Managing in an academic environment

James Balter
Overview

• In addition to managing in a clinic, academic environments provide both unique opportunities as well as challenges
  – Generally have larger staff than non-academic clinics with the same patient load
  – Often have lower salaries than peer institutions
  – Have missions that typically include teaching and research
Example – University of Michigan

- 5 Linear accelerators (6th being installed)
- 1 HDR suite
- 1 CT Simulator
- 1 MRI Simulator
- ~1500 patients treated per year
- ~70 staff in physics, including:
  - 15 Ph.D. physics faculty
  - 3 physics assistants
  - 3 research dosimetrists
  - Software development and maintenance staff
  - 4 physics residents
  - 9 physician residents (not in physics)
  - Numerous full-time and part-time students (medical, graduate, undergraduate) and post-doctoral fellows
  - No Medical Physics graduate program, but ongoing collaborations with several engineering departments involving Ph.D. research
Faculty

• Faculty have a mixed mission, with variable distributions of effort in areas such as:
  – Clinical support
  – Service and Leadership (local and national)
  – Teaching (RTT students, Medical Physics Residents, Physician residents, graduate students, undergraduate students)
  – Research

• While some patterns emerge, no 2 physicists have the same interests and mix of effort
Managing post-doctoral fellows

• Primary motivation is typically career advancement in some form:
  – Develop a research identity that can aid in seeking faculty positions (more recently outside of clinical medical physics areas)
  – Develop skills and visibility to enhance chances for entry into residency positions
  – Often a motivation is to initiate careers in the United States (work-related visa support)

• Need to attempt to understand motivation prior to hiring, as the impact of misunderstanding is significant to both faculty and postdoctoral fellow

• While a fellowship typically lasts 2-3 years, they are ideally structured as 1-year renewable contracts (provides a mechanism for adjustment when fellowships are not working well)
Managing post-doctoral fellows

• The faculty serve as a career development mentor
  – In exchange for research assistance, the postdoctoral fellows are in a position where they can be further mentored following their Ph.D. research
  – Example elements of learning/mentoring include
    • Assimilation of knowledge from the literature
    • Objective organization of original ideas
    • Understanding how to lead new science
    • Seeking new ideas and methods within and outside of existing research labs
    • Understanding mechanisms of funding and how to navigate a career that requires extramural support
Managing graduate students

- Graduate students are beginning a research career (or gaining advanced knowledge to support clinical training)
- The typical medical physics graduate student is seeking sufficient education to enter a residency program, but Ph.D. students are (or should be) further pursuing research projects under direct faculty supervision
Managing graduate students

• Typical Ph.D. students have a significant educational focus in their first 1-2 years
• During this period, smaller projects can be assigned to assess their motivation and skills
• Typically these projects should be highly constrained unless (until) the student shows a very proactive approach to research
Managing graduate students

- Following their basic coursework, students are mostly free to engage in research.
- While models vary, a relatively successful graduate student mentoring role involves encouraging idea development but not dictating specific research objectives (some funding requirements may require this to be more strict).
Student and postdoctoral research mentoring

• How closely should students and postdoctoral fellows be mentored, guided, or otherwise directed to perform research?
  – Concerns:
    • Learning independence versus potentially floundering with insufficient guidance
    • Adequate progress on a project with regards to external funding obligations
NIH Notice Number: NOT-OD-13-093

• NIH encourages institutions to develop Individual Development Plans (IDPs) for graduate students and postdoctoral researchers (including scholars, trainees and fellows, and individuals in other postdoctoral positions) supported by NIH awards by October 2014. The IDPs should be broadly implemented for all graduate students and postdoctoral researchers supported by NIH.
Some performance issues with students/postdocs

• Issues include:
  – Obstinance (whether right or wrong)
  – Limited motivation
  – Insufficient technical knowledge/ability
  – Lack of objectivity (and related skills to assess the perspective of their investigations)
  – ...

Managing Medical Physics residents

• Medical Physics residents have a primary objective of receiving clinical training as directed by CAMPEP guidelines

• In addition to clinical training, physics residents should ideally advance in:
  – Understanding the current and evolving literature relevant to their practice
  – Understanding how to navigate the (currently shrinking) job market
  – Understanding how to lead
Challenges with physics residents

• Underperformance
  – Not following through on educational objectives
  – Doing the least amount possible to follow guidelines

• Lack of knowledge depth/retention

• Lack of team engagement

• Ideally, a few layers of feedback will help, but also an annual renewable contract is a useful mechanism for failure to thrive
University resources

- Universities often provide resources to help develop leadership and management skills
Organizational Learning

Programs & Courses

Thanks to feedback from hundreds of class participants, HRD's curriculum has grown to include over 100 personal and professional development opportunities. These programs and courses are designed to be relevant—providing skills you can apply directly to your work—and reasonably priced. The instructors are knowledgeable and small class size creates more meaningful interactions and enhances learning.

