PREPARING A K99/R00 AWARD APPLICATION

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UC SAN FRANCISCO

WHO AM I?

- From Memphis, Tennessee

- Vanderbilt University B.S. Mathematics, Neuroscience; Ph.D Neuroscience

- Started November 2013 at UCSF

- Field: comparative neurobiology

- Applied to National Institute on Deafness and Other Communication Disorders (NIDCD)

TIMELINE OF PREPARATION

- Application due February 13, 2017

  - Started preparation in the beginning of January 2017

  - Helpful working with Natalie Carver (Research Services Coordinator) to make timeline

  - First draft due by February 1 to UCSF

PROPOSAL WRITING HELP

- Sent 1 page outline of aims to the program officer, then revised

- PI: reviewed the completed proposal

  - Helped coordinate collaborators/advisors from UCSF

PRACTICAL TIPS

- Read others K99s (even if unfunded) to get a sense of the structure

- Look at titles and abstracts from funded K99s on NIH reporter website

- Have a comfortable workspace (monitors, layout)

LESSONS LEARNED

- Keep in touch with program officer, even if confusing/discouraging

  - regular updates on status of application

WHO AM I?

- From Milan, Italy

- Polytechnic University of Milan: Telecommunication Engineer, Signal Processing B.S. and MSc Insubria University PhD Computer Science; Neuroimaging

- Started June 2013 at UCSF

- Field: Radiology Image Processing

- Applied to (NIAMS)

NIH > National Institute of Arthritis and Musculoskeletal and Skin Diseases

TIMELINE OF PREPARATION

- **First Submission**

  - Application due February 12, 2016

  - Started preparation Christmas Break Dec 2015

    - Contact Referee for Letters **head of time**, Institutional commitment letter **head of time, Decide the team: Mentors , Co-mentors, consultants   etc**

  - Review June 16 2016 Score 29: Payline 25
  - Resub due July 12 I have got my summary statement July 18

TIMELINE OF PREPARATION

- **<u>Second Submission</u>** *(a resubmission is less then 30% the work of the first submission)*

- **Talk with PO before preparing your resubmission this is different then a paper review**

  - Application due November 12, 2016

  - Started preparation October 15 2016

  - Review Feb16 2017 Score 23: Payline 23

  - Council Review Meeting June 2017

  - Awarded July 1st 2017

PROPOSAL WRITING HELP

- Sent 1 page outline of aims to the program officer and arraged a call to discuss it

- Primary Mentor and Co-Mentor: reviewed the completed proposal

- I had **<u>SEVERAL</u>** colleagues including friends not in my field help reading the proposal

PRACTICAL TIPS

- Read others K99s (even if unfunded) to get a sense of the structure

- Talk with other people that went trough the process before you

- Do not get scared by the submission process, number of forms, etc etc focus on your science and you **career plan !!**

LESSONS LEARNED

- Follow the instruction Reviewers have a check lists of possible "attacking points" do not give them the opportunity to use them

- My error in the first submission was to be too much *"emotionally attached"* to my data

RESUME AND SUMMARY OF DISCUSSION: This is a new application for a K99/R00 NIH Pathway to Independence Award from Valentina Pedoia, PhD at the University of California, San Francisco. Dr. Pedoia proposes to develop new automated tools for tracking early cartilage changes associated with degeneration and disease progression of osteoarthritis (OA) using the MRI imaging data from the Osteoarthritis Initiative (OAI) database. The mentoring team is outstanding with a strong commitment to helping the candidate develop research independence, and the mentor is Dr. Sharmila Majumdar, who is a leader in the field of magnetic resonance imaging and OA research. The committee agrees that Dr. Pedoia is a strong candidate who has outstanding training in biomedical engineering and computer science, and research experience in MR imaging and OA. The career development plan is well structured with details, the research environment is exceptional and the institutional commitment is strong. In addition, the research topic has high clinical significance using big data analysis and is supported by preliminary data. However, a few minor issues were noted. It is not clear how the candidate will develop an independent research project which has a clear departure from that of her mentors. Furthermore, the research plan could have a better discussion about the alternatives and potential pitfalls. Overall, the committee concludes the independent career developmental potential for this candidate is high with some minor weaknesses identified in some aspects of the application.

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Yujiao Jennifer Sun , PhD

03/20/2019

Who am I?

