**Precision Care in the IBD Clinic**

We supported Dr. Marla Dubinsky and Dr. Elizabeth A. Spencer at Mount Sinai in New York on two projects aimed at revolutionizing precision care in IBD Clinics worldwide.

Currently, there is no way to pair a patient with a therapy that works best for their type of IBD. Because we do not have this, patients often need to have trials of medication after medication until they find one that works. There has been much research on trying to identify the specific problems with a patient’s immune system that led to their inflammation in order to more precisely match the medication to the problem. However, this research has not yet come to the clinic to actually aid patients.

In the first project we supported, Drs. Dubinsky and Spencer studied how a known gene, which is in almost HALF of IBD patients and CAN be sent already from clinics worldwide, impacts a patient’s response to a common medication type in inflammatory bowel disease, tumor necrosis factor blockers, known more commonly by two brand names Remicade and Humira. Over time, patients often reject these medications because they develop an immune reaction to them; if a patient has this gene, they are MORE likely to reject the medication. One group proposed that a second medication be used in ALL the patients with this gene to avoid this rejection, but another medicine adds more side effects and problems. Drs. Dubinsky and Spencer were able to show that another medication WAS NOT NEEDED in patients with the gene, but they simply needed to use a tactic, which is already commonly used in some clinics, where doctors adjust the medication dose to ensure the patient has enough of it in their body at all times. This gene is now commonly used in clinic, and now doctors do not feel compelled to start a second medication in patients with this gene.

In the second project we are supporting, Drs. Dubinsky and Spencer partnered with a dermatologist at Mount Sinai, Dr. Emma Guttman, to utilize a cutting-edge technique that was already being used in dermatology clinics of skin taping. Skin taping is when a small piece of tape is put on and then taken off the skin; some skin cells are then on the tape, and, from these skin cells, the doctors can tell what problems are happening with the patient’s immune system. They hope to use these quick and painless tapes to pair patients with the right medicine. They have already used the tapes to better understand a common side effect to Remicade/Humira where a patient gets a rash that looks a bit like psoriasis or eczema; they found that the rash does tend to most-resemble psoriasis, and, interestingly, in people who had eczema in their past, the rash tends to be worse and MORE like psoriasis. This has helped them to develop treatments for patients who have this side effect. They continue to work on using these tapes, which even toddlers tolerate, to pair a patient with the right medicine, and we look forward to the next update.