Thank you for your interest in HRD. We look forward to serving you soon, because when you choose to learn, you choose success.

- Career Development
- Communication and Listening
- Conflict Management and Negotiation
- Customer Service
- Leadership Development
- Performance Management
- Presentation Skills
- Process and Organizational Management
- Project and Task Management
- Reading and Written Communication
- Self Development
- Supervision
- Team Development and Dynamics
- Time Management

NEW! for 2012-13 New Courses

HRD and ITS Partner for On-line Registration

A partnership between HRD and ITS has created an online course registration system that maintains a personal training history for every staff member. Named “My LINC” (My Learning and Information Center), it provides a single access point for online registration for both ITS and HRD courses and includes a category which continues to provide training, documentation, and communications for M-Pathways, eMploy, and the U-M Data Warehouse.
Leadership Development

- Developing Personal Leadership: Mastering the Art of Empowerment
- Advanced Personal Leadership
- Peer Leadership: Getting Results Without Authority
- Spark the Leader Within: How to be Better than Average
- Moving Mountains: How to Become an Agent of Change
- Capitalizing on Your True Leadership Talents: A New Model
- Leading Through Change and Transition (custom only)
- Delegating: Leading vs. Managing vs. Doing
- High Performance Leadership: Leading with Impact in all Situations
- Delegating for Results: Even When You're Not in Charge
- You, Inc.: Building Your Personal Leadership Brand

Daily Leadership 2
Curated by U-M HRD

Management is (Still) Not Leadership

After years of debate, people still confuse these ideas - at their peril.

Follow HRD's Scoop.it Topic: Daily Leadership

Developing Personal Leadership: Mastering the Art of Empowerment
Developing Personal Leadership: Mastering the Art of Empowerment

Your leadership style is characterized by the way you interact with your colleagues, supervisors, family and friends. Come to this session to acquire tools and strategies that will strengthen your leadership skills and further define your style.

You will learn to:
- Assess your personal leadership style quickly, accurately and privately
- Determine which areas of your style need refinement
- Assess candidly the influence your personality has on others
- Recognize ways to lead through “empowerment” not power

You will benefit by
- Gaining respect and appreciation from those with whom you interact
- Experiencing a sense of personal growth
Moving Mountains: How to Become an Agent of Change

Some say that you cannot change others. While that may be true, there are many skills that can be used to foster change in other people. In this session you will learn how to understand change and build skills to become an agent of change.

You will learn to:
- Apply strategies to identify and address the four types of change resistance
- Identify exactly where the change process is stuck so you can push it forward
- Apply the key ingredients for influencing change to make the process go smoother
- Use a strengths-based model to help assist the change process within you

You will benefit by:
- Knowing why individuals do or do not resist change in your organization
- Identifying when and how to use your power to insist on change
- Understanding what you need to change before you ask it of others

Audience:
- Managers and leaders looking to build positive, energized, and productive teams
Conflict Management & Negotiation

- Conflict Management: The Fundamental Skills
- Conflict Management Skills for Women
- Working With Difficult People and Personalities
- The Workplace Success Advantage: Building Your Emotional and Social Intelligence (ESI)
- Crucial Confrontations™
- Using Your Mediation and Negotiation Skills
- Strategies for Dealing with Power Struggles in Your Life: Rethinking the Tug-of-War
- From Verbal Combat to Consensus: The Gentle way to Earn a Black Belt in Communication

Conflict Management: The Fundamental Skills

The first step in resolving conflicts successfully is having a knowledge of—and ability to—use basic conflict resolution skills. This class provides the foundational skills for resolving conflict in any situation.

You will learn to:

- Recognize your natural conflict-handling style
- Identify the major causes of conflict
- Determine when “solution thinking” contributes to ongoing conflict
- Use appropriate interpersonal skills to communicate effectively during conflict
- Identify ways to manage your emotions during conflict

You will benefit by:

- Handling conflict with greater ease
- Optimizing outcomes in conflict situations
- Gaining confidence in resolving conflict

Audience:

Anyone needing to improve their conflict management ability

Recommendation for Course Preparation:

Take this class in conjunction with Advanced Conflict Management: Dealing with the Source of the Conflict to raise your confidence and ability to successfully resolve conflict.
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Working With Difficult People and Personalities
Overcoming the stress experienced when interacting with “difficult” people is a challenge. By focusing on personalities and behavioral styles, this course outlines a positive approach to working around these personality conflicts.

