

CLINICAL// TRANSLATIONAL

TREATING the MOST COMMON LIVER DISORDER

NON-ALCOHOLIC LIVER DISEASE, ALSO KNOWN AS FATTY LIVER

Disease, is the most common liver disorder in western nations. Up to 30 percent of Americans have some level of the disease, and it will soon be the country's leading cause for liver transplant. As its name suggests, Fatty Liver Disease begins simply with storage of excess fat in the liver, but can progress into serious liver inflammation and to the extensive scarring of liver tissue known as cirrhosis.

Currently, biomedical researchers have a limited understanding of what causes the disease and drives its progression. **Dina Halegoua-DeMarzio, MD**, associate professor of medicine and director of **Jefferson's Fatty Liver Center**, and her colleagues are working to uncover the cellular mechanisms underlying the disease, in part by identifying associated conditions. "Although Fatty Liver patients are often overweight, suffer insulin resistance and diabetes, and have high cholesterol," Dr. Halegoua-DeMarzio explains, "we have found further associations with celiac disease and binge-eating disorders, and are investigating the exact relationships and causeand-effect connections among these conditions." There are no non-invasive methods of diagnosing the emerging condition. That is why the Fatty Liver Center is testing **new diagnostic methods** and conducting an array of clinical trials.

There is also much to be learned on the clinical level: There are no non-invasive methods of diagnosing the emerging condition—at present, liver biopsies are necessary—and no medications known to prevent or cure the disease. That is why the Fatty Liver Center is testing new diagnostic methods and conducting an array of clinical trials of potential therapies. Among the most promising drug studies are two phase III trials of treatments for patients with moderate liver scarring, and two phase II trials of therapies that show evidence of reducing liver fat levels and removing cholesterols that contribute to fat build-up in the liver. ■