## Finding a Cure Through Science

## Written by Victoria Fouts

The Translational Genomics Research Institute, a nonprofit research institute in Downtown Phoenix, is actively searching for better understanding about disease while discovering ways to treat illnesses.



Translational Genomics Research Institute (TGen) was founded in June 2002 by Dr. Jeffery Trent and has quickly become one of the world's leading labs in genomics research, particularly focusing on health areas like neurogenomics, oncology and metabolic disorders. Cutting-edge advancements in translational research are used in TGen research labs to discover how to combat disease more effectively. Translational research can be explained as the act of "translating basic scientific discoveries into clinical applications such as new diagnostics and treatments." Experts search for the root cause of a disease by locating and examining flaws in the human genome. By identifying the problem gene, scientists can then study it more effectively and learn how to stop the progression of disease. Clinical trials and studies are also used to test out research.

"Nearly every day we look into the eyes of patients who are counting on us for help," says Dr. Trent, TGen's president and research director. "Our research is conducted with an urgency that reflects our commitment to helping these patients, now." TGen believes in treatment through personalized medicine. Where traditional methods observe the symptoms of an illness and then distribute a standard treatment to all patients, TGen closely examines the individual's genetic makeup to determine the best form of treatment and when it should be given to achieve the most successful results.

The institute has established facilities in partnership with other health centers like Scottsdale's Mayo Clinic, the Virginia G. Piper Cancer Center Clinical Trials on the Scottsdale Healthcare-Shea campus, and even a pathogen genomics and biodefense research facility in Flagstaff near Northern Arizona University. With so many different labs, TGen can address a broad spectrum of diseases and conditions, improving not only the lives of Arizonans but advancing health and scientific studies that have the potential to be used worldwide.

As a nonprofit, TGen relies on community support to help keep its important work alive. Being involved with the public is vital to the organization because they are the very ones TGen is working so hard to help. By frequently raising money and awareness for their research and organizing local events, TGen keeps itself at the forefront of the community.

This fall, TGen hosts two exciting events to raise funds and awareness for cancer research. On Oct. 18, TGen presents Key to the Cure fashion show with Saks Fifth Avenue at Biltmore Fashion Park to benefit women's cancer research; on Nov. 3, the stepNout 5K run aid in pancreatic cancer research.

To learn more, visit the Translational Genomics Research Institute at www.tgen.org.

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