

# Postdoctoral Fellowship in Health Services Research

The Department of Health Services Research at The University of Texas MD Anderson Cancer Center has an opening for a postdoctoral fellowship. Under the mentorship of Dr. Iakovos Toumazis, this postdoctoral fellowship will provide individuals with the opportunity to contribute to the design, implementation, analysis, and publication of studies focusing on health policy analytics and modeling. The position focuses on the development and application of computer simulation-based modeling to simulate the disease progression of specific cancers (e.g. lung cancer, ovarian cancer), assess the impact of alternative primary, secondary and tertiary prevention strategies on cancer incidence and mortality rates in the US population, and inform public health policy.

## Job Responsibilities:

- Develop simulation models for decision analysis, cost-effectiveness analysis, and value of information analysis.
- Develop risk prediction models using advanced analytic methods.
- Work with the research team on development of decision aid tools.
- In coordination with the principal investigator, lead the research team in writing manuscripts and grant applications.

## Qualifications:

- Expertise in stochastic simulation modeling, Monte Carlo methods, model validation and calibration.
- Experience in survival analysis, parameter estimation, data analytics, and applications of operations research to public health and medical decision making is highly desired.
- Good understanding of mathematical modeling and hands-on experience of general-purpose programming languages such as R, Python, Julia, or MATLAB.
- Strong writing and verbal communication skills are required.

## Education:

Qualified candidates should have a Doctorate Degree in industrial engineering, operations research, computer science, health services research, epidemiology, health-outcomes research, biostatistics or a related quantitative field.

## Terms:

The fellowship is a one-year, full-time commitment, renewable upon mutual consent with competitive salary and benefits. Opportunities for the fellow to write and submit his/her individual grant (e.g. NIH career development award) would be provided and strongly supported by the PI and the institution.

## Institution:

MD Anderson consistently tops U.S. News & World Report's list for cancer care ("America's Best Hospitals") and is located in the Texas Medical Center (TMC), the world's largest. The proximity of the TMC to Rice University and the Museum District, light rail connections to world-class performing arts and professional sporting venues, a short drive from Galveston and the Texas coast, and a diverse population of Houston are a few features of this uniquely cosmopolitan and affordable city.

**Contact Information:**

To apply, interested candidates should submit a brief cover letter personalizing one's interest in the position, with information about research experience and interests, and their CV with the names and contact information for references to Dr. Iakovos Toumazis, [IToumazis@mdanderson.org](mailto:IToumazis@mdanderson.org) with subject: **"Postdoctoral Fellowship Application"** or through the [Discover System](#). Review of applications will begin immediately and continue until the position is filled.

Sincerely,

**Iakovos Toumazis, PhD**

Assistant Professor

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Division of Cancer Prevention & Population Sciences

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