MENTORSHIP: IT'S ALL IN THE DETAILS

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WHY IS THE MENTORING RELATIONSHIP IMPORTANT

- Greater productivity
- Greater job satisfaction
- Greater likelihood that you will mentor others
- Increased chance of academic promotion
- **More likely to have protected time for conducting research**
- Greater likelihood of short and long term academic career success

MENTOR-MENTEE RELATIONSHIPS

Mentor Qualities

- Strong interpersonal qualities
- Technical expertise
- Knowledge of organization and profession
- Status/prestige within the organization
- Willingness to be responsible for someone else's growth and development
- **Ability to share credit**
- Patience

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MENTOR-MENTEE RELATIONSHIPS

Mentee Qualities

- Self-perceived growth and skills-based needs
- Record of seeking/accepting challenging assignments
- Receptive to feedback and coaching
- Willingness to assume responsibility for own growth and development
- Ability to perform in more than one skill area

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STAGES OF THE MENTOR/MENTEE RELATIONSHIP

Stages (typical duration)	Characteristics
Initiation (weeks)	Mutual interest identified Task-centered relationship Invitations extended
Cultivation (years)	Frequent and meaningful interactions Professional and personal relationship Transformative learning occurs Productive

STAGES OF THE MENTOR/MENTEE RELATIONSHIP

Stages (typical duration)	Characteristics
Separation (months)	Conflict Professional and personal relationship disrupted Possible feelings for resentment, abandonment or hostility
Transformation	Independence Peer-like relationship Feelings of mutual gratitude and appreciation

KINDS OF MENTORS- not an inclusive list

- On-site senior faculty- institutional goal setting
- Content mentor- specific skills, national contacts and opportunities
- Career mentor- leader in field, long term career direction
- Work life balance mentor- similar values, your ‘cheerleader’
- Peer mentor- close in rank, similar trajectory, task accountability

STRATEGIES FOR WORKING TOGETHER:MENTOR WARNINGS

- Be clear about objectives and divide them into achievable goals with built-in milestones
  - **Mentor: avoid encouraging delayed gratification**
- Establish outcomes jointly
  - **Mentor: avoid an authoritarian approach**
- Engage in regular feedback, mutually respectful dialogue and provide documentation
  - **Mentor: the "days of the Giants are gone"**
- De-emphasize time at work and emphasize productivity
  - **Mentor: life is not an either/or**

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STRATEGIES FOR WORKING TOGETHER:MENTEE WARNINGS

- Establish your goals and expectations (Use a tool like an Independent Academic and Career Plan)
- Set up a system to ensure your goals are met and conflicts and setbacks are resolved
- Establish a means to communicate and accept criticism from the mentor

YOU ARE ULTIMATELY RESPONSIBLE FOR YOUR CAREER

MENTORSHIP IS A CONTINUUM

FINDING RESOURCES

- Learn the institution ropes
- Become sensitized to the "politics"
- Considered outside mentors/resources to reach your goal
  - **Especially important for K awards**
  - **Valuable for career mentoring**

LEARNING WHEN ITS TIME TO MOVE ON

- Find another mentor or mentoring relationship
  - *Mentorship is dynamic and a continuum*
- Recognize your own independence
- Be sensitive to gender/diversity/generational conflict

GETTING BY WITH A LITTLE HELP FROM YOUR FRIENDS

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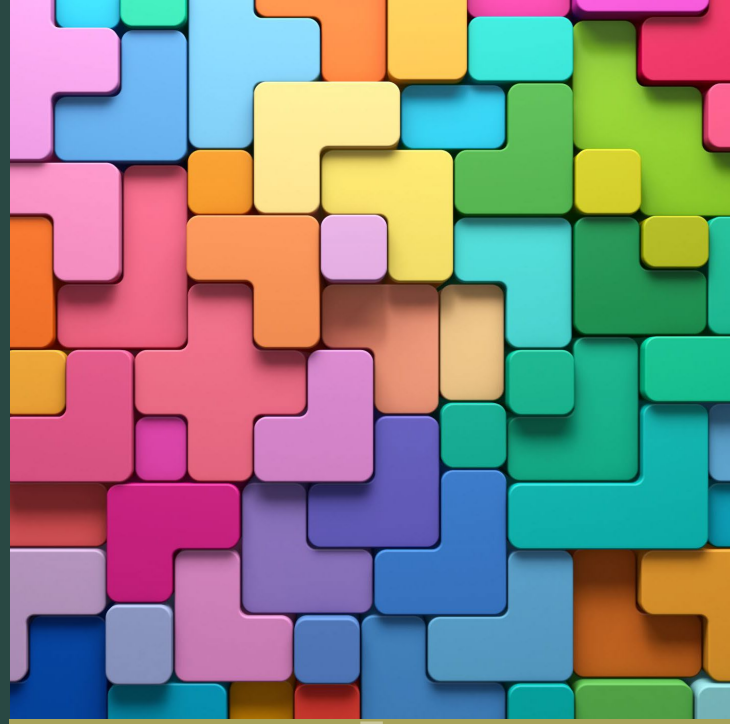
Building a K Mentor Team

