

You're Mentoring a Summer Student—Now What?

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Roadmap

Model for setting, communicating, and negotiating expectations

Identify your expectations

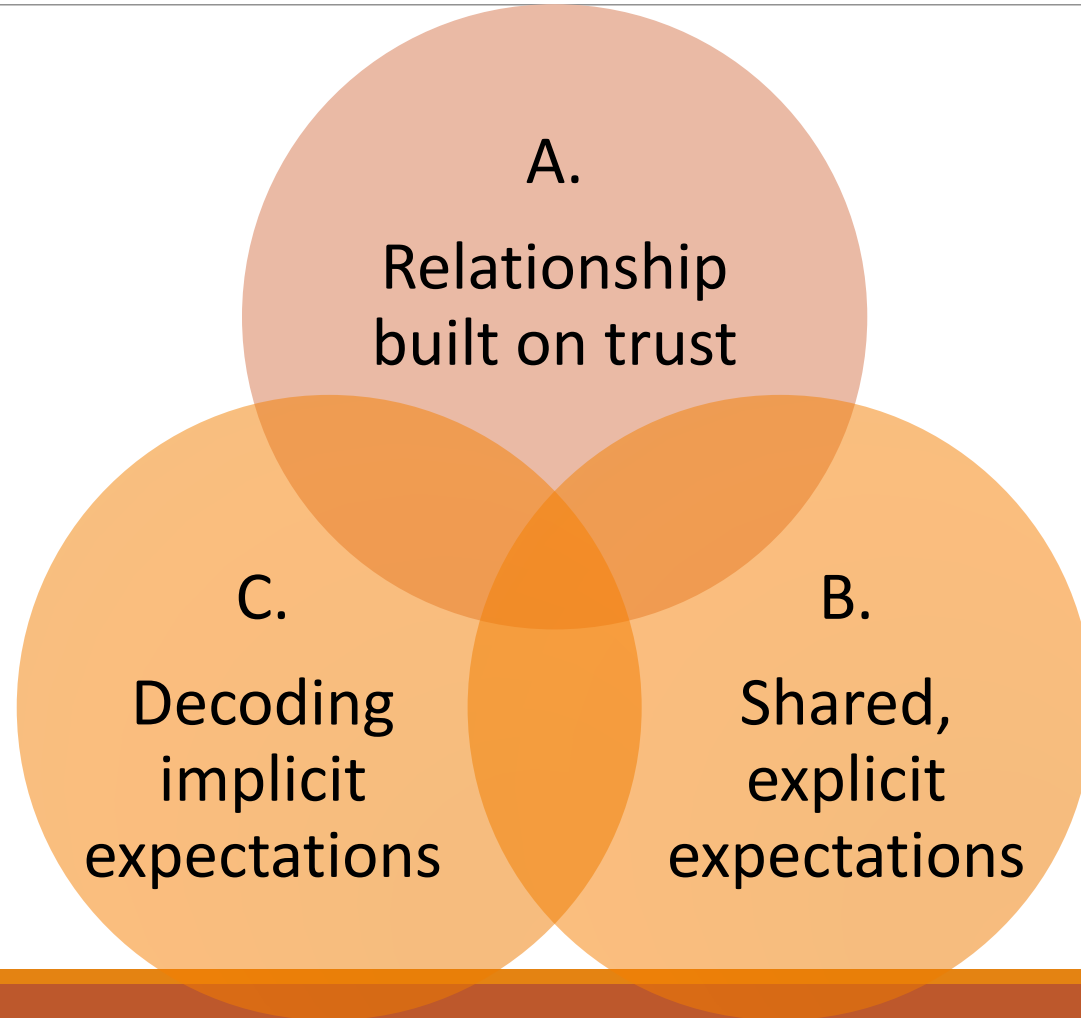
Share program expectations

Strategies

Think and Discuss

- Think about the past mentors you've had
 - What characteristics, skills, actions made them a good/effective?
 - What didn't they do well?
 - How have your past mentors shaped your idea of how you want to mentor?

