Research Team Leadership

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Who might be on your team?

You

Other faculty *(here at UC or elsewhere)*
Staff *(departmental or in your group)*
Undergraduate students
Graduate students
Post-doctoral fellows

Amy will talk about collaboration and communication, but I would like you to think about how to deal with this heterogenous group
What are the minimal characteristics of a good team?

- Everyone knows their role and responsibilities
- The group meets regularly to share information
- Everyone is professional (courteous and considerate)
  - E.g. No one slows anyone else down by leaving a mess in the lab
What are the desired characteristics of a good team?

• Everyone is invested in success
• Everyone is engaged
• Communications among team members occur spontaneously and frequently
• Constructive criticism is expected and welcomed
• Personalities and ambitions synergize to make a fun environment
What does the team leader need to do to support the team?

- Empower and inform those on the team
- Be inclusive in discussing new ideas and approaches
- Keep everyone in their lanes (avoid mixing/diluting responsibilities)
- Keep expectations on track
- Keep everyone equally accountable (no favorites)
- Learn what motivates each individual on the team
What attitudes should the team leader emphasize?

It depends on the strengths and weaknesses of your team, and their motivational basis

- Excellence?
- Speed?
- Fame?

You might have to emphasize different themes to optimize progress, so here are some examples....
What attitudes should the team leader emphasize?

These could be of higher importance when the motivator is “speed” and you have to combat the sloppiness that comes with rushing…

• Safety is more important than progress

• Thinking saves time

• Progress requires careful notes, proven reproducibility, and systematic advancement

• Mistakes are fine, but you must learn from them and move on
What attitudes should the team leader emphasize?

* Or if the motivator is “fame” or “excellence”…

* Everything should be shared among team members (data, equipment, ideas, credit)

* Sharing your results with other team members is the best way to think through the meaning of outcomes and get new ideas

* High expectations should be more exciting than stressful

* Imperfect experimental outcomes are the tool that leads to better experimental design
• Less confident and less experienced
• More likely to get stuck in between two conflicting opinions/ideas/people
• Need help/advice on navigating between team members
• Need advice on hierarchy and communications
Professional Development for all trainees

http://grad.uc.edu/
Professional Development for all trainees

http://grad.uc.edu/student-life/grow.html

**Individual Development Plan**
A strategic tool to guide students through career and professional development.

**Donuts and Development**
This yearly event is a one-stop shop to visit various professional development groups, offices and courses across the university.

**Campus Resources**
Offices across campus provide professional development opportunities for graduate students such as writing assistance, teaching guidance, job search help, and more!

**Preparing Future Faculty**
A graduate certificate program in modern teaching and learning; offers rich mentoring experiences to strengthen career skills!

**Graduate Student Expo**
A yearly event that showcases graduate student research, scholarship and creative works.

**Workshops**
Workshops supplement a student's academic training by providing brief, specific skill-building sessions on professional and personal development.
Support for graduate students

http://www.uc.edu/cetl/gate.html  GATE = Graduate Association of Teaching Excellence. Student-run group providing teaching advice and workshops.

http://www.uc.edu/aess/lac/writingcenter/grad.html  Graduate Writing Center. Get help with writing challenges faced by all young professionals.

https://www.uc.edu/gsga.html  GSGA = Graduate Student Governance Association. Travel awards! Fellowships! Peers!
UC averages around 150 Postdocs and 50 Visiting Scholars.

Currently, no formal required programming on West Campus. There is programming on East Campus. There is a proposal from the Research Advisory Board to the VPR to change this.

NSF requires a mentoring plan for all proposals that fund Postdocs who are not included as Senior Personnel on the grant.

The NSF mentoring plan must be no more than one page and can include activities such as:

- Career counseling
- Training in preparation of grant proposals, publications, and presentations
- Guidance on ways to improve teaching and mentoring skills
- Guidance on how to effectively collaborate with researchers from diverse backgrounds and disciplinary areas
- Training in responsible professional practices
The U.S. Council of Graduate Schools studied what employers value in graduate students.

They are:

- Advanced content knowledge
- Ability to analyze and synthesize data or information
- High-level skills to examine & solve complex problems
- Creative intellect to inspire innovation and drive discovery

You have to foster these talents by working closely, and sometimes things don’t always go as planned. What to do then?
Managing a deficit

No one is perfect

Identifying the deficit **EARLY** gives everyone time to adjust and compensate while minimal damage has been done and communications lines stay open.

- Realign a project to suit everyone better and invest time
- Meet regularly and talk frankly about challenges
- Work hard and smart to restore enthusiasm and optimism
- Share/review things in writing so no one forgets or misunderstands (selective hearing loss)
Consistent concerns

Identifying the deficit **LATE** means adding some more ways of compensation to balance deeper concerns and strained communications

• Get help if you need it to bridge the gap (mediators, alternate mentors)

• Salvage what you can from the investment you have made (smaller papers, lowered ambitions)
Managing a deficit

It is the centerpiece of the relationship

A deficit is **TERMINAL** when it degrades performance and every communication is problematic

- Always keep it professional: be fair, calm, and constructive
- Get advice on how to handle situations
- Develop an exit strategy and timeline that meets everyone’s needs
A roadmap to avoid potholes with any team member

Be aware, open, and talk

- Clarify expectations of how time is invested
- Set up regular meetings and expect robust, challenging discussion
- Come to meetings prepared, with talking points (data/ideas, questions)
- Make it easy to get and give formative feedback
- Share one personal item in each meeting. Help the other person understand you and your goals
The advice I would give to someone is to not take anyone's advice. *Eddie Murphy*

Good advice is something a man gives when he is too old to set a bad example. *Francois de La Rochefoucauld*

**Enough Advice…**

**Wise men don't need advice. Fools won't take it. *Benjamin Franklin***

Remember this, folks - I am a Hillbilly, and I don't always bet the same way I talk. Good advice is one thing, but smart gambling is quite another. *Hunter S. Thompson***

I hate to advocate drugs, alcohol, violence, or insanity to anyone, but they've always worked for me. *Hunter S. Thompson***

**Lets work on situations**
A paper is planned which will include data from Teri and Peter. The leader of this project was Teri, but now Peter has added some crucial data and is insisting he should be first author. Everybody is getting testy.

Your team has divided up the work on a project throughout the weekend, and can barely handle all the things that need to get done. Then one of the members announces that their religion will not let them work one day that weekend, and the rest of the team now wants to bail out of the weekend work. It will cost the project $900 and 3 weeks delay.

Both Chip and Amy want to attend a meeting to go on the job market for a postdoc. Chip’s part of the project gets stalled while Amy’s part goes great, so only Amy can justify going to the meeting. Amy is bragging about it.
Thank you!

Questions?

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