WOMEN & SCIENCE
THE ROCKEFELLER UNIVERSITY
1230 YORK AVENUE • NEW YORK, NEW YORK 10065-6399

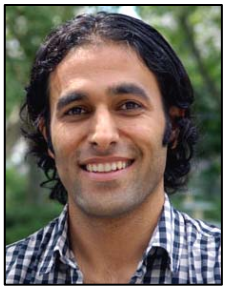
FALL BREAKFAST FORUM

Stopping Cancer in its Tracks: New Approaches to Preventing Metastasis

Date: Wednesday, October 21, 2009

Time: 7:30 – 8:00 a.m. Registration & Breakfast Buffet
8:00 – 9:00 a.m. Program

Place: Abby Aldrich Rockefeller Hall
The Rockefeller University
York Avenue at 66th Street
New York City



For cancer patients and their physicians, metastasis can be a formidable enemy. Metastatic cells are able to break away from a tumor and travel through the body to new locations, where they can proliferate and give rise to secondary tumors. Ninety percent of all cancer fatalities result from metastasis. Clearly, a medical strategy that inhibits this process could save many lives.

While much has been revealed over the past few decades about the molecular events that turn a cell cancerous, the properties that enable a cancer cell to become metastatic have remained largely mysterious. Only in recent years have biomedical scientists been able to tackle this very complex phenomenon. One of the pioneers in this effort is a young physician-scientist, **Sohail Tavazoie, M.D., Ph.D.,** who joined the faculty of The Rockefeller University earlier this year, following a fellowship at Memorial Sloan-Kettering Cancer Center, where he continues to serve as an assistant attending physician.

Inspired by his work with patients, several years ago Dr. Tavazoie launched a project in the Sloan-Kettering laboratory of Dr. Joan Massagué, whose research group had identified genes active specifically in metastatic breast tumors. Dr. Tavazoie wanted to understand what controls the activity of these "metastasis genes." Focusing on a set of hundreds of small, gene-regulating molecules known as microRNAs, Dr. Tavazoie succeeded in identifying three metastasis-suppressing molecules that are absent from aggressive breast cancer cells. He also showed that when these microRNAs are restored to active function, the tumor cells lose their ability to metastasize to lung or bone.

At the Fall *Women & Science* Breakfast Forum, Dr. Tavazoie will report on studies in his new Rockefeller laboratory that are shedding light on metastasis in breast cancer and other types of malignancies. In the future, this work may help guide clinical decision-making by enabling oncologists to more accurately identify patients with aggressive tumors at highest risk for metastatic relapse. Eventually, Dr. Tavazoie's investigations may also point the way toward the development of new chemotherapies that can block metastasis and help stop cancer in its tracks.

For more information, please call Emily Muller at (212) 327-8696
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