Setting, communicating, and negotiating expectations





TRUST



TRUST



What are some examples of how your own mentor(s)

a) fostered trust?

b) hindered trust?

Conversation starters for building trust

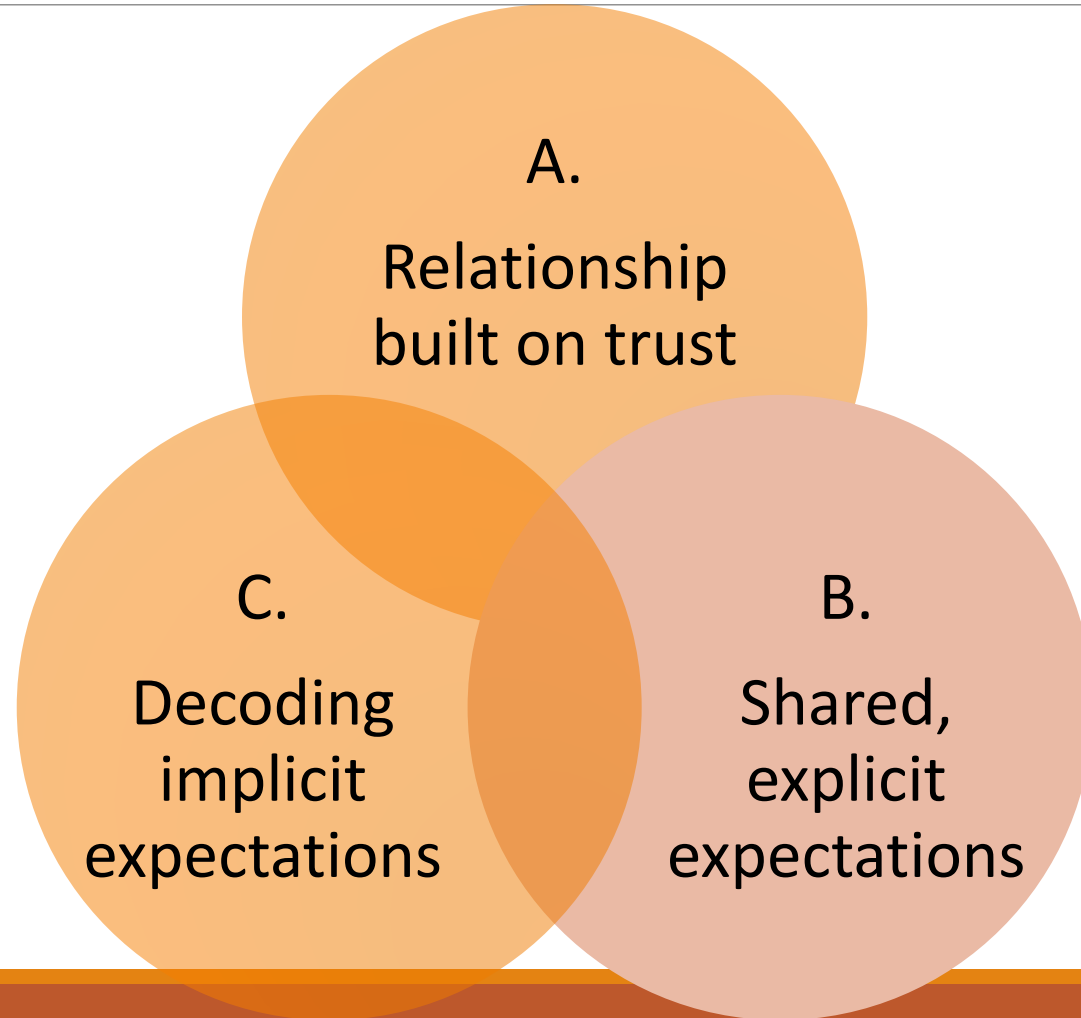
Questions for Mentees:

- How did you become interested in this research?
- What are your future academic and/or career plans? How will this experience help you reach your goals?
- What would success this summer look like to you? Both from a research perspective and a personal growth perspective?
- Do you have any previous research experience? If so, what did you do? What did you like about it? What did you dislike about it?
- How do you learn best (e.g., hands-on experience, reading literature about a topic, verbal explanations, process diagrams, etc.)?
- Do you prefer to work alone or in groups? What kind of group or collaborative work experience have you had?
- What did past mentors do that you found particularly helpful? What wasn't helpful?

