

Teachers heading to Tulane for advanced bio lesson

By Ruth Campbell rcampbell@oaoa.com | Posted: Wednesday, January 9, 2019 5:30 am

A group of teachers from Odessa and Justin will be heading to Tulane University School of Medicine today to learn about cell biology, microscopy and bioengineering.

Tissue engineering, stem cell biology, tissue culture, cell image analysis and bioreactors are also on the agenda for career and technical education health science teachers Holley Davilla, Shonda Owen, Christina Portillo and Tenille Aranda, Chief Innovation Officer Jason Osborne said.

Osborne said he first went to Tulane a year ago to work toward a partnership with the university.

“There’s a lot of pieces there. It takes a while to get any of these initiatives to the point where we can start embedding. Then you have to get teachers excited. ... ,” Osborne said.

He added that there is no shortage of teachers who are anticipating the various professional development opportunities that have come up recently.

In November 2018, 12 teachers visited the Perot Museum of Nature and Science where they got an exclusive tour of their bio lab, as well as fossil prep room. Teachers also got to anatomist Joy know Reidenberg, along and other paleontologists and scientists as they dug for fossils.

Osborne said this gives teachers a chance to put their experiences to use in the classroom and get students excited about their future.

“... We want to make sure that it’s all over the country, if not the globe, that we can open up this window for teachers and students. We have seen some teachers grow dramatically in the way that they are now embedding their lessons and bringing real, tangible experiences to the classroom,” Osborne added.

The Education Foundation is pitching in for travel costs to fly teachers to Tulane. The initiative is part of PICK Education, a program aimed at providing hands-on professional development for teachers and bringing real-world science and research projects to ECISD students.

“We’re always grateful for their support,” Osborne said.

He added that Science Coordinator Ashley Osborne will be going to Tulane also to learn about software implementation and how to embed it into biology classes, Advanced Placement biology and possibly physics.

ECISD’s future projects with Tulane will be to replicate bioreactors here and to mimic exactly what the lab is doing in Tulane. Osborne said a bioreactor is a device where you can isolate tissue and build cells onto



ECISD, Tulane logos

scaffolding that acts as a template for tissue regeneration.

“Not only will the students learn about this type of research and actively do the research, there’s a huge potential for their data to go to scientific research to be a part of it. ... Their data could be added into a publication and they could get credit for their work, which is really exciting. They could get Texas Scholar hours out of this,” Osborne said.

Osborne said the district will be working with Bruce Bunnell at Tulane and Clay Christian has been working as a liaison between Tulane and ECISD.

He said Bunnell is one of Tulane’s top faculty at the medical school.

“The opportunity is just so rare — one to have the opportunity to be able to be involved with Tulane medical campus, but then also to have a researcher that’s so willing to open the door and this cost the district zero when it came to the training,” Osborne said.

The ECISD teachers will fly out Wednesday and return Saturday. Two teachers from Northwest ISD in Justin are also participating.

“We have pretty intensive days of training that take us into Friday afternoon, then opportunities to meet other researchers that are now catching on to this idea, so that’s super exciting,” Osborne said.

He said the idea is to build a model with a view toward pulling in other laboratories.

“This is the same model as what we’re working with Texas Tech Health Sciences with the human placenta projects,” Osborne said.

Aranda and Davilla said they are “super excited” about the chance to go to Tulane. They are both respiratory therapists who decided to teach.

“I think it’s a great opportunity for us and for our students. It’s something that we’re going to be able to bring back that’s out of their element, but hopefully it’s something that they’re going to want to do and like to do,” Davilla said.

Neither Aranda nor Davilla thought this would be available to teachers or students.

“I think it’s on a completely different level,” Davilla said. “I would have never thought that they’d want high school students to help in research.”

Aranda said they hope to implement what they learn as soon as possible.

“We know what they’re going to teach us there, but we don’t know when and how we’re going to implement it with what they’re learning now,” Davilla said.

The teachers also are excited about getting to learn alongside their students and meeting peers from Northwest ISD and learn how they are going to use what they’ve learned in their curriculum.

“We hope to understand it all. We’re going to be sponges,” Aranda said.

Executive Director of Career and Technical Education Carla Byrne said she is excited that CTE is being given this opportunity to lead the way for ECISD students in healthcare programs.

“Often CTE is overlooked as high rigor, high academics, which is just not the case. Students in the health science program are bright and passionate about medicine and healthcare. This just makes sense and we are so grateful,” Byrne said.