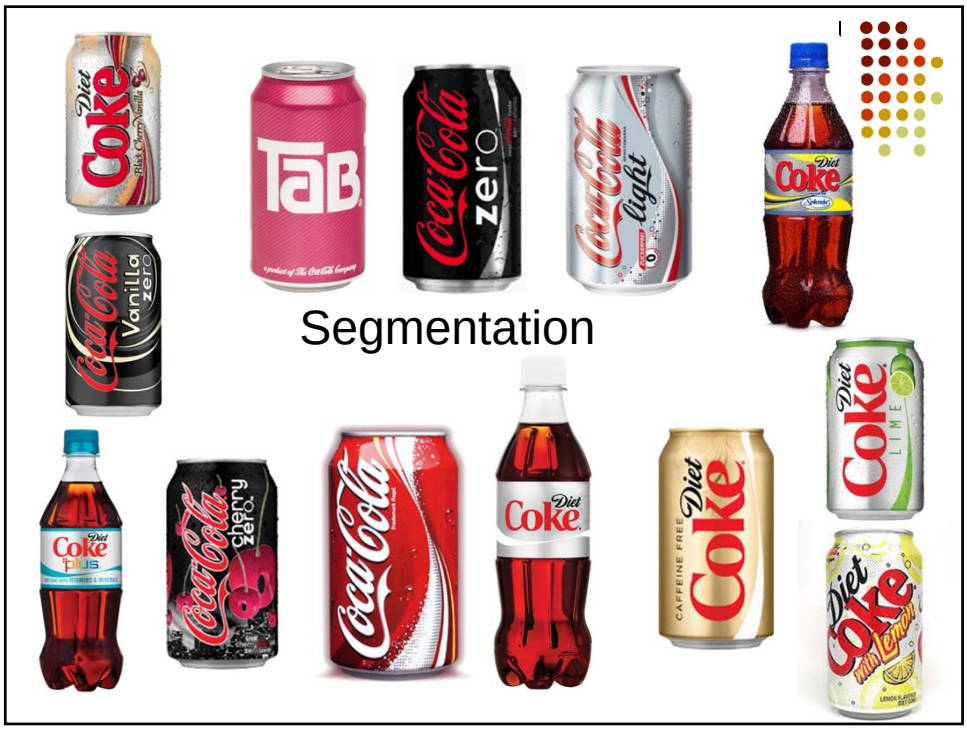
Give Them the Big Picture

- How does the class relate to something they know about?
- How does it relate to something REALLY important?
- How does it relate to classes they've already taken? Or will take in the future?

Market Segmentation (by the book)

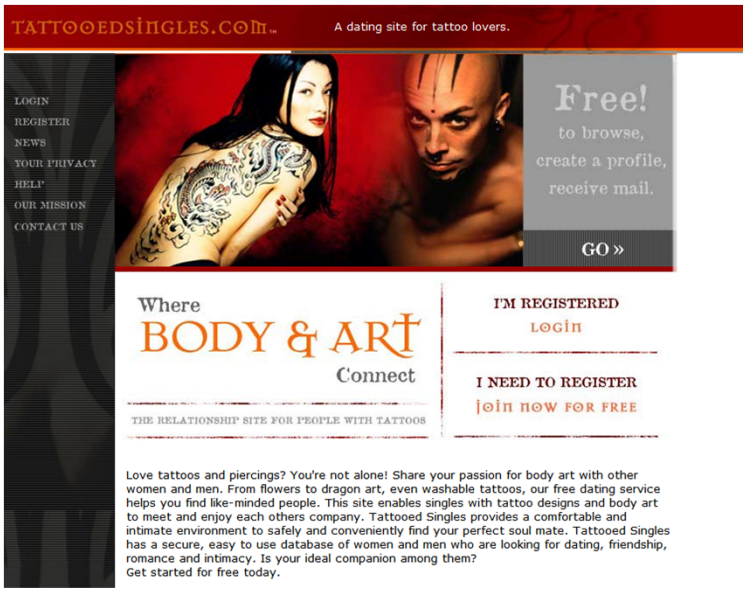
- Market Segmentation is a method of "dividing a market (Large) into smaller groupings of consumers or organizations in which each segment has a common characteristic such as needs or behavior."


Coca-Cola
237 ml
Coca-Cola


Diet Coke
TAB
Coca-Cola zero
Coca-Cola light
Diet Coke
Coca-Cola Vanilla zero
Segmentation
Diet Coke plus
Coca-Cola cherry zero
Coca-Cola
Diet Coke
Diet Coke
CAFFEINE FREE
Diet Coke LIME
Diet Coke with Lemon


Walt Disney World Resort
Epcot
ESPN Wide World of Sports Complex
Disneyland Resort
Disney's Hollywood Studios
Hong Kong Disneyland
Disney Cruise Line
Disney Quest
Shanghai Disney Resort
上海迪士尼度假区
Disney's Blizzard Beach
Disney's Typhoon Lagoon Water Park
Disney's Animal Kingdom
Disneyland Paris
Tokyo Disneyland


Renaissance Hotels · Resorts · Suites
Marriott Hotels & Resorts
The Ritz-Carlton
The Luxury Collection
Westin Hotels & Resorts
Courtyard Marriott
Fairfield Inn Marriott
Residence Inn Marriott
SpringHill Suites Marriott
TownePlace Suites Marriott
Le Meridien
St Regis
element
Sheraton Hotels & Resorts
Hilton
Conrad Hotels & Resorts
DoubleTree
Hilton Grand Vacations Club
Hampton Inns & Suites
Hilton Garden Inn
Four Points by Sheraton
Homewood Suites by Hilton
W Hotels
InterContinental Hotels & Resorts
Crowne Plaza Hotels & Resorts
indigo
Holiday Inn Hotels · Resorts
Holiday Inn Express
Staybridge Suites
Candlewood Suites
aloft



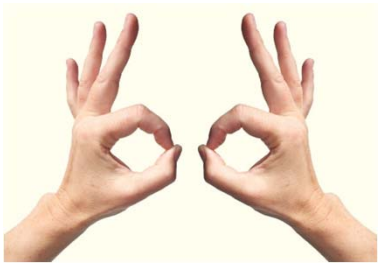
Be Engaging & Do You Own Work

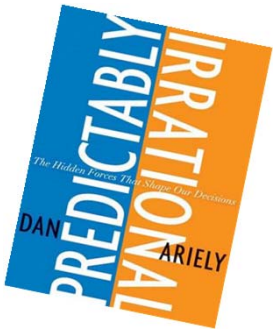
Be Relevant

- Ask yourself, “What do students REALLY have to know about this topic?”
- Then ask yourself why they need to know it
- Finally, clearly explain the answers to questions 1 & 2

Be Relevant

- In addition to relevant content, I believe there's room for a few life lessons in the classroom





"Any intelligent fool can make things bigger, more complex, and more violent. It takes a touch of genius -- and a lot of courage -- to move in the opposite direction."