Questions for Mentors:

- How did you get to where you are now? Did you do research as an undergraduate? Talk about that experience.
- Why have you chosen to be an undergraduate research mentor? What do you hope to gain from this experience?
- What would success in this summer look like to you? What skills (technical, professional) should your mentee develop?
- Who are the people who work in your group? What are their responsibilities and how should your mentee expect to interact with each of them? What are the proper channels of communication?
- How many hours per week do you expect your mentee to work in the lab? Are there specific times of day that you expect your student to be in the lab?
- What is your mentoring style? How do you prefer to help students learn to conduct research? Is there a process that you normally follow?

Setting, communicating, and negotiating expectations



Shared, Explicit Expectations



Expectations: Program

Through their participation in an undergraduate research project, students will be able to:

- develop a research question, problem, or design;
- apply basic principles and knowledge found in the literature related to the research question;
- develop a research proposal to address or resolve a specific research question or problem;
- apply and evaluate methodology throughout project;
- collect, interpret, and critique data in order to resolve a research question or evaluate a design;
- communicate research findings; and
- appreciate what the process of scientific research entails in a specific field.

Expectations: Students

10-week, full effort

Attend mandatory trainings provided by SFP or JPL EO

Participate fully in the life of the research group

Complete educational requirements

- Interim reports
- Abstract
- Final report
- Final presentation

Expectations: Mentors

- Be present!
- Encourage and guide students toward intellectual ownership of project
- Include student as a colleague in all aspects of research and group life
- Provide advice, encouragement, guidance, and wisdom
- Practice clear communication around expectations, project outcomes, and lab/group culture
- Lead student to develop new ways to approach problems
- Discuss academic and professional paths
- Assist student with preparing reports and presentations

What's important (2007)

	Co-Mentor Response	Student Response
Interacting with professor	44% important to very important	77% important to very important
Interacting with co-mentor	<i>Didn't ask</i>	79% important to very important
Interacting with group	67% important to very important	55% important to very important
Finishing project	63% important to very important	74% important to very important
Developing career aspirations	73% important to very important	65% important to very important
Producing publishable data	36% somewhat important	58% somewhat important
Being happy in lab	77% important to very important	76% important to very important
Being able to ask for recommendation	<i>Didn't ask</i>	70% important to very important

What are your expectations?

What are your expectations?

- For your mentee
- For the project
- For yourself

Strategies for setting shared, explicit goals

Discuss the project in terms of major goals or expected outcomes and link project to your larger research goals or the goals of the research group.

Discuss the summer period in terms of academic, professional, or personal goals that your mentee might have in addition to the research goals.

Share expectations in terms of personal and group work style, expected professional behaviors, etc.

- What are the ground rules for appropriate behavior (i.e. work hours, response time to emails, sharing of information, etc.)

