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The Importance of Traction Small But Mighty Grants Can Make All the Difference

Never underestimate the power of traction. Just a little bit of it can mean the difference between spinning your wheels and actually getting somewhere in your scientific career. Since 2007, extra traction for scientists studying arthritis and inflammatory disease at Johns Hopkins has been the great gift of the Dr. Ira T. Fine Discovery Fund, established by patients of the beloved Hopkins rheumatologist, Ira Fine, M.D.

The fund provides small grants, ranging from \$3,000 to \$15,000. These allow investigators to pursue innovative ideas that might not otherwise get funded, says Antony Rosen, M.D., Ph.D., Director of the Division of Rheumatology. "Sometimes you have a great idea, an idea that could be easily proven or refuted. But it's going to cost money up front in order to determine if it's a great idea that could be true, or a great idea that's just not true."

The grants come in one lump sum and are ideally suited to answering specific questions – setting up a new assay, for instance, or collecting tissue samples from a group of patients – and getting a relatively quick answer to the query, "Is this line of research worth pursuing?" Like old-time prospectors looking for gold, scientists often don't know if an idea is going to pan out until they do a little digging; but many questions are expensive to answer because they involve prohibitively costly high-tech equipment. These awards are ideally suited for creative, novel ideas, says Rosen. The Fund supports between three and five grants each year – about 21 total so far – and "everything has been definitive," one way or the other, he says. "Not all scientific ideas are

right, so if you can relatively cheaply determine that it's not worthwhile going after, more power to you."

The awards were the brainchild of philanthropists Stephanie and Erwin Greenberg, whose donations helped establish the fund, and their success shows that "you don't always need to throw a lot of money at something right away," says Rosen. "Particularly for early, innovative ideas, with small amounts of money, you can really get good traction," build up momentum, and target larger questions.

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Many young investigators in the U.S. have Career Development Awards from the National Institutes of Health. These provide salary support and laboratory start-up costs, but most young scientists are stretched pretty thin nonetheless, Rosen notes. "They don't give you anywhere near what you need to accomplish the research, and people tend not to have enough money to do the kinds of experiments that they actually need to do." If the investigation points to electron microscopy, genetic sequencing, or other tests involving expensive equipment, many young scientists find themselves up the proverbial creek.

Which is why "these grants are absolutely life-saving," Rosen says. "If you need to get an assay done and it costs five thousand dollars, there is no other place to get that kind of money. It's just not possible."