

BIOLOGY/ALLIED HEALTH DEPARTMENT

STUDENTS IN SERVICE

Familia Feliz, Educational Center and Orphanage, Bolivia
By Kristen Shields, senior biology major

When I decided last March to become a student missionary, I never would have guessed what the next year would be like. I was hard-pressed to decide between going to Palau as a dental assistant or to Bolivia to work at an orphanage. I reasoned that while Palau would be great to help further my future dental career, I would have the rest of my life to practice dentistry (if I continued to pursue that path). Also, I knew that Familia Feliz would be an experience I wouldn't be able to get at another place, and I wanted to work with children. So I began my journey as a student missionary in Bolivia.

I was so nervous before I came down here that I barely got any sleep in the weeks leading up to my departure date. It didn't help that I stayed up quite late packing for a whole year's stay the night before my flight. (Blame my procrastination.) I met the other student missionaries in Miami, and we flew together to La Paz, Bolivia. Next, we had another 12-hour car ride on the most dangerous road in the world, infamously called "Death Road." Thankfully, it didn't live up to its name, and we arrived safely at the orphanage almost 24 hours later.

The adventures had only just begun. I was placed in a house called "The Stars"—initially just as a

helper, but then later as a full-time houseparent to the younger girls. I received no training and just took a head-first dive into the cold water of parenting. I had the responsibility of cooking for 15 people three times a day, caring for toddlers in the "terrible 2s," teaching classes in school several times a week, and running a smooth household—all while being short-staffed and communicating in a foreign language. It was one of



Teachers and students line up on the first day of school.

the most challenging things I've had to do in my life—but totally worth it, because of the kids. At first it was hard to connect with them, since I didn't speak the language very well. Thankfully, they were patient with me and pretty good sports. One of their favorite memories of my Spanish blunders was when I accidentally called my own hair a very impolite term for someone's behind. It got a laugh, though!

Being down here for almost seven months has been quite an experience. I've gone through a lot of ups and downs. Sometimes I've felt like I want to give up. But at the end of the day, I feel incredibly privileged to be a part of these kids' lives. I get to see their faces light up in class when they understand a concept for the first time, to be a shoulder to cry on when they're missing their families, to take the brunt of their raw emotions when they can't make sense of the world, to kiss them good night after a **Students In Service, continued on page 2**

Life
is
Real

Students In Service, from page 1



Kristen Shields helps a student in her grades 5 and 6 classroom.

long day, to jump with them into the murky river, to give big hugs, to have awesome mud fights in the soccer field, and to be present in their lives when no one else is.

Most of these kids have been abandoned, neglected, and abused. The more-than-a-lifetime amount of trauma they have been through is truly devastating. I am so grateful to be a part of an organization that provides not only basic necessities, but also a Christ-like environment that saturates the kids in the love of Jesus. I've witnessed some of the worse-behaved kids become sweet-tempered and considerate. Now that they are in a safe place, they can leave survival mode and begin to taste the childhood that was taken from them.

So, no, I didn't spend a year advancing my potential career as a dentist. But the experiences I had here have beautifully transformed me to be a more understanding, well-equipped, and loving person. I wouldn't change that for anything.



As a houseparent in an orphanage in Bolivia, Kristen enjoys hanging out with the kids after school.

ALUMNI SPOTLIGHT

By Shayna (Clifford) Bowman, BS Biology - Biomedical, 2007 Graduate



Shayna Clifford Bowman (2007) with husband, Keith, Keith III, Kenna, and puppy, Dudley.

Hi! My name is Shayna Bowman, and I'm a 2007 graduate of the biology program at Southern. Although originally an accounting major, I switched gears late in my freshman year to pursue something more people-oriented.

At about that time, I was due for my annual eye exam. With "career hunting" still taking up much of my thoughts, I realized that I actually really loved visits to my optometrist. When I asked more about her job, it was an easy sell: flexible hours, good pay, clean environment, people-oriented, fascinating and challenging cases, and a faster academic

route (with less debt!) than the path toward becoming a traditional medical doctor.

After I changed my major to pre-optometry, Chris Hansen, PhD, became my new adviser, helping me plot my academic course. I will admit that the moment I really went "all in" with optometry was on a mission trip to Kenya with a group from Southern

during Christmas break in 2005. For our medical clinic days in the Masai Mara, I got to be the assistant for an ophthalmologist.

Handing out eyeglasses to people who hadn't truly seen their loved ones in years was absolutely MAGICAL! I loved being part of helping someone to see and able to witness their faces light up with recognition. My heart swells with joy, just remembering it all these years later. I was a goner for eye care from then on.