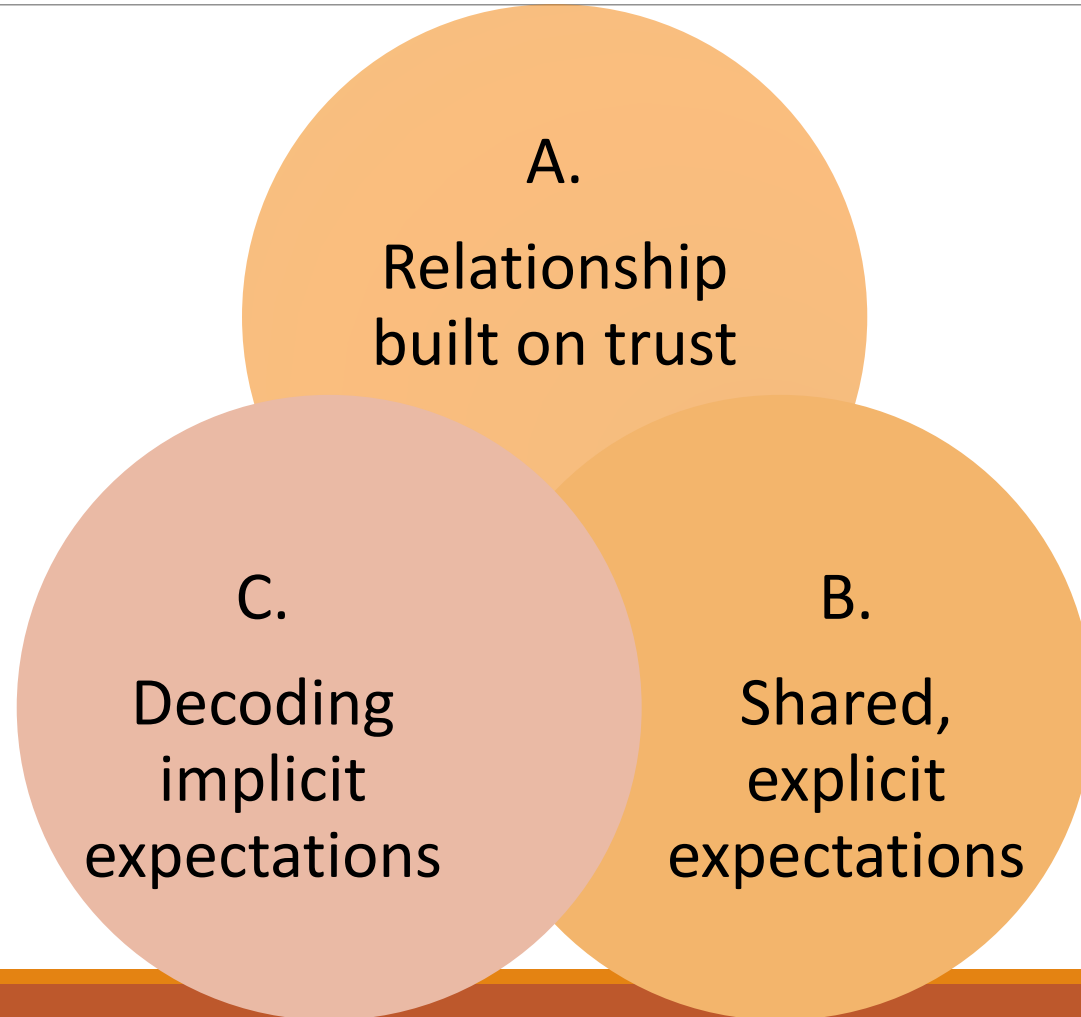
Based on this, identify what your mentee needs and what you need to do to help them be successful.

Help establish a realistic timeline and priorities.

Check for understanding and agreement.

Establish times to check in and see how things are going with both the research and the process.

Setting, communicating, and negotiating expectations



Decoding Implicit Expectations



JORGE CHAM ©THE STANFORD DAILY

“But I Don’t Like Beer”

Group “beer night”: What might a newcomer wonder?

- Who can go? How do invitations work?
- Is it ok to not go? To go sometimes?
- What if I can’t or don’t drink?
- Is it social? Is it work?

