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Cancer Center

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The Joseph Deasy Lab

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Research



Joseph O. Deasy, PhD
Chair, Department of Medical Physics; Enid A. Haupt Chair in Medical Physics

Since 2010, Dr. Joseph O. Deasy has been the Enid A. Haupt Chair in Medical Physics and the Chair of the Department of Medical Physics at Memorial Sloan Kettering Cancer Center. The MSK Department of Medical Physics, one of the oldest and largest medical physics groups in the world, conducts research and provides clinical support for radiological and molecular imaging, radiotherapy, all aspects of radiation safety, and biomedical engineering. Dr. Deasy also leads the Predictive Informatics Service within the Department of Medical Physics that focuses on using advanced mathematical, statistical, and artificial intelligence methods to support cancer research and treatment. His group's research focuses on the use of information to classify and predict response to cancer treatments, with a focus on the optimization of radiation therapy planning and delivery. He has been the Principal Investigator of six NIH research projects and also leads the Mathematical Oncology Initiative funded by the

Breast Cancer Research Foundation. Under his leadership, MSK has implemented advanced optimization and AI methods that have been used to treat over 5000 patients. Dr. Deasy is the author or co-author of over 250 peer-reviewed publications. Prior to coming to MSK, Dr. Deasy was a full Professor with tenure and the Director of the Division of Bioinformatics and Outcomes Research, in the Department of Radiation Oncology at Washington University in Saint Louis. He received his PhD in Physics and Astronomy from the University of Kentucky in 1992. He was a National Cancer Institute-supported Postdoctoral Fellow in Medical Physics at the University of Wisconsin-Madison. He is also a Fellow of the American Association of Medical Physicists.

[View Lab Overview](#) →

Featured News



[At Work: Physicist Joseph Deasy](#)

Physicist Joseph O. Deasy, Chair of the Department of Medical Physics and an expert in radiation therapy, uses physics to contribute to the fight against cancer.

People



Joseph O. Deasy, PhD

Chair, Department of Medical Physics; Enid A. Haupt Chair in Medical Physics

Medical Physics Department Chair Joseph Deasy focuses on integration and analysis of dose, imaging, and molecular data to predict outcomes and guide personalized treatments.

PhD Physics and Astronomy, University of Kentucky, Lexington KY (1992)

Fellowship in Medical Physics at University of Wisconsin, Madison WI (1992-1995)

BS Electrical Engineering, University of Kentucky, Lexington KY (1984)

 DeasyJ@mskcc.org

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Office Phone

Members

Lab Alumni

+

Lab Affiliations

+

Achievements

Fellow, American Association of Medical Physicists

Lab News & Events

[2021 Edelman Finalist: Memorial Sloan Kettering \(short 3min video\)](#)

Open Positions

To learn more about available postdoctoral opportunities, please visit our [Career Center](#)

To learn more about compensation and benefits for postdoctoral researchers at MSK, please visit [Resources for Postdocs](#)

Research in precision optimization of cancer radiation treatments

Our laboratory uses advanced machine learning, systems biology, optimization, and modeling methods to better understand individual cancer characteristics and how to optimize radiation treatments for that patient.

[Apply now](#) →

Get in Touch

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Office Phone

Disclosures

Doctors and faculty members often work with pharmaceutical, device, biotechnology, and life sciences companies, and other organizations outside of MSK, to find safe and effective cancer treatments, to improve patient care, and to educate the health care community.

MSK requires doctors and faculty members to report (“disclose”) the relationships and financial interests they have with external entities. As a commitment to transparency with our community, we make that information available to the public.

Joseph O. Deasy discloses the following relationships and financial interests:

Paige.AI, Inc.

Equity

Prexient, Inc.

Equity; Fiduciary Role / Position; Professional Services and Activities (Uncompensated)

The information published here is for a specific annual disclosure period. There may be differences between information on this and other public sites as a result of different reporting periods and/or the various ways relationships and financial interests are categorized by organizations that publish such data.

This page and data include information for a specific MSK annual disclosure period (January 1, 2022 through disclosure submission in spring 2023). This data reflects interests that may or may not still exist. This data is updated annually.

Learn more about MSK's COI policies [here](#). For questions regarding MSK's COI-related policies and procedures, email MSK's Compliance Office at ecoi@mskcc.org.

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