Molecular Analysis of Patients with Eosinophilic Laryngitis

Molecular factors have been shown to be upregulated in patients with eosinophilic esophagitis. Specifically, major basic protein (MBP), eotaxin-3, leukotriene A4 hydrolase (LTA4H), and leukotriene C4 synthase (LTC4S) have been shown to be upregulated eosinophilic factors of inflammation. We hypothesize that patients with eosinophilic laryngitis (versus those with other etiologies of chronic laryngitis) will have a similar inflammatory profile to patients with eosinophilic esophagitis. To test this hypothesis, we will recruit pediatric patients from the Vanderbilt Otolaryngology Clinic to obtain pilot data on molecular profiles:

- **Aim 1**: Compare and contrast molecular/inflammatory profiles in the larynges of patients with eosinophilic laryngitis versus those with other chronic laryngitis.

- **Aim 2**: Compare and contrast molecular/inflammatory profiles (MBP, eotaxin 3) in patients with eosinophilic laryngitis with and without eosinophilic esophagitis