- Einstein

What's this?

$$t = \frac{\left(\bar{X} - \mu\right)}{\left(s/\sqrt{n}\right)} \qquad t = \frac{\bar{X} - \mu}{\frac{s}{\sqrt{N}}}$$

$$t = \frac{\bar{x} - \mu_0}{\hat{\sigma}_x}$$

My Block in Marblehead

Household Incomes

1. $100,000
2. $100,000
3. $100,000
4. $100,000
5. $100,000
6. $100,000
7. $24,000,000

≈3.5 million dollars

- Is it fair to say that my salary was around $3.5 million?
- Why not?
- What's wrong with using the mean in this way?

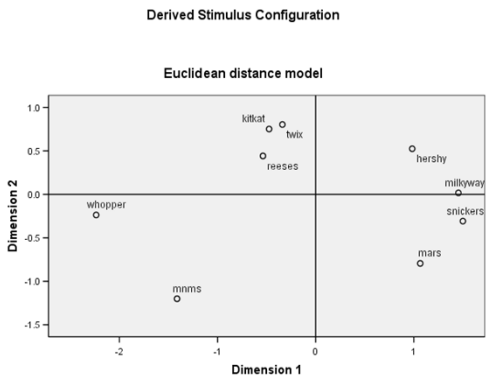
Now Let's Revisit the Formula

$$t = \frac{\bar{X} - \mu}{\frac{s}{\sqrt{N}}}$$

What is the denominator really doing?

Does this really have to be hard??

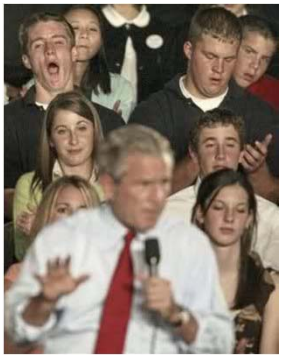
Make Things Easy, Not Hard



- By introducing MDS, creating a MDS map, identifying competitors & opportunities for each brand, students get to see how marketing is done.
- And they understand why the course is relevant

Read Your Audience

- I have a theory that everyone is capable of reading an audience.
  - If true, then people who deliver lectures to catatonic audiences either choose not to read the audience or they don't care to do anything about it.
    - Either scenario is disturbing.



Enjoy Them

Thank you!!

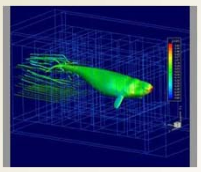
BREAK

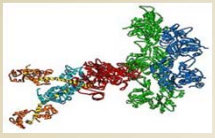
Dr. W. Ross Ellington
Associate Vice President for Research,
Michael J. Greenberg Professor of Biological Science

The Office of Research at a Very Research Intensive University

(Faculty in a Research University, 2/7/13)

W Ross Ellington, Associate VP for Research & Michael J. Greenberg Professor of Biological Science





FSUFILM

Role of the Office of Research at FSU

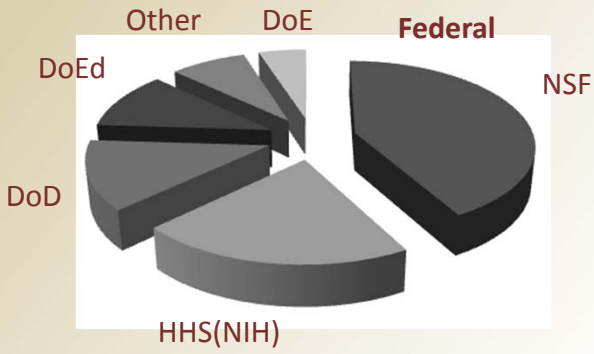
- **Support** research and creative activities across disciplines (from the arts to the "hard sciences")
- **Broaden the awareness** of FSU's research and creative accomplishments locally and beyond
- **Protect and commercialize** FSU's intellectual and creative properties
- **Encourage and facilitate** our faculty to obtain sponsored research funding
- Provide all the needed support prior to (**pre-award**) and after (**post-award**) receipt of funding
- **Ensure compliance** with Federal, State and private agency policies for use of funds as well as the conduct of research (ethics, human subjects, animal care & use, export controls, data security etc etc)

Scale of External Funding at FSU

State funding (FY 12): general revenue (GR), tuition and lottery
FSU (non-medical)- $418.1M
FSU (medical)- $42.3M
FSU total- **$460.4M**

External C&G expenditures (FY 12):
$188.1M (40.9% of total State funding)
C&G activity is a major contributor to the funding of research and creative activities as well as the training of graduate students and postdoctoral fellows; over **2,750** are employed fulltime at FSU on C&G funds (>5,000 individuals receive a paycheck sometime in the year from C&G funds).

FY12 at FSU by the numbers…
- 28 patents
- 86 patent applications
- 13 licenses granted
- 1,166 contracts and grants awarded
- $192.3M awarded (Federal- $152.2M)
- $220.1M total research expenditures



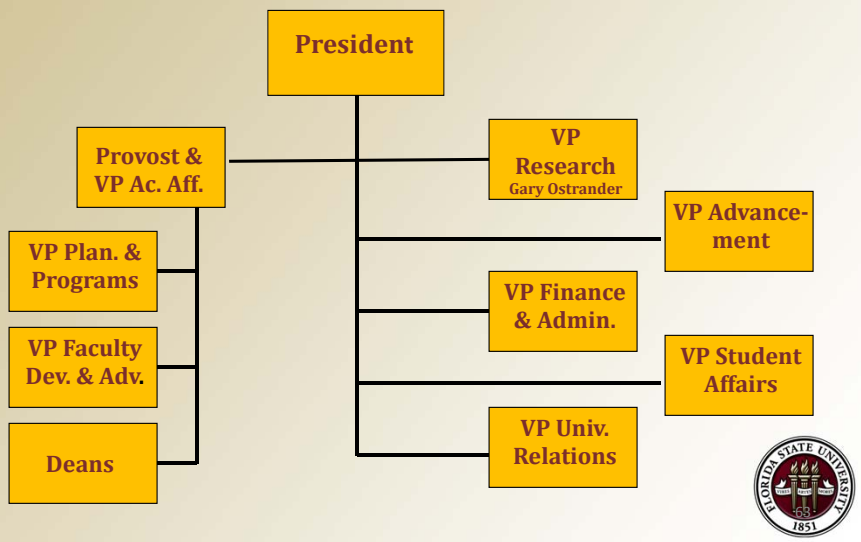
External funding comes to us in two flavors:

Direct costs- funds used in the conduct of the research. There are very specific policies as to how we can spend these funds.

