

# Science

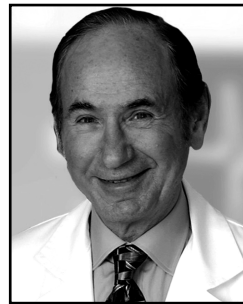
Monday, September 17, 2007

**MEDICAL MESSIAHS.** An immunologist who discovered key cells of the immune system known as dendritic cells and two cardiac surgeons who developed implantable heart valves have won this year's research awards from the Lasker Foundation. The winner of the basic research award is Ralph Steinman, 64, of Rockefeller University in New York City, for his work with dendritic cells, which he says at first glance reminded him of "a swimmer treading water." Steinman found that dendritic cells spurred T cells to attack invading pathogens.

Alain Carpentier, 74, of the European Hospital Georges Pompidou in Paris and Albert Starr, 81, of the Providence Health System in Portland, Oregon,



Dr. Alain Carpentier



Dr. Albert Starr

share the clinical research award. Starr developed a mechanical heart valve that was first successfully implanted in 1960. Carpentier took the technology a step further by using pig valves after encountering a patient with a mechanical valve who'd been paralyzed by a blood clot. The man, he remembers, had been an artist but could no longer wield a paintbrush. Carpentier was inspired "to devote my professional life" to finding valves that wouldn't pose a clotting risk. Heart valves today help save 300,000 people a year. The Lasker Foundation also honored Anthony Fauci, 66, director of the National Institute of Allergy and Infectious Diseases, for building up U.S. government programs on AIDS and biodefense.