



HOW CAN YOU CURE A CANCER? WITH PRECISION.

Indiana University's Precision Health Initiative has ambitious plans for **BREAKTHROUGH CANCER TREATMENTS** using genomics and big data, and it seeks leaders to help win the fight

To mark its 200th birthday in 2020, Indiana University (IU) has taken on several grand challenges to tackle issues in health, opioid addiction, and the environment. The Precision Health Initiative, led by IU School of Medicine, has its sights on several diseases, including an ambitious goal for cancer: "Our hope is we find some sort of cure or effective treatment for at least one cancer in the next seven years," says Dr. Anantha Shekhar, principal investigator for the expanding Precision Health Initiative. The project is targeting multiple myeloma, pediatric sarcoma, and triple negative breast cancer.

IU School of Medicine has had standout success with cancer treatment before, says Dr. Bryan Schneider, leader of

the triple negative breast cancer research team. In 1974, IU School of Medicine legend Dr. Lawrence Einhorn discovered a cure for testicular cancer, which had previously killed most men with the disease.

Today, the initiative has the additional power of genomics, big data, and a team science approach. "What I find really impressive about the Precision Health Initiative is commitment from leadership, colleagues, and the community at every level: technical, financial, and emotional. It is real engagement," Schneider says.

IU has invested \$120 million in the initiative, added to by the generosity of entrepreneur and alumnus Dr. Donald Brown, who gave \$30 million to create the Brown Center

for Immunotherapy. The center seeks a world-class immunotherapy leader who will also oversee immunotherapy research for the Precision Health Initiative. The initiative is also seeking a leader for its Center for Genomic Medicine, as well as about 40 IU faculty members in genomics, structural and chemical biology, immunotherapy, and informatics, who will work across the university's schools by using a team science approach.

IU School of Medicine educates the largest number of medical students in the country and its grant money from the National Institutes of Health has grown by about 40 percent in the past four years. Collaborating with IU on the Precision Health Initiative

are many of its neighbors, including pharmaceutical giant Eli Lilly and Company, IU Health, Eskenazi Health and the Regenstrief Institute. All are based in Indianapolis, near IU School of Medicine's main campus. The city is booming, Shekhar says, with the addition of several sports teams and tech firms in recent years, and he expects the Precision Health Initiative to flourish along with it. "We want to be famous for the Indy 500 and curing another cancer," he says. ■



PRECISION HEALTH INITIATIVE

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