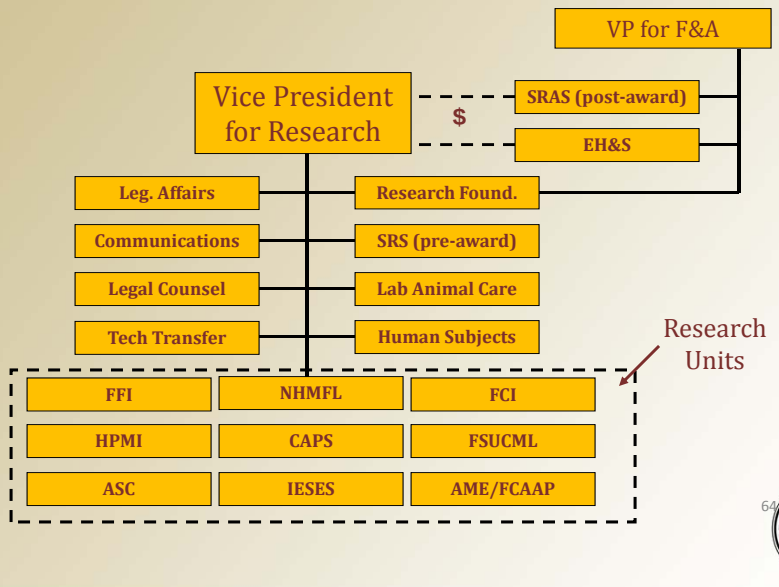
Facilities & Administration (F&A) costs- often called "indirect costs"; this is a reimbursement to the institution for costs incurred in building maintenance, power and other utilities, grant management, animal care, human subjects, purchasing, personnel etc etc.

F&A reimbursements can be used to support research activities of all kinds. In FY12 FSU earned $27.5 M in F&A reimbursements. This year nearly **$7M** was returned to colleges and their constituent units to support research.

Where the Office of Research Fits into the Structure of FSU



Organization of the Office of Research



Organization of the Office of Research

Office of the Vice President for Research (Westcott North)
- VP for Research, Gary K. Ostrander
- Associate VP for Research
- Assistant VP for Research- administration and finances
- Assistant VP for Tech Transfer & Economic Development
- Federal relations
- General Counsel
- Communications
- Council on Research & Creativity (CRC)

(**CRC** – Consists of ~40 faculty from across campus. Advises VPR on policy/budget and administers an internal grant program approaching $2M)

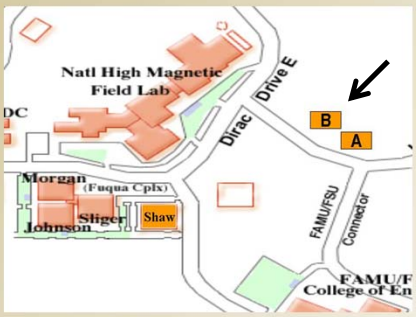
3rd Floor of the Student Services Building

Sponsored Research Services (**SRS**)
- Facilitates preparation and submission of proposals (State and Federal only)
- All other pre-award services

Sponsored Research Accounting Services (**SRAS**)
- Accounting
- Approval of appointments and expenditures above $1,000
- Financial reporting and other post-award functions

FSU Research Foundation (**FSURF**)
•Pre- and post-award for private agencies and foundations
•Manages short-term and long-term investments ($90M)
•Manages a building portfolio on the SW campus and elsewhere

Human Subjects Committee (Inst. Review Board, **IRB**)
•Reviews >1,200 protocols for research involving human subjects



Office Technology Transfer and Commercialization
•Disclosures, patents, licenses
•Start-ups
•Entrepreneurship

Laboratory Animal Resources (**LAR**)
•Research animal holding facilities
•Institutional Animal Care & Use Committee (**IACUC**)

Environmental Health & Safety (**EH&S**)
•Training
•Radiological and hazardous wastes
•Recombinant DNA
•Biohazards
•Lab safety

Research Units Under the Office of Research

- Applied Superconductivity Center (**ASC**)
- Aero-Propulsion, Mechatronic & Energy Center (**AME**)
- Center for Advanced Power Systems (**CAPS**)
- Florida Center for Advanced Aero-Propulsion (**FCAAP**)
- Florida Climate Institute (**FCI**)
- FSU Coastal and Marine Laboratory (**FSUCML**)
- Future Fuels Institute (**FFI**)
- High Performance Materials Institute (**HPMI**)
- Institute for Energy Systems, Economics and Sustainability (**IESES**)
- National High Magnetic Field Laboratory (**NHMFL**)

Why apply for external funding?

- Provides freedom and flexibility to pursue your research and creative activity dreams
- Provides peer-based validation of the quality of your scholarship and your standing in the community
- Writing of proposals helps to clarify and focus your thinking; enhances skills at selling your ideas
- Resources, resources, resources……..
- Travel
- Summer salary
- Supports students
  - (1) Shortens time to degree
  - (2) Replaces State $ to provide support for other students

(note: for some disciplines, external funding is essential for survival….)

Questions?

W. Ross Ellington wellington@fsu.edu 5-6900
3012 Westcott North

Working with Graduate Students

Dr. Nancy H. Marcus
Dean of the Graduate School
Robert O. Lawton Distinguished Professor
Mary Sears Professor of Oceanography

Working With Graduate Students

Preparing Future Faculty Workshop
February 7, 2013

Nancy Marcus
Dean of The Graduate School
Florida State University

Context – Carnegie Classification

- Doctoral with very high research activity
  - Educate and train graduate students
  - Emphasis is on doctoral education
- FSU
  - Doctoral
    - 67 degree programs
    - ~2700 students
    - ~400 degrees/year
  - Master's
    - 105 degree programs
    - ~4,400 students
    - >2,000 degrees/year

Faculty - Responsibilities

- Research
  - Major professor
  - Committee member
- Teaching
  - Courses
- Service
  - Advise student organizations

Interactions with graduate students transcends these functions

Faculty - Roles

- Major professor
- Teacher
- Committee member
- Advisor
- Mentor

Major professor

- Step 1
  - Before the “knock on your door”
  - Inform yourself of the policies and guidelines that pertain to graduate education in your new department and university.

