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# Zen and the Art of Choosing a Graduate Advisor

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# Disclaimers

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

Everything that I say may be wrong!

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# 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.

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# Personal Information / Biases

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.

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# 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.

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# Research

Doing good research is a challenge.

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

Learning how to do communicate research is another goal of Ph.D. studies.

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# What do Graduate Students Want?

Funding \$\$\$ (need to eat and pay rent!)

Interesting research to work on.

Recognitions and a position upon graduation.

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# 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.



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# 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.”

Think of it like sampling from a lunch buffet  
(i.e., lots of options, many choices)

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# 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.

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# How are you currently funded?

- \* Fellowship (100%, supplement)
- \* Teaching Assistantship
- \* Research Assistantship

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# Academic Dating

Think of choosing an advisor like you think about dating.

- \* Is he/she right for me?
- \* Do we have common (intellectual) interests?
- \* Do we enjoy the time we spend working together?
- \* Are there personality conflicts?

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# What this Means for You

Having a Fellowship / Teaching Assistantship allows you to “date”.

Having a Research Assistantship commits you to a professor for one year.

**Advice #1:** You should continue to “date”

RA = Professor wants to “date” you and to try it out.

You also have a say!

\* Do you want to date them, or someone else?.

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# Common Misconceptions

Q1: A faculty is funding me. Does that mean that they are my advisor?

A1: Perhaps. They are funding you to hopefully entice you to join their group. After a year, they may decide that you are not a good fit, or you may decide that another faculty is a better fit for you.

Q2: If I choose another advisor, will I not have any funding?

A2: No. All faculty have access to funding. The most important issue is to find an advisor that you are compatible with and who will help you to reach your full potential.

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# Common Misconceptions

Q3: If I meet another professor who I would prefer to work with and serve as my advisor, will the current professor I am working with be angry?

A3: Perhaps. If the current professor who is funding you is happy with you and your work, they would prefer for you to stay with them. However, your well being is the top priority, and a good advisor understands this. The key is open communication, which minimizes any hurt feelings.

Q4: I like my advisor, but he/she decided that they cannot advise me anymore. Will I need to leave the program?

A4: No. Advisee/advisor incompatibility occurs. That is why it is useful to keep lines of communication open with several faculty.

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# 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 advise and  
direct research (hands off, micro-managers,  
group meetings, individual meetings)



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# Hedgehogs versus Foxes

## Hedgehogs

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



## Foxes

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



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# Hedgehogs versus Foxes

Most criteria for graduate school admission reward hedgehogs.

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

**Advice #2:** If you are a hedgehog (fox), choose an advisor who is a fox (hedgehog)

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# Question to Ask When Choosing an Advisor

Will you become a better **person** with this  
advisor?

## Corollary

Will the advisor become a better **person** with you?

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# Things to Consider When Picking an Advisor

Goals

Recognitions / Awards

Priorities

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# Graduate Student Goals

Do the highest quality research

Publish the highest quality papers

Win the most prestigious national awards

Get the best possible position

**Advisor's Job:**

**Help you achieve all these goals**

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# 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)

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# 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?

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# Two Secrets for Success



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# The Penultimate Secret

## Just Show Up!



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# The Final Secret

## Pass it Forward



Dentist story

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# Key Take-Aways

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

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

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

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# What This All Means?

Picking an advisor is like dating.

You both have a say in the choice.

\* The Secretary Problem (CS481)

Getting a PhD is a marathon, not a sprint

\* Having the right advisor for you will help you finish the race and realize your full potential.

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# Final Comment

A good advisor is worth their weight in gold.

**Go forth, and strike it rich!**

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