Aileen Chang

Associate Professor of Medicine




Find your Sponsor or Champion

A Sponsor as oppposed to a Mentor

- Has a personal stake in your success
- They like you as a person and truly believe that your work is impactful
- Sponsors may help with promotions, career opportunities, and funding
- Sponsors go to bat for you!

Mentor Abilities that you might look for

- Skills
  - Laboratory, data analysis, clinical trial skills, international experience, work-life balance, gender)
- Location (at least one local)
- Their mentorship record
- Their NIH funding record

Describing your mentorship team in your Career Development Plan

INCLUDE THE FREQUENCY OF MEETINGS

INCLUDE THE SPECIFIC SKILLS THEY WILL TEACH YOU AND WHEN

PROVIDE ADEQUATE TIME FOR THEM TO REVISE YOUR CAREER DEVELOPMENT PLAN

How to be a Good Mentee

Know your mentor

(How they think, What they want to talk about, What they don't want to talk about, What motivates them, How they like to spend mentorship TIME)

Don't waste their time

(Prep for every meeting, Pre-write all their sections-LOS etc.)


Good luck!

A Tale of Many Mentors

Terry Dean, MD PhD

03/21/2024

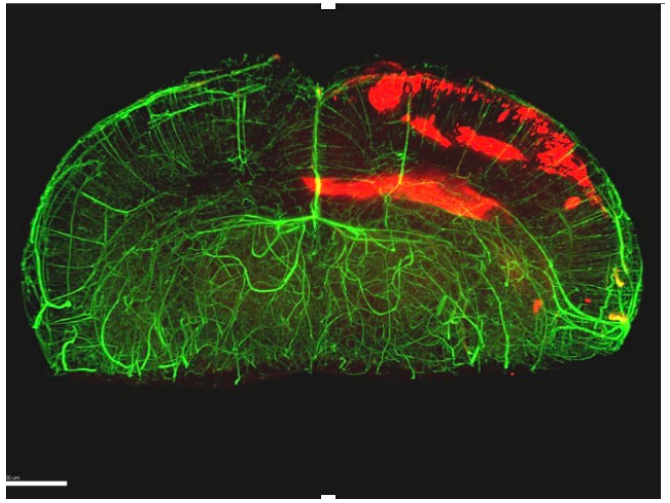
2000-2005

2005-2012

2012-2015

2015-2019

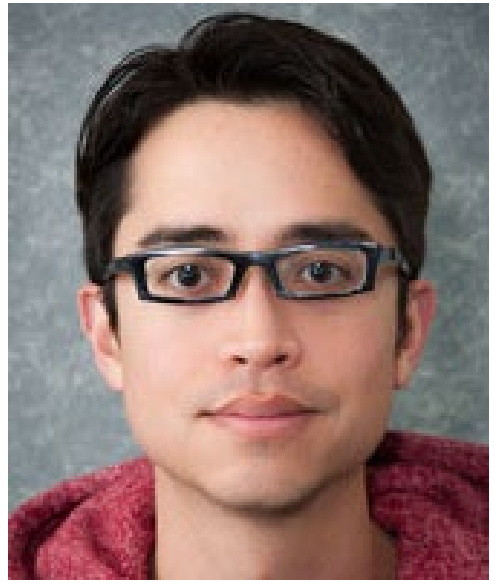
UCSF Benioff Children's Hospital
San Francisco