Major professor

- Step 2
  - Develop a written document of your philosophy regarding graduate education to share with a prospective student.
    - Reflect on your own experience with your major professor
    - Develop your own expectations of student performance
      - How do you want to be addressed?
        - » Formal vs informal
      - Work hours, work habits, regular meetings, office hours etc.
      - Independent vs hand holder
      - What don’t you like – lateness; messy lab etc.
    - Delineate your responsibilities
    - Set boundaries – professional vs personal matters

Philosophy – cont.

- Major Professors are in a position to lay out expectations, but trainees are sometimes in an awkward position because of the “power inequity”.
- Major Professors should be prepared to take the lead in raising issues that are of concern to the trainee as well as those that are of interest to the mentor.

Major professor

- When you agree to be the major professor
  - Commitment of time
  - Value judgment that this student has potential to complete his/her degree
    - You will need to adapt to different styles
    - Treat students equitably; no favorites
    - Empathy
    - Steady pressure
      - New student needs to be taught the “right” habits and may require more time.
      - Students evolve to a more independent style

Major professor-trainee interactions

- Elements of a successful relationship
  - A clear understanding of mutual responsibilities
  - A commitment to maintain a productive and supportive research environment
  - Proper supervision and review, and
  - An understanding that the main purpose for the relationship is to prepare trainees to be come successful, independent researchers.

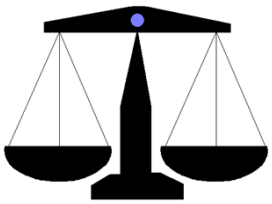
Major professor - responsibilities

- In one way or another, a major professor needs to:
  - Assure proper instruction in research methods
  - Foster the intellectual development of the trainee
  - Impart an understanding of RCR, and
  - Routinely check to make sure the trainee develops into a responsible researcher

Major professor/ mentor

- You may be a major professor and mentor to a student.
- You may be a mentor to a student and not be his/her major professor.
- It is OK for students to have multiple mentors

Final thoughts



- What are your goals?
  - Promotion and tenure?
- Balance your time
  - Competing demands
    - Research
      - Collaborate with your graduate students >> publish together
    - Teaching
    - Advising, mentoring etc
    - Service
    - Personal commitments

Personal Opinion

- Working with students, especially graduate students is the most rewarding aspect of being a professor.
- It is not easy
- It takes commitment and an openness to adapting to others styles while sharing knowledge and experience.

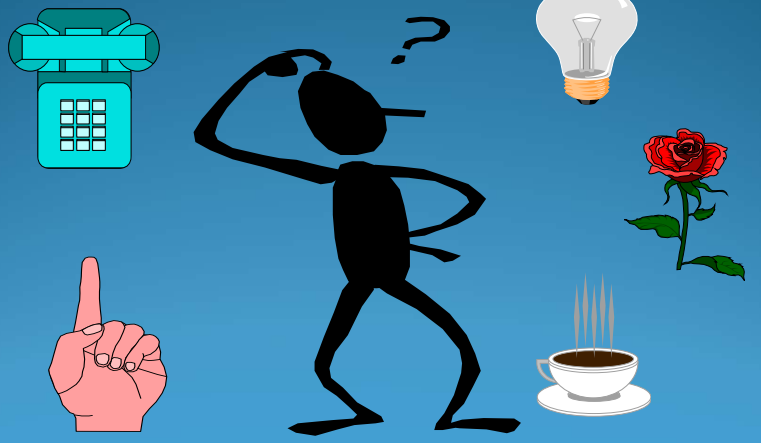
The Successful Researcher

Dr. Debra A. Fadool
Professor of Biological Science and Neuroscience

"Oh, You're a professor at FSU, what do you teach?"

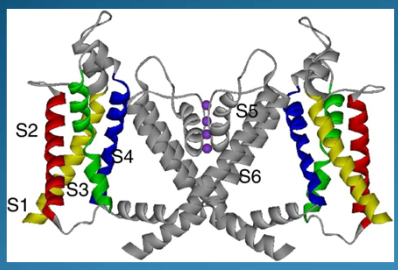
Debra Ann Fadool
Department of Biological Science
Program in Neuroscience & Molecular Biophysics
Postdoctoral and Graduate Scholar Workshop

The Idea

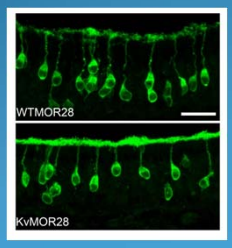


Scientific or Professional Writing

Find Your Niche



Potassium Ion Channel Camp



Chemical Senses Camp

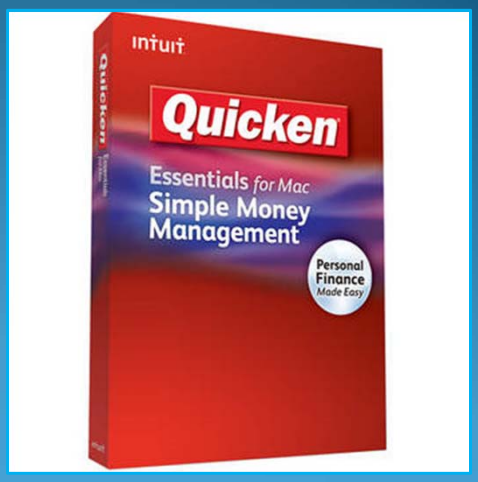
RESEARCH NEWS

Tracking Insulin to the Mind

Although the idea is controversial, recent evidence suggests that insulin may be needed for normal brain functions—including learning and memory