http://mlkscholars.mit.edu/wp-content/uploads/But-version_nonchem_Aug2012.pdf

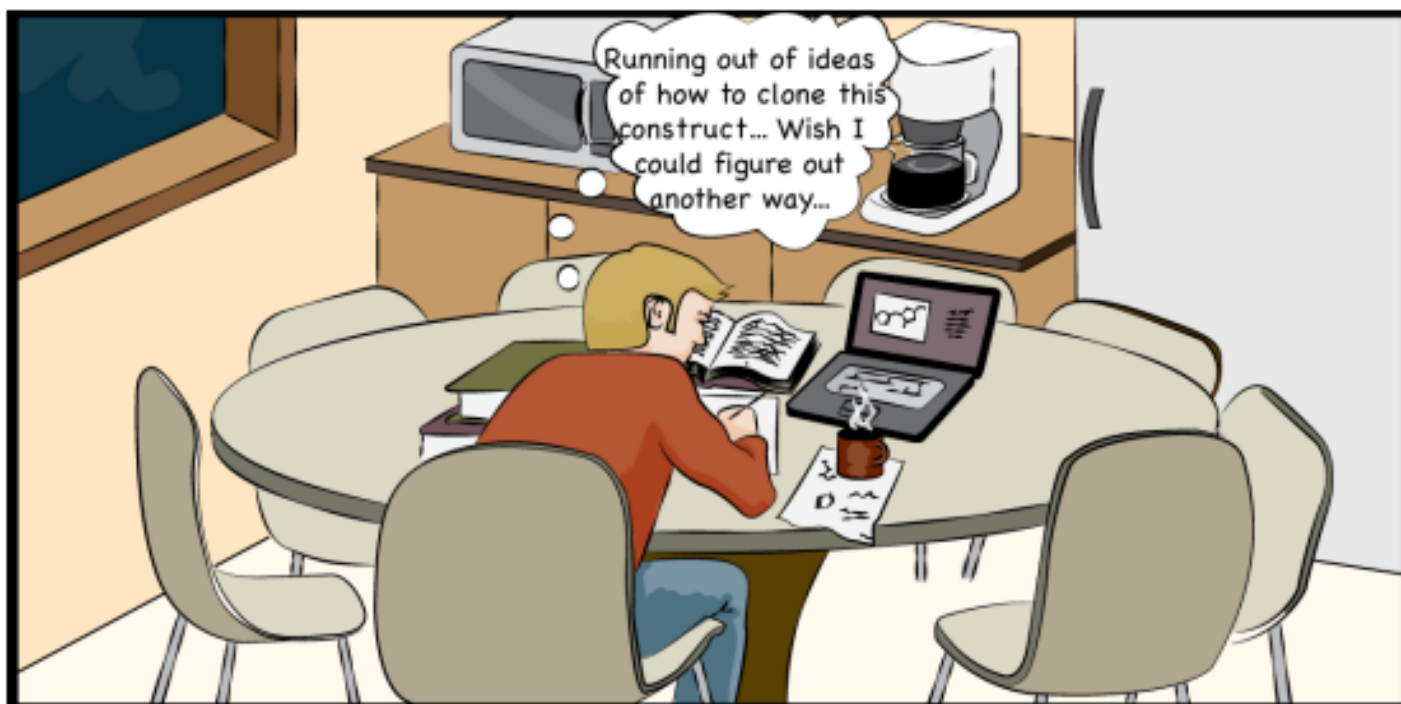


“But I Don’t Like Beer”

Group “beer night” may actually be:

- Informal; all welcome
- No invitation needed
- No expectations to attend or drink
- A helpful place to talk about ideas

[http://mlkscholars.mit.edu/wp-content/uploads/But-I-don t-like-beer MIT-version nonchem Aug2012.pdf](http://mlkscholars.mit.edu/wp-content/uploads/But-I-don-t-like-beer_MIT-version_nonchem_Aug2012.pdf)



BRAINSTORM:

What aspects of your local research culture would be difficult for a newcomer to figure out?

Group Culture: how the group works and communicates, including traditions, social/professional norms, values, symbols, etc.

Roles and Responsibilities: what individuals in the group do and how best to work with/approach them (including insight into their pressures, timelines, etc.)

