
RSNA Press Release

Mammography Research Receives RSNA Margulis Award

Released: September 28, 2021

CHICAGO (September 28, 2021) — The Radiological Society of North America (RSNA) announced that the Alexander R. Margulis Award for Scientific Excellence will be presented to László Tabár, M.D., and Stephen W. Duffy, M.Sc., for the article, “Beneficial Effect of Consecutive Screening Mammography Examinations on Mortality from Breast Cancer: A Prospective Study,” published online in *Radiology* in March 2021. The study of nearly 550,000 women found that regular mammography screening substantially reduces the risk of dying from breast cancer.



Stephen W. Duffy, M.Sc.



László Tabár, M.D.

“This year’s Margulis Award recognizes impactful results likely to affect millions of women throughout the world,” said *Radiology* editor David A. Bluemke, M.D., Ph.D. “The authors evaluated mammography data from more than half a million women over a 24-year period. Women who faithfully attended regular breast cancer screenings lowered their risk of death from breast cancer by 50%.”

Named for Alexander R. Margulis, M.D., a distinguished investigator and inspiring visionary in the science of radiology, this annual award recognizes the best original scientific article published in RSNA’s peer-reviewed journal *Radiology*.

“We are honored and grateful to receive the Alexander Margulis award,” said Duffy, professor of cancer screening at Queen Mary University of London. “Our thanks go to our colleagues in Sweden and elsewhere who made the work possible, and to the Radiological Society of North America for the award.”

Breast cancer screening with mammography has helped reduce disease-related deaths by enabling detection of cancer at earlier, more treatable stages. Despite mammography’s well-established effectiveness, many women don’t participate in recommended screening examinations.

“Regular participation in mammography screening is a prerequisite for decreasing the risk of dying from breast cancer,” said Dr. Tabár, professor emeritus at the University of Uppsala, Sweden. “Missing even one screening examination confers a significant increase in risk. This is an important message for women in the screening age group, for healthcare providers and public health decision makers.”

In the study funded by the American Cancer Society, Dr. Tabár, Duffy, and a multinational team of researchers took a more detailed look at screening attendance patterns to further refine mortality risk estimates. They analyzed data from almost 550,000 women eligible for mammography screening in nine Swedish counties between 1992 and 2016.

The women were divided into groups based on their participation in the two most recent scheduled screening exams prior to cancer diagnosis. Women who participated in both screening sessions prior to diagnosis were identified as serial participants, while those who did not attend either screening opportunity were categorized as serial nonparticipants.

Analysis revealed that participation in the two most recent mammography screening appointments before a breast cancer diagnosis provides a higher protection against breast cancer death than participation in neither or only one examination.

“Our results showed that participating in regular, high-quality mammography screening is the best way to reduce the risk of a premature death from breast cancer,” Dr. Tabár said. “Women who have participated in mammography screening obtain a significantly greater benefit from the therapy available at the time of diagnosis than do those who have not participated.”

The incidence of breast cancers proving fatal within 10 years of diagnosis was 50% lower for serial participants than for serial nonparticipants. Compared to women who attended only one of the two previous screens, women who attended both had a 29% reduction in breast cancer mortality.

Duffy said the results add further evidence to support regular screening with mammography as a means for reducing breast cancer-related deaths.

“While we suspected that regular participation would confer a reduction greater than that with irregular participation, I think it is fair to say that we were slightly surprised by the size of the effect,” he said. “The findings support the hypothesis that regular attendance reduces the opportunity for the cancer to grow before it is detected.”

The Margulis Award will be presented at a luncheon during the [RSNA 107th Scientific Assembly and Annual Meeting](#) (RSNA 2021) in Chicago (Nov. 28-Dec. 2).

“We are honored to receive this award,” Dr. Tabár said. “Our thanks go to our colleagues and personnel working in the Breast Centers in nine Swedish counties, to the members of our international research group and to the Radiological Society of North America.”

Access the study at <https://pubs.rsna.org/doi/10.1148/radiol.2021203935>.

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RSNA is an association of radiologists, radiation oncologists, medical physicists and related scientists, promoting excellence in patient care and health care delivery through education, research and technologic innovation. The Society is based in Oak Brook, Ill. ([RSNA.org](https://www.rsna.org))