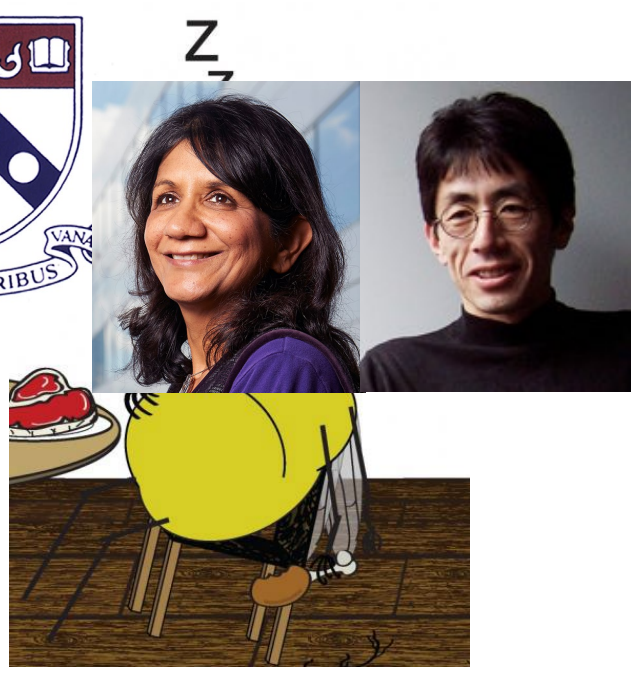
2000-2005

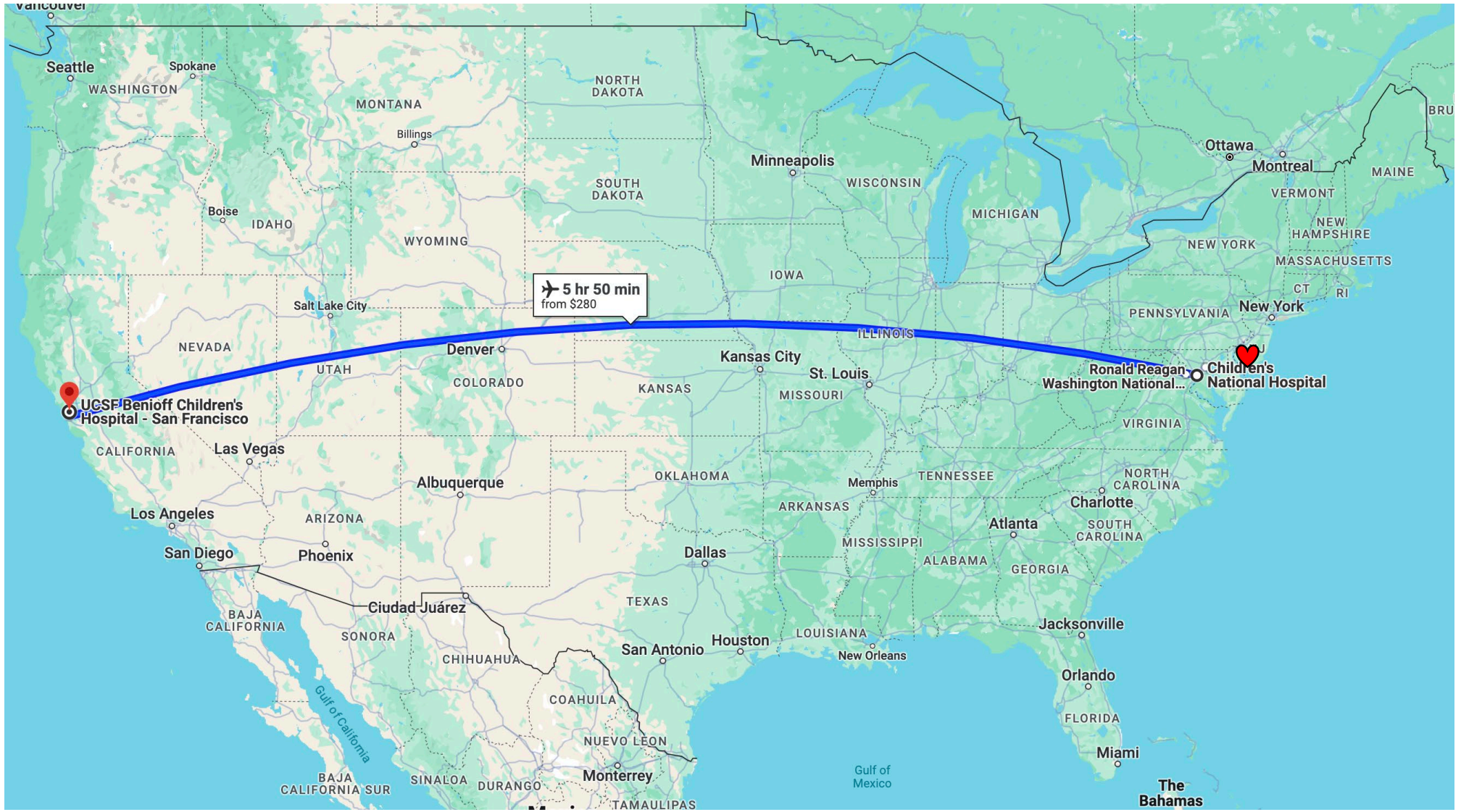
2005-2012

2012-2015



2015-2019





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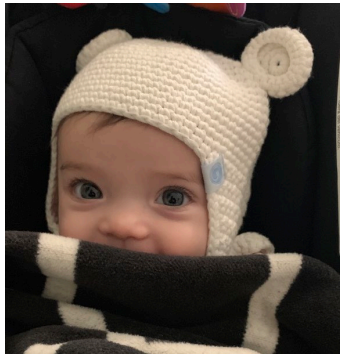


My Wish List

