



# Cited!

Dr. Jorge Filmus

“Basic scientists,” says Dr. Jorge Filmus, in defense of a profession that has served him well, “sometimes come across discoveries that revolutionize medicine.” So it has been with Filmus, whose 2003 *Gastroenterology* paper, “Glypican-3: a novel serum and histochemical marker for hepatocellular carcinoma,” has won him much notice. The paper, which identifies a new marker for the early diagnosis of one of cancer’s most deadly strains, has attracted more than 158 citations in peer-reviewed journals in the five years since its publication.\*

Filmus, whose research centres on the presence of a protein called glypican-3 that’s bound to the cell membrane in the blood-streams of many patients with early-stage liver cancer, thinks the attention the piece has attracted is in recognition of the gravity of the disease his discovery helps to diagnose.

The average life expectancy for someone with advanced hepatocellular carcinoma—the most prevalent form of liver cancer, the third most frequent cause of cancer-related death and the fifth most deadly cancer in the world—is six months.

More often than not, liver cancer develops out of chronic hepatitis. In the Far East, some 30 million people suffer not only from this condition, but also from a dearth of tests that might uncover an incipient cancer sooner. By the time most liver cancer patients are experiencing symptoms, the cancer is too far-gone to make it go away. “The trick,” says Filmus, “is to get it early, while surgical treatment could be effective.”

Introduced slowly to the clinical landscape, the glypican-3 test—licensed by Sunnybrook Research Institute to BioMosaics, an American biotechnology firm—is still imperfect, and the subject of regular revisions to its sensitivity and robustness. The improvements are critical, says Filmus, who estimates that 300 million people worldwide suffer from chronic hepatitis. “That’s big,” he says. “This is a tool that can save a lot of lives.” ■

\* Google Scholar, October 26, 2008.

Dr. Jorge Filmus is a senior scientist in the discipline of molecular and cellular biology at Sunnybrook Research Institute and an associate professor in the department of medical biophysics at the University of Toronto. He is also a career scientist with Cancer Care Ontario.

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