

## Panther Lab helps library patron update software on his insulin pump



For Dick Gilley, using the Panther Lab at the Fort Worth Public Library's Northwest Branch is an important part of maintaining his health.

About once a year, he needs to update the software that regulates the insulin pump he uses to control his diabetes.

"I am a Type 1 diabetic, meaning that I do not produce any insulin in my pancreas. All of the insulin that I use is supplied from my pump to control my blood glucose," Gilley said. "It will provide me a basal rate, which is the amount needed for body functions. It will also provide a bolus amount which is the amount

needed to balance carbohydrates consumed. I wear one that will automatically adjust the basal rate."

Programming an insulin pump is an involved process and not for everyone, but Gilley has specialized expertise in diabetes and diabetes management. He is a Registered Nurse with board certifications in Critical Care and Diabetic Education, and serves as the Director of Total Diabetes Care at Wise Healthcare in Decatur. He teaches diabetic education to patients in the hospital and outpatients in the clinic. He is also a Certified Pump Trainer on three different insulin pumps.

"I saw the Panther Lab while visiting the library and was excited to see there were Apple computers available, because that is what was needed to update my insulin pump," Gilley said. "The process for updating is done by having an Apple Developers License and rebuilding the app that controls the pump by use of a cell phone and communication bridge. This needs to be done annually or more frequently if something new becomes available."

The Panther Lab at Northwest is the Fort Worth Public Library's first dedicated makerspace and features 3D printers, 3D scanner, robotics and electronics kits, 27-inch iMacs with Adobe Creative Cloud Suite, Virtual Reality simulation headset, Sony camera and green screen and a vinyl cutter.

A makerspace is designated as a creative, do-it-yourself space where people can gather to create, invent, tinker, explore and discover using a variety of tools and materials. Besides the tools themselves, the Panther Lab offers guided STEM

activities and classes. Best of all, the activities and use of the lab are all free of charge and are open to everyone.

“The Panther Lab has such unique opportunities beyond just fun robots and 3D printers,” said Ian Garland, Public Education Specialist at the Library. “It offers a place for people to come and put rapid prototyping into practice to solve problems for real-world applications. With tools that range the spectrum from vinyl cutting to programming to CAD Design and beyond, the Panther Lab offers just about anything to almost anyone.”