Bridged via Neuromodulation
Clinical Health Impact

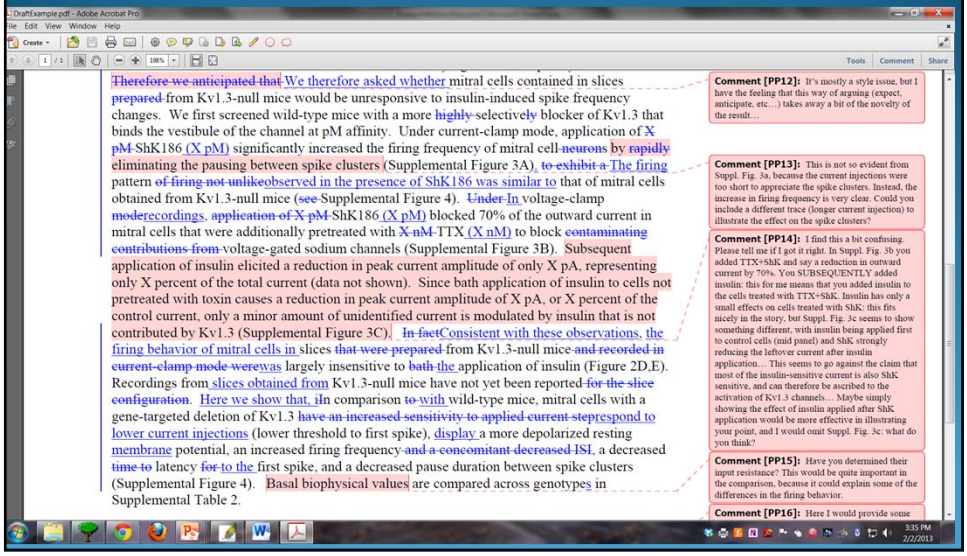
Develop Business Sense



Know Your Talents

AChemS 28th Annual Meeting
Sarasota Florida
2006

Know Your Capacity and Round Out Your Weaknesses



DraftExample.pdf - Adobe Acrobat Pro

File Edit View Window Help

Create

Tools Comment Share

~~Therefore we anticipated that~~ We therefore asked whether mitral cells contained in slices ~~prepared~~ from Kv1.3-null mice would be unresponsive to insulin-induced spike frequency changes. We first screened wild-type mice with a more ~~highly~~ selective~~ly~~ blocker of Kv1.3 that binds the vestibule of the channel at pM affinity. Under current-clamp mode, application of ~~X pM~~ ShK186 (X pM) significantly increased the firing frequency of mitral cell ~~neuron~~s by ~~rapidly~~ eliminating the pausing between spike clusters (Supplemental Figure 3A), ~~to exhibit a~~ The firing pattern ~~of firing not unlike~~observed in the presence of ShK186 was similar to that of mitral cells obtained from Kv1.3-null mice (~~see~~ Supplemental Figure 4). ~~Under~~ In voltage-clamp ~~mode~~recordings, ~~application of X pM~~ ShK186 (X pM) blocked 70% of the outward current in mitral cells that were additionally pretreated with ~~X nM~~ TTX (X nM) to block ~~contaminating contributions from~~ voltage-gated sodium channels (Supplemental Figure 3B). Subsequent application of insulin elicited a reduction in peak current amplitude of only X pA, representing only X percent of the total current (data not shown). Since bath application of insulin to cells not pretreated with toxin causes a reduction in peak current amplitude of X pA, or X percent of the control current, only a minor amount of unidentified current is modulated by insulin that is not contributed by Kv1.3 (Supplemental Figure 3C). ~~In fact~~Consistent with these observations, the firing behavior of mitral cells in slices ~~that were prepared~~ from Kv1.3-null mice ~~and recorded in current-clamp mode were~~was largely insensitive to ~~bath~~ the application of insulin (Figure 2D,E). Recordings from slices obtained from Kv1.3-null mice have not yet been reported ~~for the slice configuration~~. Here we show that, ~~i~~In comparison ~~to~~ with wild-type mice, mitral cells with a gene-targeted deletion of Kv1.3 ~~have an increased sensitivity to applied current step~~respond to lower current injections (lower threshold to first spike), display a more depolarized resting membrane potential, an increased firing frequency ~~and a concomitant decreased ISI~~, a decreased ~~time to~~ latency ~~for~~ to the first spike, and a decreased pause duration between spike clusters (Supplemental Figure 4). Basal biophysical values are compared across genotypes in Supplemental Table 2.

Comment [PP12]: It's mostly a style issue, but I have the feeling that this way of arguing (expect, anticipate, etc…) takes away a bit of the novelty of the result…

Comment [PP13]: This is not so evident from Suppl. Fig. 3a, because the current injections were too short to appreciate the spike clusters. Instead, the increase in firing frequency is very clear. Could you include a different trace (longer current injection) to illustrate the effect on the spike clusters?

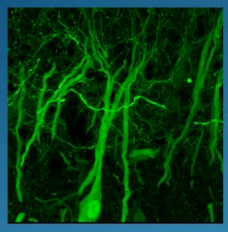
Comment [PP14]: I find this a bit confusing. Please tell me if I got it right. In Suppl. Fig. 3b you added TTX+ShK and say a reduction in outward current by 70%. You SUBSEQUENTLY added insulin: this for me means that you added insulin to the cells treated with TTX+ShK. Insulin has only a small effects on cells treated with ShK: this fits nicely in the story, but Suppl. Fig. 3c seems to show something different, with insulin being applied first to control cells (mid panel) and ShK strongly reducing the leftover current after insulin application… This seems to go against the claim that most of the insulin-sensitive current is also ShK sensitive, and can therefore be ascribed to the activation of Kv1.3 channels… Maybe simply showing the effect of insulin applied after ShK application would be more effective in illustrating your point, and I would omit Suppl. Fig. 3c: what do you think?

Comment [PP15]: Have you determined their input resistance? This would be quite important in the comparison, because it could explain some of the differences in the firing behavior.

Comment [PP16]: Here I would provide some

3:35 PM 2/2/2013

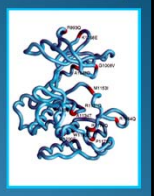
Tools of the Trade

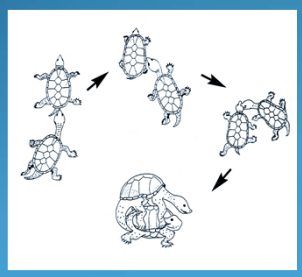


Transgenic Technology

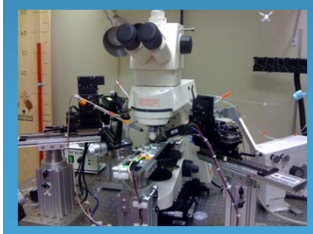
Behavioral Phenotyping
Engineering, Computing

