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Nobel laureate Peter Agre, MD became the second director of the Johns Hopkins Malaria Research Institute in January, 2008.

Dr. Agre received his BA in chemistry from Augsburg College in 1970, and his MD from Johns Hopkins in 1974. Following an Internal Medicine Residency at Case Western Reserve University Hospitals of Cleveland and a Hematology-Oncology Fellowship at the University of North Carolina at Chapel Hill, Dr. Agre returned to Johns Hopkins as a postdoctoral fellow in cell biology. Dr. Agre joined the faculty in 1984 and has spent most of his professional life at Hopkins' School of Medicine, leaving in 2005 to go to become Vice Chancellor for Science and Technology at Duke University Medical Center. His return to Hopkins and JHMRI in 2008 gives Dr. Agre the opportunity to concentrate on an area in which he has always been interested - the problem of disease in the developing world.

Dr. Agre's research in red-blood-cell biochemistry led to the first known membrane defects in congenital hemolytic anemias (spherocytosis) and produced the first isolation of the Rh blood group antigens. In 1992, his laboratory became widely recognized for discovering the aquaporins, a family of water channel proteins found throughout nature and responsible for numerous physiological processes in humans- including kidney concentration, as well as secretion of spinal fluid, aqueous humor, tears, sweat, and release of glycerol from fat. Aquaporins have been implicated in multiple clinical disorders-including fluid retention, bedwetting, brain edema, cataracts, heat prostration, and obesity. Water transport in lower organisms, microbes, and plants also depend upon aquaporins. For this work, Dr. Agre shared the 2003 Nobel Prize in Chemistry with Roderick MacKinnon of Rockefeller University.

Not long after receiving the Nobel Prize, Dr. Agre was awarded a JHMRI pilot grant to extend his studies of aquaporins to malaria, addressing the question of whether or not aquaporins could be exploited as a means of treating or

preventing the disease. Initial encouraging results have led to an NIH grant and a focus on malaria as the primary area of study in Dr. Agre's laboratory.

Dr. Agre maintains an affiliation with Duke University where, among other duties, he promoted the growth of a research program in malaria. His honors include election to the National Academy of Sciences in 2000, the Institute of Medicine in 2005, the American Academy of Arts and Sciences in 2003, and the American Philosophical Society in 2004. He has also received honorary doctorates from universities in Denmark, Japan, Norway, Greece, Mexico, Hungary, Poland and the United States.