Zen and the Art of Choosing a Graduate Advisor

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The points stated are mine, and do not represent the views of anyone but myself

Everything that I say may be wrong!
Why am I Here?

Advising graduate (Ph.D.) students is the best reward for being an academic in a research university.

 Graduate students represent the human product of academic research efforts.

 Graduate students represent the future of our profession.
Am most effective with students who wish to become academics.

Have graduated 20 Ph.D. students and am currently advising 3 Ph.D. students

* 5-6 is my steady state.

Graduate student (Ph.D.) advising is the best part of being an academic in a research institution.
Graduate Students

An important element in a faculty member’s success.

Graduate students are the “oil” that makes the research engine run smoothly and efficiently.

Everyone’s success (graduate students, faculty, department, college, university) is inextricably intertwined.
Research

Doing good research is a challenge.

Learning how to do research is one of the goals of Ph.D. studies.

Research is a process (problem identification, conjectures, testing, analysis, results, impact).
What do Graduate Students Want?

Funding $$$.

Interesting research to work on.

Recognitions and a position upon graduation.
What do Faculty Want?

Bright, hard-working, productive and committed students to work on their research.

Measurable research outputs (papers).

Academic career recognition and success.
Is Area Important?

Explore two or three areas during your first year.

Talk to professors across different areas.

The “good” is the enemy of the “better”, which is the enemy of the “best.”
Keep Your Priorities

Getting your PhD is a marathon, not a sprint.

Take care of all areas of your life:
- Mental
- Physical
- Social/Emotional
- Zen
Picking an Advisor: A Matching Problem

ALL people have a *style* of how they do research (technical, intuitive, creative, plodding).

ALL advisors have a *style* of how they direct research (hands off, micro-managers, group meetings, individual meetings).
Hedgehogs versus Foxes

Hedgehogs
- Highly focused / Linear thinkers
- Good at producing measurable outputs
- Excellent closers.

Foxes
- Broadly focused / Nonlinear thinkers
- Highly creative / Good intuition
- Excellent initiators.
Hedgehogs versus Foxes

Most criteria for graduate school admission reward hedgehogs (some even penalize foxes).

Everyone (students, advisors) has a combination of hedgehog and fox tendencies (one is typically dominant).

Advice: If you are a hedgehog (fox), choose an advisor who is a fox (hedgehog)
Criteria When Choosing an Advisor

Will the graduate student become a better person with this advisor?

Corollary

Will the advisor become a better person with this graduate student?
Goals for my Graduate Students

Do the highest quality research
Publish the highest quality papers
Win the most prestigious national awards
Get the best possible position

My Job: Help them achieve all these goals
Awards my Graduate Students Have Won

INFORMS George E. Nicholson Student Paper Competition (Honorable Mention).
INFORMS College on Simulation Women and Minority Award
INFORMS Computing Society Student Paper Competition (Runner-Up)
INFORMS Transportation Science & Logistics Dissertation Prize (Honorable Mention)
INFORMS Innovations in Analytics Award Semi-finalist)
INFORMS Section for Public Programs, Services and Needs, Best Paper Award (Finalist)
IIE Pritsker Doctoral Dissertation Award Competition (First Place, Second Place, Third Place)
IIE Graduate Research (Master's Thesis) Award Competition, (First Place, Second Place)
IIE Gilbreth Memorial Fellowship
VT Paul E. Torgersen Graduate Student Research Excellence Award (Second Place)
AAUW Postdoctoral Research Leave Fellowship (Runner-up)
UI Ph.D. Thesis Initiation Fellowship, Program in Arms Control, Disarmament, & International Security
UI M&IE Alumni Teaching Fellow (2)
UI M&IE Harper Safety Award (2)
UI COE Mavis Graduate Fellowship (2)
UI CS Grad Expo Top Team Presentation
UI CS Outstanding Graduate Research Project
FAA / U.S. DOT Graduate Research Award Program on Public-Sector Aviation Issues
AFOSR Graduate Student Summer Research Fellowship Award.
National Science Foundation Graduate Fellowships (2)
NDSEG Graduate Fellowships (2)
Questions for my Graduate Students

What are we doing today to make our research group the best in the field?

How can I help facilitate this goal?

How can we make the world a better place?
Two Secrets for Success
The Final Secret

Pass it Forward

Dentist story
What Does all this Mean?

The processing of “passing it forward” helps both the “receiver” and the “passer”.

The advisor / advisee relationship will be one of the most important relationships in your academic career (and beyond….).

Research style compatibility is imperative (hedgehogs, foxes) in making successful passes and receptions.
Penultimate Comment

A good advisor is worth their weight in gold.

Go forth, and strike it rich!
Final Comments

Good luck in your decision to choose a graduate school. We want you to make the best choice that is right for you.

Wherever you decide, we know you will be splendidly successful in all your pursuits.

Thank you for visiting us @ Illinois. Enjoy the rest of your visit with us.
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