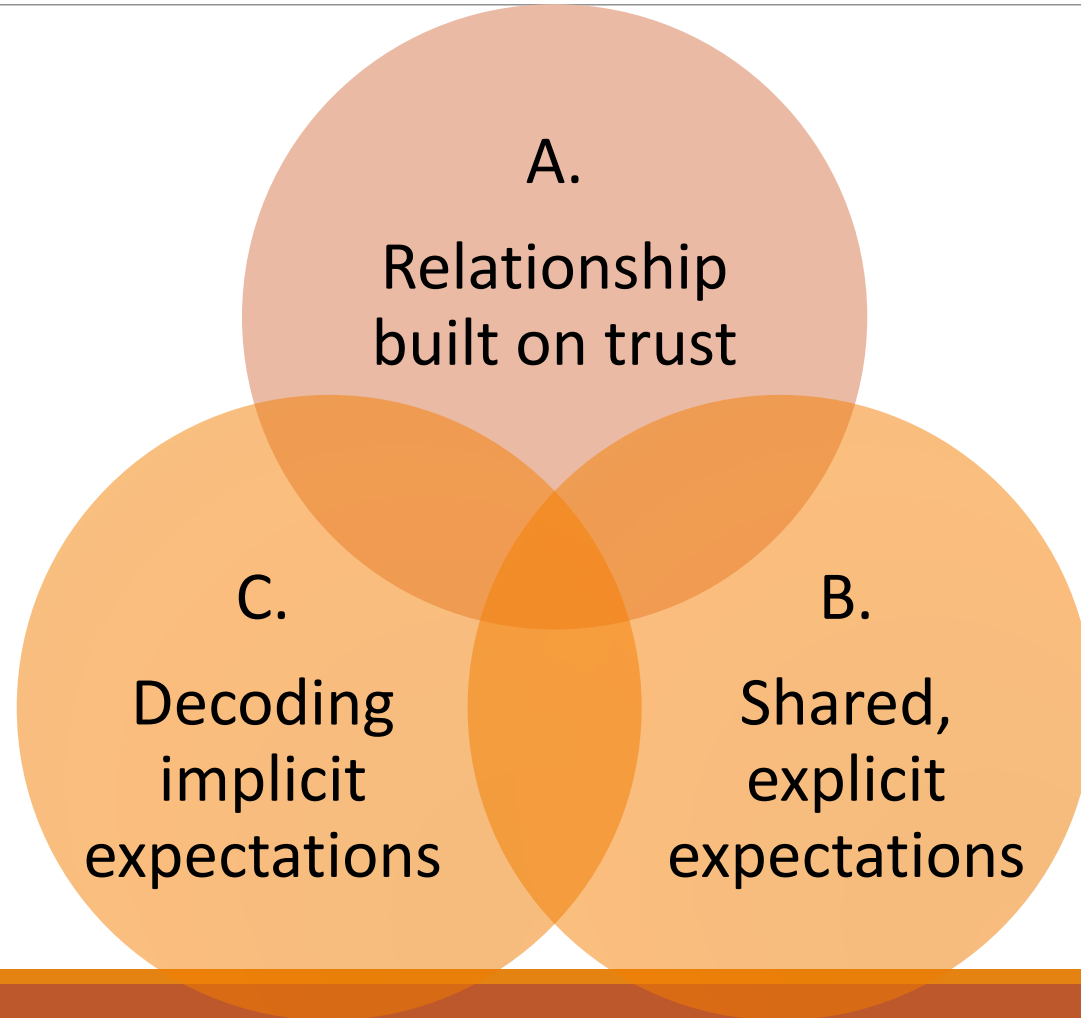
Strategies for decoding implicit expectations

Discuss with your research group, in advance, aspects of your group culture that would be helpful to share with students at the start of summer.

Be open and honest with summer students early on. Encourage them to come to you, or other members of the group, with such questions. Make it comfortable for them to do so.

Think about aspects of your group culture and how they might be interpreted differently or impact an undergraduate student. Think about how students from different backgrounds might experience things. This might be a good time to change, add, or do away with certain things.

Setting, communicating, and negotiating expectations



Questions? Discussion?