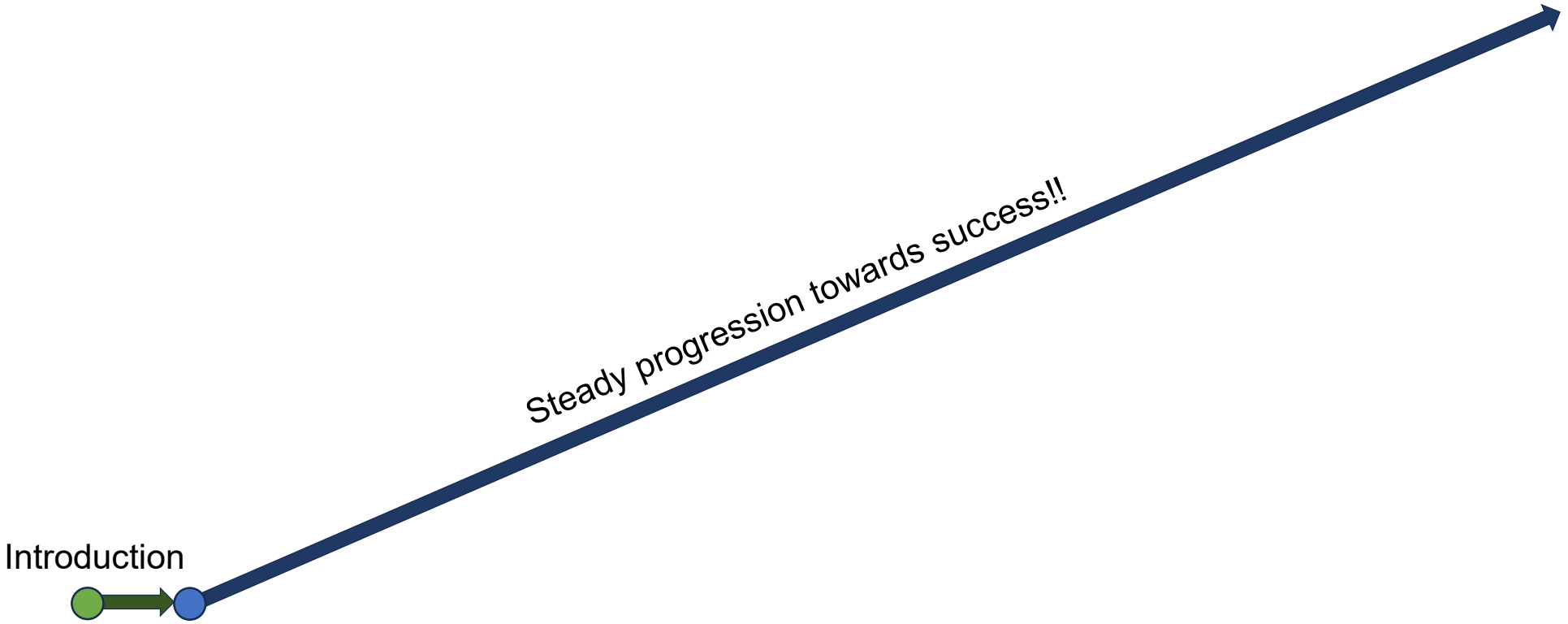
- What I wanted
  - A nice person with a lot of money, space

- What I needed
  - A content expert with a track record of:
    Publications
    Internal connections
    External reputation
    Mentees