You will learn to:
- Identify categories of difficult people and why you perceive them that way
- Find coping strategies to effectively deal with difficult people and personality conflicts
- Prevent the development of problematic relationships
- Identify the source of a dispute and determine what to do about it
- Identify ways to effectively deflect the hostility of others

You will benefit by:
- Expanding your knowledge of personality types and interpersonal relations
- Utilizing skills acquired to diffuse personality conflicts that may arise
- Gaining confidence in handling tough situations
- Maintaining composure and professional language in “hot” situations

Audience:
- Anyone wanting to be more effective at handling their emotions when dealing with challenging people and situations

Program Note:
Participants will receive a copy of the bestselling book *Dealing with People You Can’t Stand: How to Bring Out the Best in People at Their Worst* by Dr. Rick Brinkman and Dr. Rick Kirschner
Questions?
Extra/old slides
Conflict Management Skills for Women
There is no denying that women and men handle conflict differently. For women, understanding the root causes of conflict and knowing how to cope with the anger and emotions are key elements of managing conflict. Learn powerful conflict management strategies that will allow you, as a woman, to handle difficult situations with poise and confidence.

You will learn to:
- Practice techniques that prevent resentment and unresolved anger from damaging an important relationship
- Adopt practices to stop people from taking advantage of you
- Apply strategies to banish anger and frustration when dealing with difficult people
- Utilize tools that will enable you to be more assertive on important issues

You will benefit by:
- Building your confidence when setting limits and boundaries with others
- Becoming more comfortable expressing yourself without accusation, sarcasm, or hostility
- Increasing your ability to diffuse confrontation so that constructive resolutions are achieved

Audience:
- Women who want to turn conflict into resolution
The Workplace Success Advantage: Building Your Emotional and Social Intelligence (ESI)

Research has shown that high levels of emotional and social intelligence (ESI) are twice as important as technical skills in the job performance of individuals and teams. While it may sound soft and fuzzy, emotional/social intelligence is critical in managing and collaborating to drive results.

You will learn to:

- Evaluate your current personal level of emotional and social intelligence
- Identify various emotional signals that can affect your interactions with others and how their behaviors or emotions may impact you
- Recognize how competencies like resilience and adaptability drive performance
- Find effective ways to channel emotions constructively during conflict to achieve collaborative outcomes
- Apply the 18 ESI competencies to successfully build on your strengths
- Recognize the importance of empathy to better understand and motivate others

You will benefit by:

- Understanding how effective managers apply ESI and how you can use it to become star performer
- Enhancing your awareness of your strengths and weaknesses through emotional intelligence training
- Increasing your ability to influence by leveraging your understanding of others and your knowledge of the organization to build strong collaborative relationships

Audience:

Leaders and professionals who want to increase their business and personal effectiveness by understanding and building their emotional intelligence
**Crucial Confrontations™**

Confrontations are about that in-the-moment accountability. Developed by VitalSmarts®, Crucial Confrontations™ teaches a straightforward step-by-step process for identifying and resolving performance gaps, strengthening accountability, eliminating inconsistency and reducing resentment.

**You will learn to:**
- Use a step-by-step process for holding anyone accountable for their performance, no matter their power, position, or temperament
- Demonstrate how to master discussions to get positive results and maintain good relations by staying focused on the real issues and avoid getting distracted
- Find ways to motivate without using power by clearly and concisely explaining specific, natural consequences to permanently resolve problems
- Identify and avoid roadblocks to performance by creatively helping others to avoid excuses, stay on track, and resolve performance barriers

**You will benefit by:**
- Seeing better results when faced with confrontation
- Not succumbing to the pitfalls of avoiding confrontation with others
- Managing the expectations and, therefore, the performance of others

**Audience:**
Anyone wishing to improve their conflict management skills
Using Your Mediation and Negotiation Skills
Knowing how to mediate conflict and negotiate with others are key skills to help maintain a positive and productive work environment. In this session, you will gain skills to improve your daily results when handling negotiations and managing conflict.