I had so much fun during my years at Southern. My favorite classes were Tropical

Biology and Human Anatomy. I also met and fell in love with my husband, Keith Bowman, during our freshman year. Since no graduate program for optometry is offered at any of our Adventist colleges, I went on to graduate with my Doctor of Optometry degree from Pacific University in Oregon in 2012.

After a dozen years of living in either Oregon or Michigan (twice each!), we are finally settled back home in good old Collegedale, Tennessee. I'm now 10 years into my career as an eye doctor, and my patients still comment: "You really like your job, don't you?" I do!!

My career has all of the benefits my own optometrist bragged about years ago, plus being able to help people see brings me so much more joy than I could have imagined!

I'm grateful to God for how He has blessed my journey and guided me each step of the way. I am especially enjoying being back in my hometown and practicing where I get to see so many familiar faces. My husband, Keith, and I have two kids: Keith III (age 8) and Kenna (age 5), and our new puppy, Dudley.



Stephen Cho injecting scorpion venom into crickets.

DEPARTMENT HAPPENINGS

By Professor Keith Snyder, PhD

Associate Professor David Nelsen has been busy this semester with several speaking engagements. At Southern's continuing education meeting, he presented the methods we use at the beginning of General Biology class to introduce the concept of worldviews. We want students to realize how worldview shapes our biases and how to think about topics as if we held different worldviews. Although we look through the lens of short-term creationism, we need to be able to discuss thoughts from other viewpoints.

Professor Nelsen was also the invited speaker for a lecture series at Loma Linda University in California. Over the past year or so, he and his students have been involved in researching the chemical signatures of toxins, bioassays of injected venom, HPLC analysis of the venom, and differentiating male and female signatures in toxins. He and Megan Marquez have collected some interesting results on scorpion behavior that is becoming part of a scientific paper. Well done to you all!

Since COVID-19 has disrupted the world of international travel, we have not been able

to take our international trips to the Bahamas and Indonesia. Due to challenges at these sites and the dim prospects of going to either location in the next few years, Professor Ben Thornton will be heading to Costa Rica this Summer to scout for suitable places where we can conduct a summer class. This country is especially nice, because its habitats range from lowland jungle to high alpine. Stay tuned as we collect more information.

Professor Aaron Corbit took a one-semester sabbatical during the first semester of this school year. Among other things, he wrote the paper "Human-Wildlife Conflict at a Suburban-Wildlands Interface: Effects of Short-and Long-Distance Translocations on Red Diamond Rattlesnake (*Crotalus ruber*) Activity and Survival," which was published in the journal *Diversity*. In addition to his other research with Loma Linda University professors, he has been working at home with Southern students and Professor Nelsen on the defensive behavior of black widow spiders.

Professor Keith Snyder visited Loma Linda University in February to meet with alumni and prospective students. About 25 alumni attended a brunch, and he was able

to see more after church and while hiking.

It was a pleasure for him to see some of our graduates successfully navigating the next part of their lives. Snyder was also the invited speaker in February to Bryan College in Dayton, Tennessee, where he presented his research on the Dino Dig. Professor of biology Neal Doran, who is also director of Bryan College's Center for Creation Research, plans to join the dig with several of his students this coming summer. It is a joy to work on this research together.

Professor Noemi Gonzalez has been working diligently to prepare the online Anatomy & Physiology II course that she will be teaching this coming summer. Please let everyone know that A&P I, A&P II, and Basic Microbiology will be discounted summer classes.

News flash! Five out of the 21 top advisers for this school year are from the Biology/Allied Health Department (Professors Azevedo, Gonzalez, Nelsen, Snyder, and Trott). Kudos to all our professors for their interest in student success.

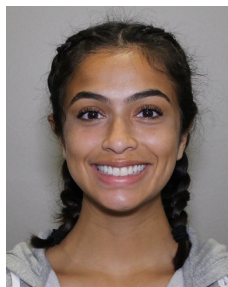
Allied Health Graduates 2021-2022



Gysel Avendano
AS Nutrition/Dietetic



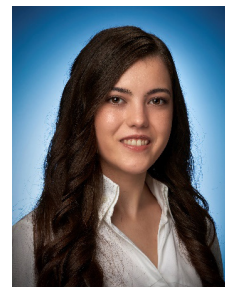
Nickolas Blagajev
BS Medical Lab Science