Diabetes
and
Obesity
Literature

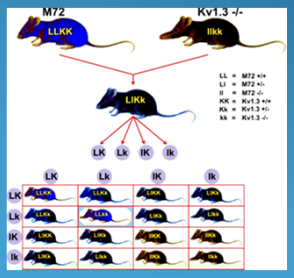




Sternotherus odoratus

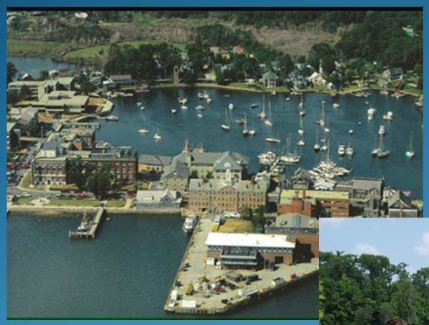


Slice Electrophysiology



Mouse Husbandry

Stretch and Re-educate Yourself



Neurobiology Course
Woods Hole MA
1991

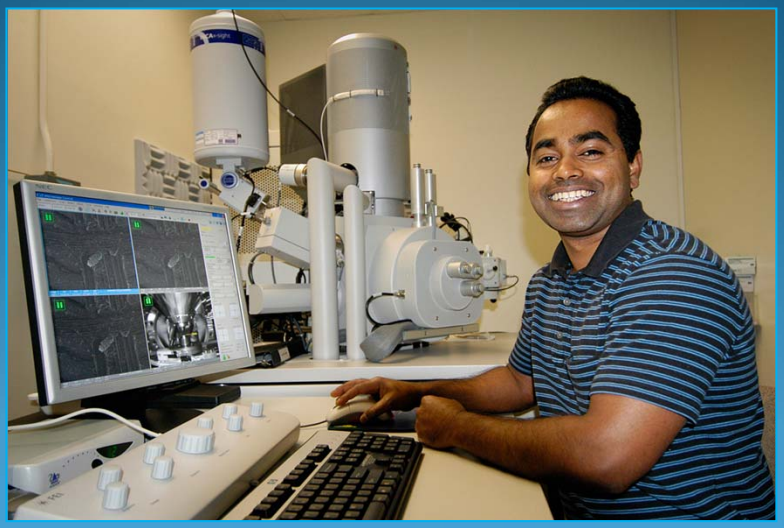
University College London
Sabbatical
2009

Albion College, Michigan
1985

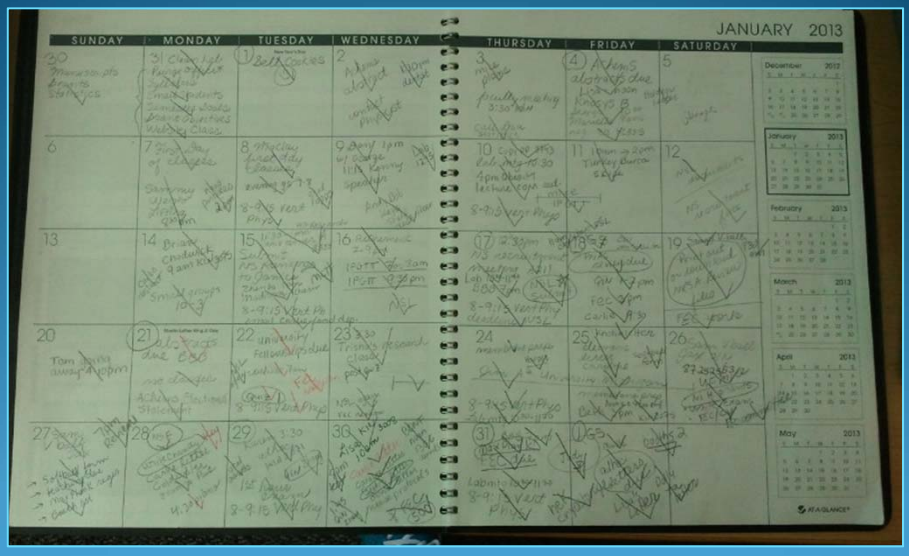
Obama Supplement
Summer 2010

Read the Literature AND Hear Advances

Oral Communication



Multi-tasking



Personnel Manager

Balance Your Life

Troop 443

Hobbies Keep You Healthy

Desert Roses, Succulents, and Cacti
Specialty Arrangements & Workshops
Saturdays at the Downtown Market 850 668-6694

The Balancing Act

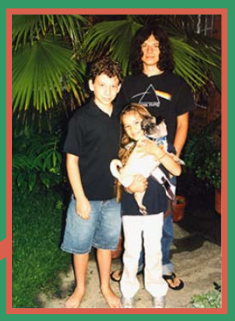
"Fadool Protocols"

James and Debra Fadool
Florida State University

Program In Neuroscience &
Molecular Biophysics

The Balancing Act

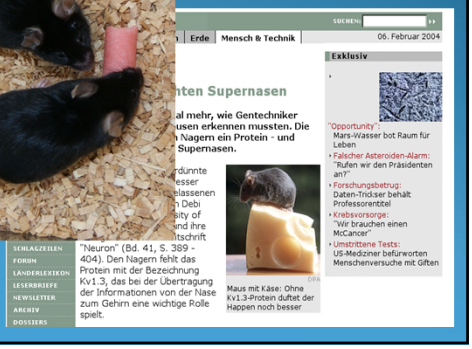
"Fadool Protocols"