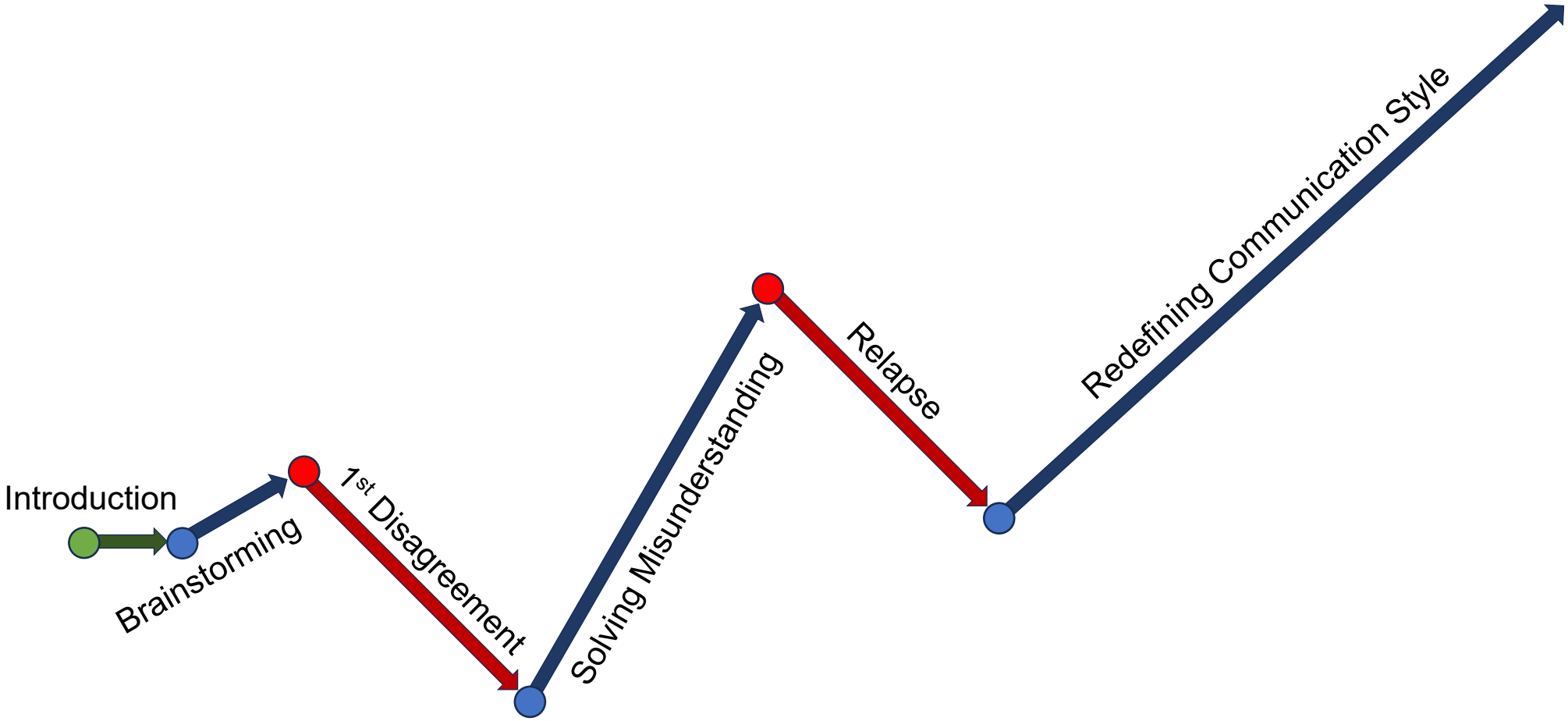
  - A lab including people with experience (CNH experience, experimental experience)

- What was a dealbreaker
  - Not understanding the clinical commitment
  - Not willing to separate research projects ← **this is where seniority mattered the most**

Establishing the Timeline



Establishing the Timeline



*Vittorio Gallo
Kazue Hashimoto-Torii

SOC:
Mike Bell
Mish Shoykhet
Tarik Haydar

RESUME AND SUMMARY OF DISCUSSION: This is a new K08 application from Terry Dean, M.D., Ph.D., who is an Assistant Professor of Pediatrics at George Washington University as well as an Attending Physician in Critical Care Medicine at Children's National Hospital (Washington DC). At Children's Research Institute, Dr. Dean is mentored by Dr. Vittorio Gallo and co-mentored by Dr. Kazue Hashimoto-Torii. Reviewers indicated that Dr. Dean is a pediatric critical care physician and an excellent candidate. He has a very good solid neurobiology/neuroscience background and has experience studying sleep disorder and circadian rhythms research. The primary gap in Dr. Dean's career development plan (CDP) is learning more about NG2 glia as well as TBI. More specifically his CDP proposes training in glial cell culture techniques, prep and analysis of omics type research, in situ gene expression detection methods, and in skills to lead an independent research lab. Dr. Dean already has some nice mentoring experience as well, of undergraduates. The CDP has some very intensive coursework proposed, but it is mostly online so there is good flexibility for Dr. Dean. Dr. Gallo is considered to be a superb mentor. The environment is strong and the institutional commitment is strong, with start up as well as supplemental development funding. Dr. Dean's clinical time is well detailed.

