

Date:

To

The Provost Postdoctoral Fellowship Program committee members:

I write this letter to **nominate XX** for the **Provost Postdoctoral Fellowship Program (PPFP)** at Florida State University (FSU) and **offer my strongest support** for his application. XX is currently a productive Ph.D. student and is scheduled to graduate next month. After completing his Ph.D., he is interested in working as a postdoctoral fellow in my laboratory. My lab is currently focused on applying genomic, proteomic and molecular approaches for developing novel therapeutics for benign skin tumors known as keloids that predominantly afflict African Americans. My lab is also involved in developing therapeutics for a specific type of childhood brain tumor that currently lacks any approved therapies and is invariably fatal.

As an African American himself, XX is particularly interested in working on the keloid project in my lab as it would be a natural fit for his longstanding interest in health care disparities. In fact, for much of his time as a graduate student so far, XX has been working on an important piece of research aimed at addressing questions in the general area of health disparities in cancer therapy. In particular, he has been focusing on the studying the effects of specific naturally derived compounds on breast cancer cells from patients of different races, since people of color often experience worse outcomes following breast cancer therapy compared to their white counterparts. The situation is very similar for keloids which have an *incidence of about 1 in 6 among African Americans* compared to *less than 1 in a 1000 among white Americans*. Not surprisingly, keloids are poorly studied and have limited therapeutic options. Keloids are troublesome fibrotic skin lesions that develop due excessive scar tissue formation and collagen deposition as a result of aberrant wound healing following an injury. These lesions can become very large, painful, infected and have a significant negative impact on the quality of life of affected individuals. Currently, surgery is the mainline therapy for large keloids, although they have a *recurrence rate of nearly 100%* within a few months following surgery alone.

Although I had not previously registered as a faculty mentor for the PPFP, it was XX who sought me out and expressed a strong interest in applying for the PPFP which would enable him to work as a postdoctoral fellow in my lab once he graduates this summer, if his application is successful. I was intrigued by his initiative and invited him over to my office for an hour-long meeting to discuss the possibility further. I was immediately struck by his strong motivation, keen interest in applying molecular tools to study diseases impacted by healthcare disparities and his “can do” attitude. I laid out some of the possible projects that he could potentially work on in my lab in very general terms and he immediately gravitated towards the keloid research. So, I gave him a very general introduction to keloid research and provided him with some reading material from our lab on the topic, and asked him if he could provide me with a very rough draft of a proposal to study the genetics and epigenetics of keloids in a week or so. He agreed to do so without any hesitation, which was a little surprising given the short timeline. I was even more surprised to find a *very polished proposal in my email just 4 days later, complete with appropriate citations from the literature*, with just a request for some help in cutting the proposal down to three pages since it was a little over the 3-page limit (which did not take long to accomplish at all)! I have not seen a better proposal written in just 4 days! I wish I could assimilate knowledge in a new area that quickly and produce a research proposal of that quality in such a short time! I knew then that XX had the motivation, work ethic and potential to go far in research and would absolutely be a “keeper”!

Despite living in Tallahassee for much of his life so far and going first to FSU for his undergraduate studies and then to FAMU for his graduate work, XX wants to continue living in Tallahassee and pursue a postdoctoral opportunity here. Although this would not be the typical career path chosen by an academic researcher these days, I believe that XX’s choices are well thought out. He has deep roots in the city and is very involved in his community, which is very dear to him. XX believes that the best way he can give back to his community is by living and working among them by seeking postdoctoral research opportunities locally, and he is determined to succeed at this. All of this goes to confirm that XX is a highly motivated self-starter who will go to great lengths to overcome any obstacles in his path to achieve what he has set out to do.

The fact that keloids disproportionately affect African-Americans suggests a strong genetic and/or epigenetic contribution to their etiology. Further, the response of keloid patients to steroid therapy (the mainline therapy for small keloids) is highly variable, again suggesting strong genetic or epigenetic influences, which are yet to be investigated at depth using genomic tools. Hence, for his project, XX will use a combination of next generation sequencing (NGS) based genomic approaches to understand the molecular mechanisms involved in

keloid formation, response to therapy and racial bias. His goal during the postdoctoral fellowship will be to identify additional therapeutic targets and prognostic markers for keloid therapy in an unbiased manner. Humans are the only species known to be afflicted by keloids and so establishing an animal model for keloid studies has been elusive so far. Hence, XX will culture patient derived keloid tissue explants and fibroblasts from these tissues for his *in vitro* studies. He is well versed with cell culture and associated molecular and cellular analytical tools. But, for his project he will need to acquire the skills required to prepare high quality sequencing libraries from patient samples for multiple types of genomic experiments. Then, XX will learn how to program in R and Python to perform genomic analysis following whole genome sequencing (WGS) and epigenetic analysis following Cut & Tag. Given what I have seen in XX so far, I believe that he will be able to meet this challenge easily and will be successful in executing the project if given the opportunity.

XX's long-term goal is to carry out independent research broadly aimed at understanding the molecular underpinnings of healthcare disparities in cancer, using the latest genomic approaches. In fact, he believes that his current research involving the use of molecular approaches to probe aspects of therapeutic responses in breast cancer cells obtained from patients of different races may go on to form the basis of his independent research program in the future as a principal investigator. Given the nature of XX's current and potential future research work, if he is given the opportunity to join my lab, I will ensure that he receives a solid training in omics, including the associated statistical/computational considerations, which will come in handy when he transitions to running his own independent research lab someday. This will include his participation in specific workshops and meetings. XX will also participate in departmental journal clubs and seminars to the fullest extent, and as a result, he should be very proficient at public speaking and know how to organize and present his thoughts and data clearly by the time he finishes his postdoctoral fellowship. XX's professional development will further benefit from being in my lab as he will have opportunities to learn about other ongoing projects that involve the writing of IRB applications for human subjects' research as well as development of animal protocols for approval by our IACUC. Additionally, XX is likely to have opportunities to be involved in our ongoing collaborative studies with other labs. My goal for XX will be for him to acquire much of the necessary training he would need to excel in any health-related research program after he completes his postdoctoral fellowship. Apart from research, XX has a tremendous passion for teaching science and I have no doubts that he will prove to be an excellent teacher when it comes to training the next generation of exceptional scientific minds. Hence, training XX will ensure that he will impart the same high-quality training to anyone who seeks to be trained by him in the area of omics and healthcare disparities in the coming years.

XX will be a good fit in our highly diverse department as a postdoctoral fellow in my lab. With his laid back but effective approach, and keen sense of humor, he will get along well with lab members. Although I have known XX for a very short time, I have been communicating via email on a daily basis and I find him to be mature, dependable, and armed with good problem-solving skills. He is hard-working and has a tremendous ability to focus on the task at hand. XX has been a solid performer throughout his academic career so far and he appears to have all the right attributes to excel in the future, first as a postdoctoral researcher and then as an independent researcher, taking full advantage of omics tools to address questions in the field of human health. I expect great things from him in the future and a fellowship from the PPFP will do wonders for his future career. Hence, I would like to conclude by giving my **strongest endorsement to XX for the PPFP postdoctoral fellowship**. Please feel free to contact me if you require additional information regarding XX's application. Thank you.

Sincerely,

Professor  
Department of YY  
Florida State University