Alexandra Candamil
AS Physical Therapy/
BS Health Science



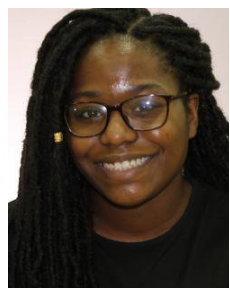
Ellen Choe
BS Medical Lab Science



Lora Foraker
BS Medical Lab Science



Meaghan Gano
BS Medical Lab Science



Bethany Grant
AS Speech Pathology



Sabrina Guerrero
AS Nutrition/Dietetic



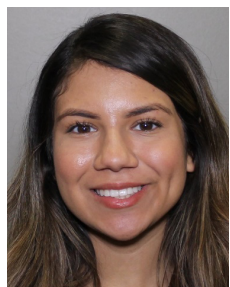
Clemence Harelimana
BS Medical Lab Science



Hannah Lewis
AS Physical Therapy/
BS Psychology



Delany Malin
AS Physical Therapy/
BS Health Science



Destiny Nunez
AS Speech Pathology



Julie Pereira
AS Physical Therapy/
BS Health Science



Sydney Raitz-Buhl
AS Speech Pathology



Grace Scoggins
AS Nutrition/Dietetic



Emily Tan
BS Medical Lab Science



Natalee Townsend
AS Speech Pathology



Nicholas Viar
AS Physical Therapy/
BS Health Science



Cynthia Wen
AS Speech Pathology/
BS Medical Lab Science



Joel Wright
AS Physical Therapy/
BS Health Science

Biology Graduates 2021-2022



Hannah Baldrige
BA Biology



Renny Calcano
BS Biomedical



Elizabeth Cannon
BS Biomedical



Ken Cautivar
BS Biomedical



Stephen Cho
BS Biomedical



Kaylin Chung
BA Biology



Sam Ham
BA Biology



Jonathan Hausted
BS Medical Science



Dewell Jimenez
BS Biomedical



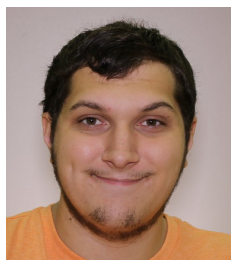
Sonia Joy
BS Research



Esther Kim
BS Biomedical



Joshua Kim
BS Biomedical



Connor Koerting
BA Biology



Levi Lemert
BS Biomedical



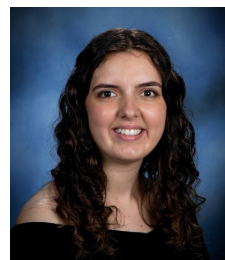
Allie Mae Magtanong
BA Biology



Anthony Melgar
BS Biomedical



Phil Moon
BS Biomedical/BS Biochemisty



Nicole Pustea
BS Biomedical



Kathleen Randol
BS Biomedical



Wyndham Reams
BS Biomedical



Allysa Reid
BS Biomedical



Andrew Retz
BS Biomedical



Felipe Rocha Poblete
BS Biomedical



Patrick Sagage
BS Biomedical



Allen Sangar
BS Biomedical



Adam Shim
BS Biomedical



Avner Shryer
BS Biomedical



Marco Swaisgood
BS Biomedical/BA INS-Spanish



Treson Thompson
BS Research



Elsie Watts
BS Research



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Aaron Corbit, PhD
Ann Foster, PhD
Noemi Gonzalez, MS, MT (ASCP)
Lucinda Hill, MD
David Nelsen, PhD
Rick Norskov, MD
Keith Snyder, PhD
Debbie Strack, Office Manager
Ben Thornton, PhD
Tim Trott, PhD

CONGRATULATIONS 2021-2022 PLAQUE RECIPIENTS!



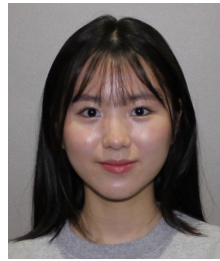
Nicholas Belenson
Biology Freshman
of the Year



Ken Cautivar
Biology TA of the Year



Matthew Gano
Biology Research
Assistant of the Year



Hyunah Park
BA Biology Senior
of the Year



Woobin Cho
BS Biomedical Senior
of the Year



Treson Thompson
BS Research Senior
of the Year



Josiah Myaing
Allied Health Freshman
of the Year



Gysel Avendano
Allied Health Senior
of the Year



Joshua Kim
Biology Leadership
of the Year



Grant Milano
Biology Naturalist
of the Year



Lora Foraker
MLS Senior of the Year



Anella Poljak
Integration of Faith
of the Year