James and Debra Fadool
Florida State University

Program In Neuroscience &
Molecular Biophysics

Discovery Favors the Prepared Mind



International Community

Two Women & Across Americas

Liolaemus belii

Learn Another Language

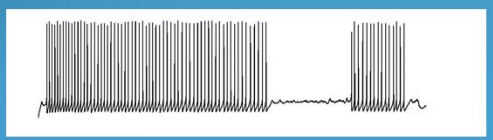
Visit Each Other's Country

Job Rewards

Meeting the Authors

Accomplishments of your Students & Fellows

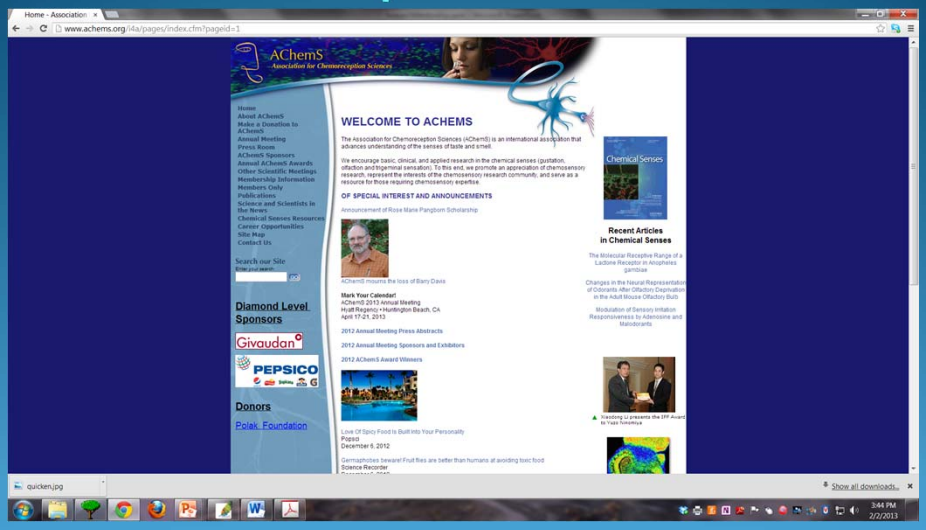
Traveling



Joy of Discovery

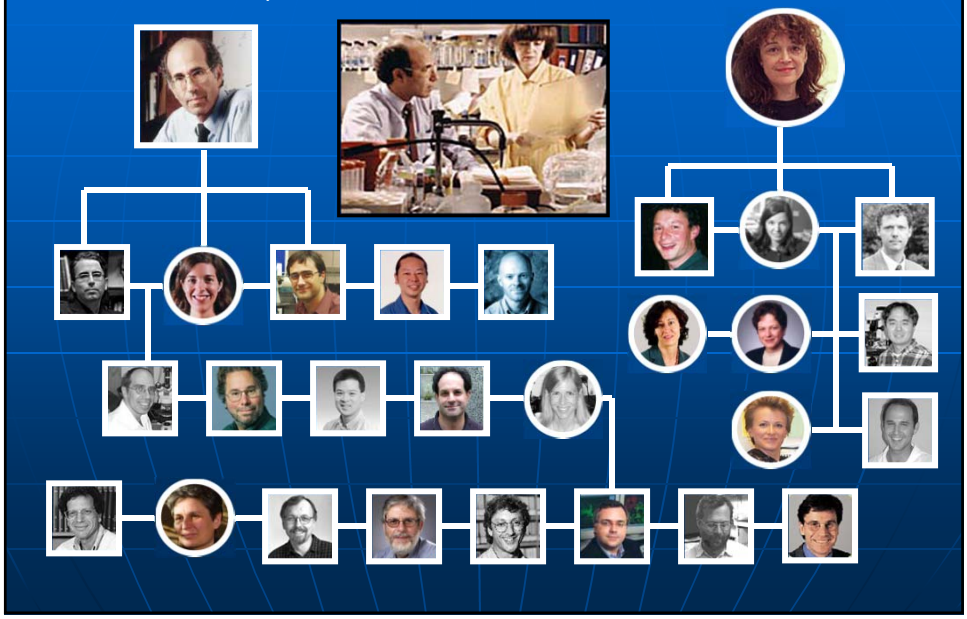
Career Placement

Mentorship and Networks



A Toast to Your Achievement……

"I've been blessed over the years with a remarkably strong and exciting group of students who did much of the work towards this end. The joy of science is in the process, not in the end." - Richard Axel, HHMI Bulletin



Faculty Evaluation, Promotion and Tenure

Dr. Sally McRorie
Vice President for Faculty Development & Advancement

FACULTY

EVALUATION, PROMOTION AND TENURE

- Anything is possible if you don't know what you are talking about.

PERSONAL RESILIENCE

- OPTIMISTIC ABOUT THE WORLD
- OPTIMISTIC ABOUT YOURSELF
- FOCUSED ON MISSION OF THE INSTITUTION AND YOUR GOALS
- CONNECTIONS WITH OTHERS; MENTORS; SOCIAL RESOURCES
- ORGANIZED
- PROACTIVE

PERFORMANCE & ASSESSMENT

- **ANNUAL EVALUATION**
  - *SUMMATIVE; ACCORDING TO DEPT BYLAWS*
  - *ASSIGNMENT OF RESPONSIBILITIES*
  - *RESEARCH*
  - *TEACHING*
  - *SERVICE*

Instruction

A. Courses (list by course prefix, number, title, credit hours, percent of effort assigned to each course):

B. Thesis and Dissertation Supervision:

C. Other Instruction (continuing education assignment - not to include overload; other instruction-related projects):

D. Academic Advising: (formal counseling with students on academic course/program choices, scheduling, and career counseling)

Research or Creative Activity

A. Departmental Research:

B. Sponsored Research (indicate title or grant number):

Service

A. Academic Support (committee activities relating to curriculum, promotion and tenure, admissions, etc.)

B. Administration (supervisory, management, or staff activities related to administration of department, college, or unit):

C. Public Schools:

D. Public Service (effort expended in providing professional services to the community, state, or nation; professional organizations, academic or professional student organizations.):

E. Special Assignments:

INSTRUCTION Percent of Total Effort:

RESEARCH Percent of Total Effort:

SERVICE Percent of Total Effort:

ANNUAL EVALUATIONS CONT.

- PEER EVALUATION
- CHAIR/DEAN EVALUATIONS
- PROGRESS TOWARD TENURE AND/OR PROMOTION LETTER: *SUMMATIVE +FORMATIVE*

2ND, 3RD, OR 4TH YEAR REVIEWS

- CUMULATIVE
- COMPREHENSIVE
- FORMATIVE EARLY REVIEWS
- TIME IS GETTING SHORT REVIEWS

- TYPICAL TIME FOR P&T CONSIDERATION IS DURING 6TH YEAR. MAY BE EARLIER.
- LATER= NONRENEWAL LETTER

PROMOTION & TENURE: TELL YOUR BEST STORY WELL

- WHAT ARE YOUR MOST IMPORTANT PROFESSIONAL ACCOMPLISHMENTS?

- WHY IS YOUR WORK IMPORTANT TO THE UNIVERSITY, NATION, AND WORLD?

WHAT WILL REPRESENT YOU?

- DEAN'S AND CHAIR'S LETTERS
- EXTERNAL LETTERS
- C.V. [FEAS]
- SUMMARY/EVIDENCE OF ACHIEVEMENTS
- ANNUAL LETTERS OF PROGRESS TOWARD P& T
- 2ND AND 4TH YEAR REVIEW NARRATIVES
- PUBLICATIONS/SUPPORTING MATERIALS

WHO WILL VOTE?

- DEPARTMENT COMMITTEE
- FACULTY/TENURED FACULTY
- CHAIR
- COLLEGE COMMITTEE
- DEAN
- UNIVERSITY COMMITTEE
- PRESIDENT
- BOARD OF TRUSTEES

IN CONCLUSION

- Plans are only good intentions unless they immediately degenerate into hard work.

  Peter Drucker

- Every day's a holiday on the green side of the grass.

  Avery McRorie

Dr. Robert B. Bradley
Vice President for Planning and Programs
Director of the Institute of Science and Public Affairs
Professor of Public Administration

Assessment, Institutional Effectiveness (IE), and Student Learning Outcomes (SLOs)

Preparing Future Faculty

February 2013

123

Institutional Effectiveness

- A term used extensively by accrediting bodies
- It is the systematic, explicit, and documented process of measuring performance against mission in all aspects of an institution.

124

University Missions

Typically involve using instruction, research and service to accomplish certain goals such as the discovery, dissemination or preservation of knowledge

125

University Goals

- Involve such considerations as:
  - the ability to think critically, synthesize knowledge, and draw conclusions from information
  - Understand the nature of the world or develop an appreciation of the fine and performing arts
  - Develop mathematical and quantitative skills necessary for calculation, analysis and problem solving
  - Acquire a base of knowledge common to education persons along with the capacity to expand that base throughout their life
  - Tend to the development of the whole student

126

Reasons for Assessment

- Primary reason is to ensure students are learning and to inform and facilitate improvements to these efforts.
- There will be other demands on your time but assessment of student learning is key to your students' success.

