

**SCIENTIST AT BENAROYA RESEARCH INSTITUTE IDENTIFIES
NOVEL CAUSE OF ALLERGY**
**Discovery of Trigger to Inflammation and Disease Progression in Asthma May Lead to
New Therapeutic Approach; Published in *Nature Immunology***

Seattle, WA—Sept. 6, 2005— In a report published online Sept. 4 in the journal *Nature Immunology*, a team lead by Benaroya Research Institute scientist Steven F. Ziegler, Ph.D., identified a new factor perpetrating the onset and progression of asthma. Along with Dr. Ziegler's team at the Benaroya Research Institute, the work included investigators from the University of Washington and Stanford University School of Medicine¹.

Ziegler's group showed that a novel cytokine, Thymic Stromal Lymphopoietin (TSLP), is involved in initiating the inflammatory cascade that leads to the development of asthma and other allergic diseases. Current therapies for these diseases typically treat symptoms, not causes (i.e., through use of inhaled steroids). If TSLP proves to be the elusive initiating factor, these studies suggest that inhibiting TSLP may be an effective therapeutic intervention for asthma and other allergic inflammatory diseases.

The studies used model systems to show that TSLP was increased in lungs with asthma, that only those capable of responding to TSLP were affected by disease, and that expression of TSLP in the lung leads to the development of allergic asthma.

“We have identified a potentially very important trigger for allergic disease. The next step is to gain further understanding on how TSLP functions, and to determine whether it is a viable clinical target for asthma and other allergic diseases,” said Dr. Ziegler. “The exciting news is that we may now be able to target a factor involved in the onset of disease.”

The Benaroya Research Institute at Virginia Mason is a non-profit research institute focusing on molecular and cell biology of diabetes, arthritis, immunology, genomics, cardiovascular research and cancer, with a clinical research program which conducts approximately 200 clinical trials every year. A bench-to-bedside approach at BRI combines expertise in laboratory investigation with innovative clinical trials that allow for rapid testing of scientific findings to discover medical treatment advancements. Virginia Mason Medical Center, founded in 1920, is a non-profit comprehensive regional health care system that combines a primary and specialty care group practice of nearly 400 physicians with a 336-bed acute care Seattle hospital.

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