Chronic Inflammatory Response Syndrome (CIRS):

(<u>Chronic Fatigue</u>, <u>Fibromyalgia</u>, <u>Multiple Chemical Sensitivities</u>, <u>Chronic Lyme Syndrome</u>, etc) (*From Dr R Shoemaker, 2016*)

Symptoms frequently associated with CIRS:

Chronic fatigue that **interferes with functioning**, **associated with** any of these symptoms:

- Brain fog
- Poor sleep
- Generalized muscle aching
- Bowel problems (Irritable Bowel Syndrome)
- Nerve symptoms (tingling, numbness, burning pain)
- Chronic flu-like symptoms
- Excessive fatigue after exercise

Diseases associated with CIRS:

- Mold Sensitivity
- Post-Lyme Syndrome
- Multiple Chemical Sensitivity (Chemical Injury)
- Dementia (some cases, per Dr Dale Bredesen, UCLA)

Preliminary screening questions for CIRS:

- 1. Do you wake up feeling refreshed? Do you have difficulty going to asleep? Staying asleep?
- 2. Do you have some good days and bad days?
- 3. If you have a good day and try doing more, how is your energy next day? The day after?
- 4. How is your memory?
- 5. Do you have muscle aches?

CIRS is caused by Biotoxin Molecules:

- In genetically susceptible <u>HLA</u> patterns (specialized molecular markers on cell membranes), the "Adaptive Immune System" is <u>unable to tag</u> & remove these toxin molecules with antibodies. (This is not "Allergy", which is mediated by antibodies.)
- The "Innate Immune System" (the body's "first responder" to threats) becomes over-reactive trying desperately to fight "an invader that refuses to die", while awaiting relief from the "Adaptive Immune System" that cannot activate to this threat. The result is a chronic, multi-symptom illness driven by inflammation.
- Toxins in the air can enter through the nose, affecting the pituitary gland at the base of
 the brain that controls the hormone system. Toxins in food and water enter through the
 mouth into the digestive system and liver. These are very small molecules that can only
 be detected by specialized testing. Toxic burden damages the body's ability to detoxify
 new toxic exposures, which can increase the damage.
- The liver tries to secrete toxins into bile (& into the intestinal tract for elimination), but some of them are easily reabsorbed back into the liver.
- Toxins can attach to insulin receptors, damaging cells' processing of glucose.

Specialized testing is needed to evaluate and treat CIRS. This is a new and evolving field. Many chronic diseases are caused or exacerbated by chronic inflammation. These symptoms seldom improve with time without appropriate individualized treatments, which need to address the causes, not just the symptoms.