



Jeesun Kim Xianhong Kuang Lifang Zhang Mingshan Yan Soojin Kim Paul Wong

## The Best Lab in the World

by Robert Howard

No joke. During my recent visit to meet with Paul Wong and his team, Paul said, “See, we have the best lab in the world!” Immediately before his statement, the researchers had just gone through an hour-long, mind-blowing litany of all the projects they are doing. I got to thinking about it and I decided that Paul could be right. All I know is that if they are not the best lab in the world, I’d sure like to know about the one that is!

It is unbelievable how many leading-edge discoveries they are making and how broad and varied their focus is—all with extremely limited financial resources. For example, Mingshan Yan, who also came up with the only method yet found to prevent lymphoma in A-T mice, has discovered the scientific explanation of why calorie restriction increases longevity and reduces degenerative disease. Scientists have long known that calorie restriction was beneficial, mostly due to its affect on oxidative stress (free radicals). When they read Mingshan’s coming paper, they will learn how an enzyme known as mTOR is the answer to the calorie restriction puzzle.

Jeesun Kim is doing work that is just as ground-breaking. Besides working with stem cells to treat brain cancer, which in itself is miraculous, she has also discovered a way to prevent neuro-degenerative disease. Using A-T as her model, which in many ways is translatable to diseases such as Alzheimer’s, Parkinson’s, and MS; she has found a way to treat neural stem cells so that they can regenerate neurons to normal levels!

No less impressive is Soojin Kim’s work on the well known cancer inhibitive protein called p53. The standard world-wide theory for many years has been that p53’s sole function was to cause cell death in tumors. Soojin has now proven that in some cases, p53 actually plays a protective role in normal cells experiencing an invasion of viruses, thereby preventing DNA damage.

On top of all that, George Stoica (not pictured) has received a grant from the Michael J. Fox Foundation to develop a mouse model for Parkinson’s disease! George, originally from Romania, is located at Texas A&M at College Station and has been a member of Paul’s team for over 20 years. As his latest grant award indicates, he is a world class a neuro-pathologist.

So there you have it; and I’ve only scratched the surface! I cannot imagine another lab anywhere in the world that could be more impressive than this one. Even more amazing is that they can do such great work with such limited resources. I’ll be honest, though. If we cannot do our part to sustain them, their days of working together as a team are numbered. The reality today is that competition for grants from the NIH is so fierce that many labs are having to shut down. We desperately do not want that to happen to ours.

I’ll have to admit, when I met with our team a few days ago, I felt very badly about what I have not done more to help them this year. My excuse is that my paying clients have had me involved with great projects, but ones that have required almost every working hour of my attention. As you know, we have one very dedicated and poorly paid part-time employee, Connie Cole. Connie has managed to keep things afloat, thanks to your help, but now is the time for us to do better. Paul and his team deserve nothing less. Please do whatever you can to help them keep doing their magic!