Lynn's Top Five Paying for College – Let's **Think Outside the Box!**

By Lynn Ballou, CFP®

iving in Lamorinda feels like the benefit of having our children Saint Mary's in Moraga, Cal just sets for college funding. One way over the hill and so many other they can be involved is by aggresgreat educational opportunities nearby. And we are a community committed to sending our youth to college or to other post-highschool learning institutions. So, how do we pay for it? Let's review five ideas that might be misunderstood or overlooked.

1) Cast a wide net. Not everyone can nor should go to the best-known and/or most expensive schools. It makes great sense to look at the under-discovered, often overlooked opportunities. These schools are eager to expand their student community to include a diverse population, and many have unique attributes that could fit your student to a tee. By applying to a diverse array of colleges, your student increases the possibility of finding the most affordable fit. After a year at the wrong, "big name" school, my son's friend told him about Cal Lutheran University in Thousand Oaks. We had never even heard of the school. It turned out to be the best fit for him and they were able to tailor a financial aid package, athletic and scholastic plan that fit right college planning consultant him (and us) well.

2) Go to school abroad. Many college students enjoy studying abroad for a year, but what about for longer? Just as our schools are looking for a globally diverse student base, so are foreign campuses. Sometimes the costs can be comparable to a UC education. Yes, it's going to be a bit pricey to do that college scout- helping your children with college ing trip, but it could be a fun part costs while tailoring a long-term of a family vacation. Plan ahead for those great travel deals. And don't be shy about looking into your family tree to find out if you have a link to any international enjoy this remarkable journey! countries, religions or cultures with respect to universities abroad that could provide your student an admissions advantage or financial aid benefit.

3) Pay as you go. I don't suits their needs is worth it. think this gets enough credit. Think about it: Your child is no longer living at home and you are not incurring those expenses. Sometimes that alone will save you thousands of dollars. And if you really plan ahead you can be prepared to pay as they go for at least part of the costs. For example, if instead of funding your retirement plan at a moderate pace while your children are home, you could maximize and wherever possible accelerate that funding. Then, while your student is in college, you can put away less for retirement and divert those funds to the "pay as they go" approach. This can also be very helpful when filling out financial aid forms - fewer assets in your child's name and a lot more in retirement plans that are often off limits or count far less in college financial aid formulas. 4) It's work, but apply for every possible dollar in local scholarships. We often overlook

living in a college town with participate in the gathering of assively researching and applying for every local grant and scholarship they could possibly qualify for. Yes, time-consuming essays and interviews are involved for seemingly small amounts. But this is great for your kids because guess what they'll be doing for the next four years anyway? I also think that winning any of these is a fantastic boon for them on their resumes. It looks pretty impressive to be in your teens and say on a job application that you are the recipient of a local award. To those who employ youth, these things definitely grab their attention, even when hiring a summer babysitter.

> Get help. There are 5) many to turn to for help, but you will especially want to find a qualified college planning counselor who understands and likes your student. It's also very important to work closely with your certified financial planner as options become clear to determine which possibilities are affordable and pass on those that are not. The can save you a lot of time and money by assisting you with the daunting job of finding and narrowing down your student's best options, as well as assisting you in preparing financial aid packages. And you should absolutely start working with your financial planner early on to develop a longterm strategy for successfully plan that will fit your total financial goals and objectives in a realistic and affordable way.

And last but not least, try to When done well, the joy, not to mention pride, of being able to assist your children in attending the college or other post-high-school educational institutes that best



An Unlikely Candidate for a SMC Summer Research Project: Mistletoe

925-377-0977

By A.K. Carroll



Courtney Starr checks the size of this mistletoe in Lamorinda.

Then biology major Courtney Starr began making plans for summer research, she didn't expect she'd spend June through August surrounded by an iconic symbol of Christmas, but that's exactly what is happening for this Saint Mary's junior. In collaboration with Anthony Talo, Ph.D., a professor of biology at Saint Mary's College, Starr is plucking, grinding and analyzing mistletoe from all around the Lamorinda area.

"There's actually a lot of mistletoe in Lamorinda," said Starr, noting that the term covers a wide swath of plant life (up to some 1,300 species). Starr and Talo are focusing on the three to four that grow closest to home, primarily on one called Phoradendron macrophyllum. "We're looking at the distribution of different genetic subspecies," said Starr, "and how they vary by location."