Dr. Dean is very interested in understanding how circadian rhythms and clock genes affect the homeostasis of NG2 glia, which are the precursors for oligodendrocytes in the CNS. The research also proposes to determine how these glia are affected in brain injury, specifically TBI. Reviewers indicated this is a very understudied area in TBI research and highly innovative, particularly as it relates to applying circadian biology to the study of these oligodendrocyte precursors. Thus, reviewers were quite excited about what is being studied, both for translational reasons as well as basic science reasons. While noting many strengths to the proposed research, reviewers felt there to be several moderate weaknesses. First there are no mentors who have experience researching TBI or circadian rhythm biology. While the applicant has experience with the latter, for this type of training mechanism, it was felt there should be a co-mentor or advisor with circadian rhythm biology experience. Additionally, while there is a member of Dr. Dean's advisory team who has a wealth of experience with TBI, the application would be much better if this individual is elevated to the team of mentors, and even maybe as the primary mentor. Moreover, there are no plans for attending conferences on either TBI or circadian biology. There is also very little pilot data on the TBI model being used, particularly since it is a less-used model that appears to be supported by only one publication. Thus, it was felt there should be better justification of why this particular model is being utilized. Also, given the mechanics of this hit and run model of TBI, it was felt the two developmental time points (P10 and P21) that are being studied could be very difficult to accomplish using the CCI device since these are mice; and that preliminary data to show feasibility are needed for the P10 time point. Others countered this noting that

*Vittorio Gallo
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Amita Sehgal
Regina Armstrong

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Tarik Haydar

1K08NS131529-01A1 Dean, Terry

RESUME AND SUMMARY OF DISCUSSION: This is a resubmitted K08 application from Terry Dean, M.D., Ph.D., who is an Assistant Professor of Pediatrics at George Washington University and an Attending Physician at Washington National Hospital's Children's Research Institute (CRI). Dr. Dean is mentored by Dr. Vittorio Gallo (CRI) and co-mentored by Drs. Kazue Hashimoto-Torii (CRI), Regina Armstrong (Uniformed Services University of the Health Sciences) and Amita Sehgal (University of Pennsylvania). Reviewers indicated this to be a well-revised application from an outstanding candidate whose strong PhD training was in sleep biology and who also has completed a neurocritical care fellowship. Reviewers added that Dr. Dean has a strong scientific background and has been performing basic research through his undergraduate, Masters' and PhD training. Dr. Dean has focused upon circadian regulation of NG2 cells in recent years and this is the focus of the current proposal. The career development plan (CDP) was noted to be designed to strengthen some of Dr. Dean's technical scientific skills and leadership in performing research administration. Reviewers indicated the CDP to be a good combination of hands-on and didactic training and that it addresses the learning of advanced techniques for studying transcriptional aspects after TBI. Despite that some reviewers felt the collaborators might not be the best fit for what is being proposed and that the mentoring and career development plans gave more praise to the mentors and less space describing what they are contributing, the panel felt there are no weaknesses among the mentoring team and noted that the applicant, mentors and collaborators have a long history of working together. Institutional support was considered to be very good and includes a startup package, but Dr. Dean lacks his own space. Clinical obligations were described, and the mentor clearly states the research is totally owned by Dr. Dean.

The proposed research training plan addresses the potential for harnessing the brain's native capacity for cellular regeneration to replace lost cells damaged after TBI. For this Dr. Dean will focus upon NG2-glia which is the largest population of regenerative cells in the adult CNS, which can proliferate and differentiate into multiple glial cell types. Dr. Dean believes that uncovering the molecular pathways that regulate the NG2-glia will be a key step for developing potential therapies for TBI. For this reason, in this application Dr. Dean proposes to examine the mechanism by which a molecular circadian clock, that is a 24-hr transcriptional-translational feedback loop, regulates the NG2-glia. He also will examine whether regulation can be generalized to other NG2-glia such as in white matter tracts. Reviewers indicated that this is very timely and important research and that this resubmitted application includes

Epilogue

- Dr. Gallo went to Seattle …