

# DR. MAUREEN MURPHY

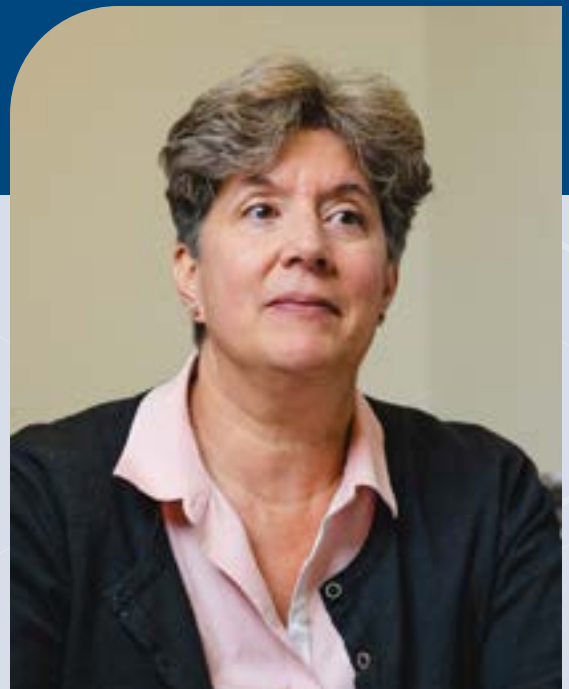
- Deputy Director, Ellen and Ronald Caplan Cancer Center, The Wistar Institute
- Ira Brand Professor
- Program Leader, Molecular and Cellular Oncogenesis Center
- Associate Vice President for Faculty Affairs

## EDUCATION

- B.S., Biochemistry, Rutgers University
- Ph.D., Molecular Biology, University of Pennsylvania

## CAREER HIGHLIGHTS

- Dr. Murphy studies the p53 tumor suppressor protein, focusing on the genetic variants of p53 that exist in populations of African descent and Ashkenazi Jewish descent.
- She works to identify hypomorphs of p53 - certain mutations in the gene - that make p53 less effective.
- By identifying cancer-causing p53 hypomorphs, Dr. Murphy then works to find drug treatments that restore p53's function in those cancer-causing hypomorphs.
- P53 varies broadly from person to person; humans can have a wide array of p53 hypomorphs, or mutations, several of which have been implicated in cancer.
- Dr. Murphy works with Dr. Andrew Kossenkov to use machine learning to develop a gene expression signature that will tell doctors whether patients have normal p53 or impaired p53 with an increased cancer risk.
- She hopes to develop a simple blood test for the 4.5M people in the U.S. with family histories of cancer.
- Began postdoctoral research at Princeton University in the laboratory of Dr. Arnold J. Levine, the co-discoverer of p53.



## AVAILABLE FOR MEDIA INTERVIEWS ON

- Cutting-edge cancer research, particularly as it impacts populations of African descent and Ashkenazi Jewish Americans
- Encouraging young women to pursue STEM careers
- Utilizing personalized medicine approaches to cancer research

## A SAMPLE OF DR. MURPHY'S MEDIA APPEARANCES

- Key Mechanism Related to p53 Tumor Suppression Uncovered, *Genetic Engineering and Biotechnology News*, 5/4/2023
- New p53 Function Signature Could Predict Cancer Risk, *Inside Precision Medicine*, February 2023

## CONTACT

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