Inspiration for the project came from Talo's day-to-day life. "One of my goals is to develop undergraduate research," he said. As he drove back and forth to work, clusters of mistletoe bulging from leafless deciduous trees repeatedly caught Talo's attention. "I thought 'there's got to be an [undergraduate] project there."" Though there are clusters of mistletoe throughout California, Talo noted that the ones in Lamorinda are particularly sizable. Enough so to warrant some exploration.

"One question I was interested in was how related mistletoe are within a tree and between trees as well. In theory, all of it should be related but what you have are little islands [of mistletoe] per tree and potentially what we would see is speciation between trees, eventually becoming so different they would not interbreed." As an obligate stem hemiparasite, mistletoe seeds are typically carried through bird droppings that transfer the mistletoe from one clump of trees to another. Once a seed makes its way to a host tree, it sticks in a haustorium (basically a dual-acting anchor-straw) from which it draws nutrients and water. It then spends its entire life attached to the host. As opposed to a holoparasite, which is incapable of contributing to its own survival, mistletoe takes in energy and produces food through photosynthesis. It has been found on a variety of trees, with different species of mistletoe preferring different hosts.

Starr and Talo have found that the pockets of mistletoe that grow on host trees near Mt. Diablo are a different species from those that grow on the trees at Saint Mary's. They are trying to figure out just how different those two species are, basically asking whether or not the populations share a common ancestor. "They could have started as one type and then adapted to their environments, forming different preferences and traits," said Starr, excited by the idea of seeing evolution in process.

Starr and Talo are focusing on the population(s) closest to Saint Mary's campus, but are also taking samples from other clusters in the area. The project has taken them to Briones Regional Park, the Moraga Commons, the Oursan Trail, and the Lafayette Reservoir. "[The mistletoe] is readily available for research," Starr noted. She gathers samples every one to two days. So far she and Talo have collected 50, roughly half of their goal for the summer-long project.

When they aren't out collecting samples, they're in the lab analyzing them. Starr extracts the DNA from the mistletoe, grinding her samples and who really want to do good research."

Photo Andy Scheck

using chemicals and a centrifuge to pull strands of DNA from the rest of the plant cell. She then performs a Polymerase Chain Reaction (PCR) to replicate the DNA, amplifying the specific region of DNA she's trying to compare. Starr does this with all of her samples, comparing the DNA coding from one population to the next and evaluating whether or not it differs by location.

Starr and Talo's summer mistletoe collections and analysis, which focus on the mistletoe in Moraga, will continue until the last week in August. In October, Starr will give a poster presentation at Saint Mary's. She and Talo may also publish a paper, depending on their findings. Talo hopes to broaden the research going forward, looking at samples from populations throughout Contra Costa and Alameda counties. Starr may be a part of that additional research, though mistletoe isn't what got her interested in biology.

"I'm actually interested in animal biology," Starr said. "But doing the research on [something like] this gives you a background; starting small and working toward something more complex."

"I can't think of a better way to do science," Talo said of the faculty-student project. "It's a very one-on-one relationship. We have good students

Lynn Ballou is a CERTIFIED FINANCIAL PLANNER[™] professional and co-owner of Ballou Plum Wealth Advisors, LLC, a Registered Investment Advisory (RIA) firm in Lafayette. Lynn is also a Registered Principal and Branch Manager with LPL Financial (LPL). The opinions voiced in this material are for general information only and not intended to provide specific advice or recommendation for any individual. Financial Planning offered through Ballou Plum Wealth Advisors, A Registered Investment Advisor and a separate entity. Securities offered through LPL Financial, member FINRA/SIPC.



As Seen In Lamorinda: Hamming it Up



"Honestly, the Lamorinda Weekly is always the best source for our efforts. Everyone reads it, thoroughly!" Lucy



Photo Cathy Dausman

Ham radio operators Patti Young, left, and Sandi Gritzer put out their call across the country as Al Archangel offers tech support. The trio, all licensed amateur radio operators and members of Lamorinda Area Radio Interest Group, set up shop at Moraga Commons during American Radio Relay League's nationwide Field Day event held the last weekend in July. C. Dausman