- Born in Beijing, China

- Development and functionality of sensory cortices

- Applied K99 to National Eye Institute (my current PI's main funding source)

EDUCATION

2007 – 2013   **Ph.D. in Physiology and Biophysics**
University of Southern California, Los Angeles, CA

2003 – 2007   **B.A. in Physiology**
Peking University, Beijing, China
Hong Kong University of Science and Technology, Hong Kong, China (exchange)

RESEARCH TRAINING

2015 – Present   **Postdoctoral Scholar with Dr. Michael P. Stryker**
Department of Physiology, UCSF
Project: Circuitry basis of adult visual plasticity and binocularity

2013 – 2015   **Postdoctoral Fellow with Dr. Roger A. Nicoll**
Department of Molecular Pharmacology, UCSF
Project: Subunit-specific effects of AMPARs on receptors trafficking

2007 – 2013   **Graduate Researcher with Drs. Li Zhang and H. Whit Tao**
Department of Physiology, University of Southern California
Projects: Development and laminar processing in rat auditory cortex;
Computational modeling of receptive field property in visual and auditory cortices
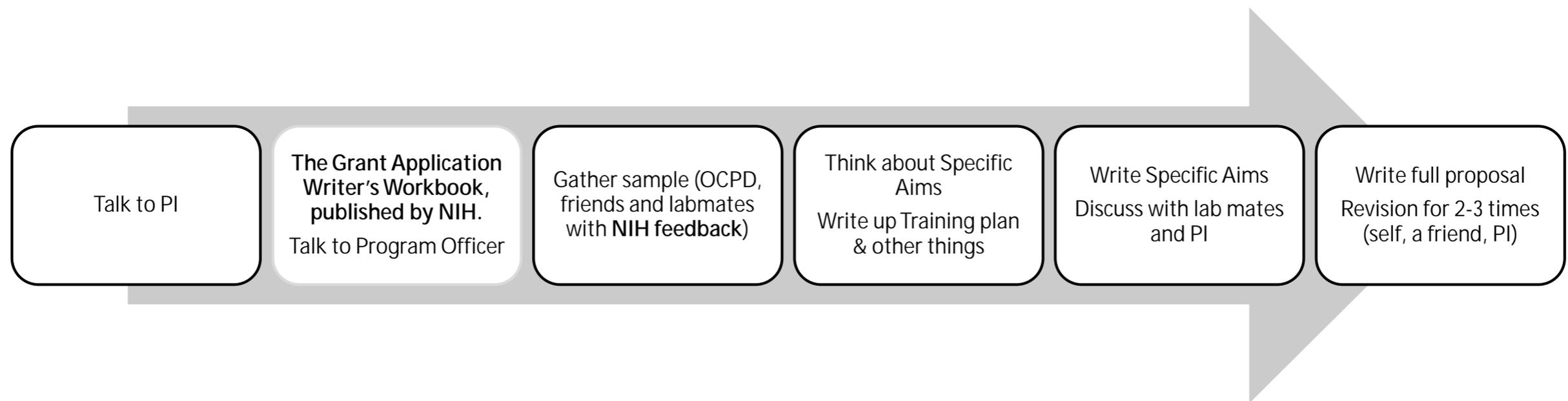
2006 – 2007   **Undergraduate Researcher with Dr. Shiqiang Wang**
Department of Physiology, Peking University
Project: Visual circuit development using electrophysiology and network modeling

Timeline (& lessons learned)

- timeline for preparing your proposal (3 mo)

| Talk to PI | **The Grant Application Writer's Workbook, published by NIH.** Talk to Program Officer | Gather sample (OCPD, friends and labmates with **NIH feedback**) | Think about Specific Aims Write up Training plan & other things | Write Specific Aims Discuss with lab mates and PI | Write full proposal Revision for 2-3 times (self, a friend, PI) |

Proposal writing help

- Draft revision: self, 2-3 friends, PI (in the book)
- Your PI's involvement: Specific Aims, Recommendation letter, Coordinate collaborators/advisors
- K99/R00 part: technical wise, your PhD & postdoc; idea wise, depths or breadth

Practical tips

- UCSF used to have some editing resources, but friends and ginger could work as well
- Publication during your postdoc: if you have something written but not submitted, you can actually put it on biorxiv and include it in your publication list; or, try include all the data in your proposal to justify that you are ready