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Penn researcher to help lead pancreatic cancer effort

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Figure 1-Craig Thompson : Idea "really fundamentally different."

A University of Pennsylvania cancer researcher will help lead a three-year effort to develop new treatments for pancreatic cancer funded by an unusual \$18 million grant raised in a television fund-raiser last year.

Craig Thompson, director of Penn's Abramson Cancer Center, will collaborate with colleagues from Johns Hopkins, Princeton, and a research center in Phoenix - along with patient advocates - hoping to develop new tools against pancreatic cancer within three years.

The approach is "really fundamentally different" for cancer research, Thompson said. Instead of individual scientists working in small groups or by themselves, these scientists will be required to collaborate and work with patients. "We had to get together and hash out the ideas," he said.

The grants come from Stand Up To Cancer, an effort founded by a group of women, including newscaster Katie Couric, whose lives have been affected by cancer. The group today is giving five grants totaling \$73.6 million for new cancer research. The money was largely raised in a TV simulcast on ABC, NBC, and CBS on Labor Day.

The projects bring together five "dream teams" of scientists chosen from 237 applications. They are charged to collaborate, find new methods, and deliver them to patients quickly.

"We urgently need more and better treatments, and we need everyone to support the scientists who are working so hard to develop more effective treatments," said cancer survivor and movie producer Laura Ziskin, one of the group's leaders. "That, in a nutshell, is what Stand Up To Cancer is trying to facilitate."

The charity is also keen on involving patients early in the process.

"The traditional scientific community has been a little leery of working as collaborators with patient advocates. This . . . is forcing them to do that," said Fran M. Visco, head of the National Breast Cancer Coalition and a 22-year cancer survivor. "If you do it all together where every discipline is involved at every step of the research . . . you get a better answer and you get it more quickly."

In the fall, the charity plans to announce 12 three-year, \$750,000 grants to innovative young researchers, chosen from 425 applicants.

Nobel laureate Phillip A. Sharp of MIT, who chaired the scientific advisory committee that chose the grant winners, is excited about this approach to medical research.

"There is a strong emphasis on collaboration, a strong emphasis on innovation, and a strong emphasis on being engaged in clinical studies with patients," he said.

Thompson's team seeks new ways to starve pancreatic cancer tumors of their blood supply and halt a disease that kills 9 out of 10 people within a year of diagnosis.

Most cancer treatments target the glucose that many tumors use as an energy source. But Thompson said pancreatic tumors often rely on an amino acid, glutamine.

New imaging techniques created at Penn detect the energy source for cancer cells. They will be used to examine tumors and identify patients who would benefit from care targeting tumors that feed on glutamine.

Thompson plans to test four agents.

The primary focus is pancreatic cancer, but Thompson said other types of tumors that resist traditional treatments might also feed on glutamine and be susceptible to new treatments.

He plans to start clinical trials in the next several months.

His team includes three groups that get many pancreatic cancer patients - Penn, Johns Hopkins, and a consortium of universities working with Daniel Von Hoff's group at Translational Research Genomic Institute in Phoenix.

Von Hoff and Thompson will lead the project. And all the grants will be overseen by the American Association for Cancer Research, based in Philadelphia.

MIT's Sharp said the goal was to "identify innovative research that could have a translation and engagement with patients within the three years of the funding."

The effort, while competitive, was also collaborative. For example, with the prompting of the advisory committee, Thompson and Von Hoff merged their individual applications to create a stronger project.

"I think they are really going to change the picture of pancreatic cancer," Sharp said.