Collaboration – A Story of a Faculty at a Commonwealth Campus

With our knowledge of the world broadening and deepening every day, exploration alone will lead to nowhere but being lost, in a jungle full of confusion and frustration. A team work - to explore from different aspects - is the only way out of that jungle. Interdisciplinary collaboration nowadays is not a privilege in conducting scientific researches; it actually becomes an essential. The difficulty is, how to start one?

It is not a problem at all if you know Jack – the most appropriate researcher – is just next door, or even next building. An hour-long conversation may turn into a decade of collaboration. What if this Jack is 100 miles away? Chances are, your eyes quickly look for alternatives. Sure, exchange of emails and phone calls greatly shortens our distances. But isn't an old good fashion face-to-face discussion more welcome?

Being the 100-mile-away Jack, I, a faculty of a Commonwealth Campus, feel the pain. The physical distance from University Park, where a lot great researches are going on, becomes an obstacle of our involvement. Luckily for me, Professor Thomas Richard heard of my joining Penn State in 2007 and quickly introduced me to some UP researchers in similar area, especially Professor James Kubicki – we both are interested in how a long cellulose crystal is cut into small pieces by a protein called cellulase. A collaboration had been discussed by us in several occasions, but it was far distant in the horizon. The announcement of the Research Collaboration Fellowship becomes the perfect opportunity to catalyze the formation of our collaboration. Supported by Professor Kubicki, I submitted my application shortly after the announcement. Luckily again, I was selected to be one of the four fellows in 2008.

The fellowship supported me from many aspects. Some research hardware was purchased and our collaboration started promptly. Our research progressed smoothly as we hoped for. I also made many trips to UP. Our collaboration benefited greatly from these effective and direct discussions, which many times involved other researchers of similar interest. We realized that what we are studying is just one piece of a bigger puzzle: what's going on in a plant cell wall? Our research helps to complete the whole puzzle; and it is also helped by other pieces. A much broader collaboration is needed for such a big yet important puzzle. Consequently, we were called up by Professor Daniel Cosgrove to join a group of researchers to study lignocellulose structure and formation. We applied for DOE fund for an Energy Frontier Research Center (EFRC). The application was successful and the DOE is to provide $21 million to this center over the next five years.

An endless road is just paved in front of me and I am ready to start the exploration. I feel grateful for the opportunity that the Research Collaboration Fellowship brought to me. A little seed like this can grow into a giant tree.