You will learn to:
- Choose among over 25 specific negotiation tactics and counter-tactics to better handle negotiations
- Identify the most effective negotiation assumptions and methods
- Use the six steps in planning to be better prepared to negotiate

You will benefit by:
- Understanding your preferred conflict management approaches
- Practicing application of the principles through a mediation simulation
- Improving your ability to handle negotiations and manage conflict

Audience:
Anyone who would like to successfully negotiate and manage conflict
Strategies for Dealing with Power Struggles in Your Life: Rethinking the Tug-of-War

Power can be a motivator for doing things and, therefore, power struggles can happen in all relationships. In this session, you will learn how to avoid the pitfalls of power and turn them into powerful resolutions with others.

**You will learn to:**
- Recognize the dynamics of power at work and in personal relationships
- Assess your style of reacting to power struggles
- Determine the best strategies for responding to unreasonable power issues, like bullying and passive-aggressiveness
- Write a personal “how-to” guide to help you alter a situation that gets you stuck in a power struggle script

**You will benefit by:**
- Knowing your strengths and weaknesses when you approach power struggles
- Differentiating between reasonable and unreasonable power exchanges
- Learning how to integrate and apply strength, optimism and assertiveness in your personal approach

**Audience:**
Anyone wanting to learn how to manage power struggles with others more successfully
From Verbal Combat to Consensus: The Gentle way to Earn a Black Belt in Communication

It’s difficult to stay calm and focused when engaged in a heated or difficult conversation, especially if you’re trying to influence the other person’s behavior and they’re not listening. Based upon the concepts developed by best selling author, Dr. George Thompson, in this session you will learn techniques to increase your ability to resolve these situations.

You will learn to:
- Summarize a concrete, 5 step process to lower others’ resistance
- Find ways to change your own behaviors to increase others’ compliance
- Identify the 5 basic desires of human interaction that fuel difficult situations
- Distinguish the difference between natural language and tactical language
- Formulate a plan for removing your ego from the conflict

You will benefit by:
- Choosing appropriate springboard and deflection statements to lower resistance
- Using techniques to assist in lowering the need to react to others’ comments and behaviors
- Creating a more supportive environment for resolution of difficult situations

Audience:
Anyone who is interested in advanced techniques for conflict resolution or decreasing resistance and increasing compliance from others
Managing graduate students

• Challenges
  – Support for infrastructure
    • Faculty salary, equipment (which may be broken by students), access to machines are part of the infrastructure costs
    • Space for students is also necessary
Managing graduate students

• Challenges
  – Funding for full period of student support
    • M.S. students generally pay tuition
    • Ph.D. students generally need support for 3-6 years
      – Teaching assistants (rare)
      – Graduate student research assistants (more common)
  • Support mechanisms include
    – Research grants (individual faculty)
    – Training grants
    – Individual grants
  • Typically the first 1.5-2 years of early student effort leaves little time for research, or to assess individual skills for research, but still requires funding
Managing graduate students

• Challenges
  – Mentoring and teaching
    • A program has to be maintained for supporting the teaching mission of a graduate program
    • Faculty teaching requires time (most medical physics programs have faculty that teach part time and have clinical and/or research duties otherwise)
Physician residents

• Physicians in training require medical physics education
  – ASTRO recommendations (need ref here)
  – ABR requirements
  – NRC requirements for license

• Typically little time is protected outside the classroom setting for studying/homework, etc.
Physician residents

• Programs for physics education of physicians need to be developed and maintained separately from those for graduate students
  – Needs of physicians are different
  – Skill sets are different as well
  – No reason to convince physicians as to how complex physics is – they already know 😊
• Resources (faculty time) need to be allocated for teaching, curriculum maintenance
• At Michigan, part of the medical physics residency training requires the physics residents to be teaching assistants for other classes (in our case MD classes as well as separate RTT classes)
Managing Medical Physics residents

- Residents can provide some clinical effort (supervised), and a stable residency program typically offsets faculty effort in resident training by service provided by residents (in Michigan, the residency is offset in part by providing routine machine calls, dosimetry and QA/commissioning support)
Medical Physics residents

• In addition to clinical training, physics residents should ideally have support for:
  – Understanding the current and evolving literature relevant to their practice
  – Understanding how to navigate the (currently shrinking) job market
  – Understanding how to lead

• Ideally one or more faculty members with a strong teaching mission will have protected time to direct the residency program
Foundations of Supervision I: Maximizing Performance

This program provides the essential information to develop and manage successful employee performance and effective fiscal and resource management.

Modules include:
- The Role of U-M Supervisors
- Developing Employee Performance
- Employee Selection Process
- Workload and Resource Management
- Performance Coaching
- Managing Difficult Performance Issues
- Financial Responsibility
- Concluding Day Presentations

Who should attend: Supervisors with less than 5 years of supervisory experience or those who are new to supervision at U-M