127

Assessment Can:

- Provide an opportunity to collaborate with faculty colleagues to determine desired outcomes
- Align efforts with most important goals;
- Allow us to determine whether student learning meets our expectations
- Facilitate discussion about improvement; and
- Identify concrete steps toward enhancement of student learning

128

Assessment is a process

- What do you want? (set goals and learning outcomes; set standards and measures)
- What do you have? (collect results)
- How do you get there from here? (analyze results and develop improvement plans to adjust efforts or keep successful ones)
- Closing the assessment loop begins the process again.

129

The Move to Increased Accountability Is Widespread

- Southern Association of Colleges and Schools/Commission on Colleges (SACSCOC) Requirements for all Programs
- Most Professional Disciplines have Requirements
- Florida Board of Governors Requirements for Undergraduate Programs – State Mandated Academic Learning Compacts [SMALCs]
- Federal interest continues to grow
- **You Will Be Involved in Such Processes**

130

Assessment of Learning

Student Learning Outcomes

A Student Learning Outcome is the knowledge, skills, and abilities that a student has attained at the end (or as a result) of his or her engagement in a particular set of higher education experiences.

131

What Does This Involve?

- ✓ ***Define Outcomes (usually in the context of the entire curriculum)***
- ✓ ***State Assessment Procedure and establish Standards***
- ✓ ***Collect and Analyze Results***
- ✓ ***Formulate Action Plans***
- ✓ ***Implement Improvements***
- ✓ ***Link to Other Processes and Budgeting***
- ✓ ***Continue to Improve***

132

Faculty Already do these things

- Faculty meet and determine what the curriculum is to contain
- Courses established that contain various curriculum elements
- Syllabi are developed to those ends and then reviewed
- In class tests and on-going program reviews based on assessments
- Regular reviews of developments
- Changes of curriculum to address problems
- Often the efforts are:

  Not systematic, Not written down, Not comprehensive, Not shared

133

Institutional Effectiveness:

The FSU Example Is Typical

- Annual assessments are collected and maintained in an *Institutional Effectiveness Portal -- SMALCs*
- Chairs are responsible for gathering, entering and checking entries into the Portal
- Each program undergoes a *Quality Enhancement Review* every 7 years

134

Example of an Student learning Outcome

Define Outcome:

Upon completion of the course of instruction, the student will be able to demonstrate basic knowledge of the functional anatomy of the Central Nervous System (CNS), i.e., the localization of functions within the brain and spinal cord.

135

Assessment and Evaluation Process:

This will result in 85% of the students enrolled during Fall and Spring in all sections of the department's "core" neuroscience courses demonstrating knowledge of the material by correctly answering 70% of the items from a departmental exam that are designed to assess this specific learning outcome. (This entire exam assesses Learning Outcomes #6 and #7.) The exam is multiple-choice and is given at end of semester. To establish the content validity of the items, a committee will examine the items to verify that they reflect the intended learning goal. The committee will consist of instructors from the core neuroscience courses and members of the Undergraduate Studies Committee for the Department of Psychology. In addition, a standard item analysis will be employed to identify individual items that need to be replaced and/or reworded. Exams will be administered by course instructors and will be scored by evaluation services. "Core" neuroscience courses are those that students can choose among to fulfill the departmental neuroscience requirement. They include: PSB 2000 (Brain and Behavior), PSB 4461 (Hormones and Behavior), EXP 3202 (Sensation & Perception), and PSB 3004 (Physiological Psychology). While majors are given considerable flexibility in terms of which subfields within psychology they can emphasize in their studies, neuroscience is the one subfield within psychology that is required of all majors. Method(s): Department Assessment.

136

Results:

Of the 8 items designed to assess the functional anatomy of the central nervous system, 83% of the students (compared to 73% in the previous year) scored 75% correct or better, and 94% of the students (compared to 89% in previous year) scored 63% correct or better. This represents an important improvement because this is the first time that students met our criterion for this learning outcome. Most probably, this improvement was due to the fact that in the 2007-2008 academic year, instructors told students about the 2 learning outcomes relevant to neuroscience that students were expected to master by the end of the semester. (This had not been done in prior years.) As described in the action plan derived from last year's performance, giving students clear expectations about the learning outcomes that they need to master is consistent with good instructional practice.

137

Improvements Made or Action Plan Based on Analysis of Results:

The plan is to continue the strategy of having instructors tell their students about the 2 learning outcomes relevant to neuroscience that they are expected to master by the end of the semester. We are hopeful that the improvements we saw over the previous year were due to this strategy rather than to temporary fluctuations in the quality of students and/or instruction. The Committee will also consider rewording one item which was particularly easy and did not discriminate very well.

138

Remember Improvements May Not Be Obvious: Your Actions Should be Based on Analysis

"We just haven't been flapping them hard enough."

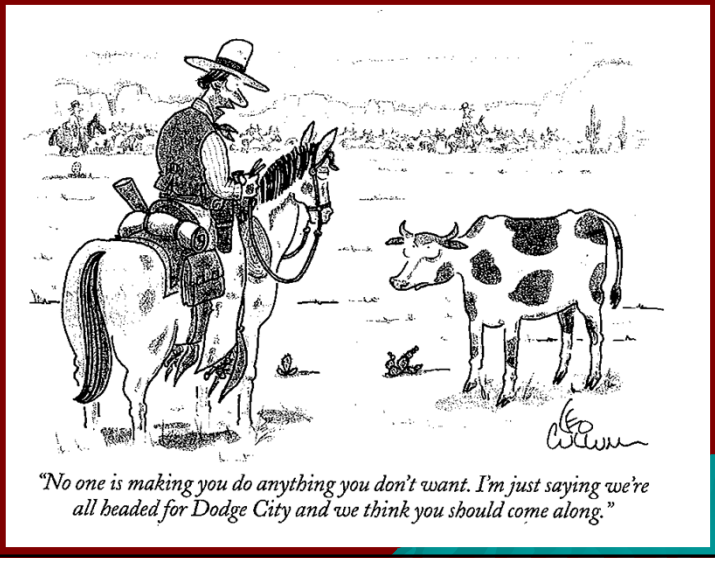
139

You Will Be Involved When You Serve on Faculty Curriculum or Assessment Committees

"I don't think it's a posse-it looks more like a subcommittee."

140

This Will Be Part of the Future for which You Are Preparing



"No one is making you do anything you don't want. I'm just saying we're all headed for Dodge City and we think you should come along."

Conclusion