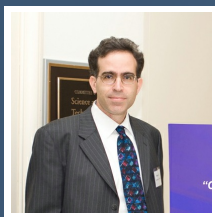


# Solving the Cancer Equation



**Doron Levy**

Professor and Associate Chair, Department of Mathematics and Center for Scientific Computation and Mathematical Modeling

## CURRENT RESEARCH

### Using mathematics to work towards a cure for cancer

According to the American Cancer Society data, 585,720 patients passed away in the U.S. in 2014 due to cancer. It is therefore no surprise that new models and therapies to help understand and treat cancer are necessary to improving the health and well-being of the American public and the global community. Dr. Doron Levy, of the University of Maryland, is driven by the promise that mathematics could aid in curing cancer. Using mathematical and quantitative tools to make sense of the mechanisms that control the dynamics of cancer, his research has novel insights upon the role of the immune response in controlling the progression of the disease. Bringing mathematics to cancer studies is a substantial step forward as it provides an understanding of the disease dynamics, reaching beyond the contemporary and experimental tools. Within cancer studies, Dr. Levy's research will allow researchers to develop a systematic method to phenotype cancer. Therefore, his approach is highly significant as it can potentially lead to the design of personalized therapy in the form of specific therapeutic strategies.

Dr. Levy's research within applied mathematics walks a unique balance between application and communicating with doctors and experimentalists that will eventually use his research to better inform their practice, conduct clinical trials, and guide therapies. As a Guggenheim Fellow, he has been recognized by his novel approach in which he allows doctors and experimentalists to truly drive his research with the hopes that his approach will lead him to the most meaningful conclusions for providers and their patients. In collaboration with researchers at the Carnegie Institution, Stanford University Medical School...

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## AFFILIATION



University of Maryland College Park Campus

## EDUCATION

- B.Sc. (cum laude), in Mathematics and Physics, 1991, Tel-Aviv University
- M.Sc. (summa cum laude), in Applied Mathematics, 1994, Tel-Aviv University
- Ph.D., in Applied Mathematics, 1997, Tel-Aviv University

## AWARDS

- Fellow, John Simon Guggenheim Memorial Foundation, 2014
- Distinguished Scholar Teacher, University of Maryland, 2013
- Departmental Award for Excellence and Innovation in Undergraduate Teaching, 2009
- National Science Foundation Career Award, 2002
- Haim Nessler Prize for Best Ph.D. Thesis in Mathematics in Israel, 1998

## RESEARCH AREAS

Life Science, Health IT, Oncology / Cancer, Oncology / Cancer

## FUNDING REQUEST

Your contributions will support the continued research of Dr. Doron Levy, of the University of Maryland, as he uses math to help cure cancer. Donations will support the necessary funds required for supporting Ph.D. students and postdoctoral associates. In choosing to support his research, you will take part in obtaining novel, quantitative, state-of-the-art mathematical methodologies that can later be translated into clinical setup for improved therapy.