

# Dan Rossignol, MD FAAFP

## Hyperbaric oxygen therapy research in autism & Mechanism of HBOT for neurological conditions

---

### **About the lecture:**

Many disease processes are characterized by inflammation as well as by increased oxidative stress and relative mitochondrial dysfunction. We will review the current literature discussing the effects of HBOT on each of these problems. Several diseases that are typified by these abnormalities, and the effects of HBOT in these diseases, will be reviewed. Special focus will be giving to autism, and the results of several studies in children with autism will be reviewed. This lecture will lay the groundwork for an understanding of the mechanism(s) of action of HBOT in many chronic neurological diseases and other conditions.

### **About Dr. Rossignol:**

Dan Rossignol, MD, FAAFP received his Doctorate of Medicine at the Medical College of Virginia and completed his residency in family medicine at the University of Virginia (UVA). He is currently a physician at the International Child Development Resource Center (ICDRC) in Melbourne, FL. One of his clinical interests is the use of hyperbaric oxygen therapy (HBOT) in neurodevelopment disorders, including autism. He has authored several papers on the use of HBOT in autism and other conditions. He has spoken many times on the use of HBOT in individuals with autism, and is actively involved in research on HBOT and other treatments for autism and various neurological conditions.

### **Learning Objectives:**

*At the conclusion of this lecture, attendees should be able to*

1. Review the effects of HBOT on inflammations, including gastrointestinal and cerebral inflammation.
2. Describe the effects of HBOT on oxidative stress and mitochondrial function.
3. Review current research investigating the use of HBOT in diseases characterized by inflammation, increased oxidative stress, and mitochondrial dysfunction.
4. Summarize the common protocols and hyperbaric pressures currently in clinical use for these conditions.
5. Document the common improvements and side effects seen with HBOT when treating individuals with these conditions.

### **Contacting Dr. Rossignol:**

International Child Development Resource Center  
3800 W. Eau Gallie Blvd., Suite 105  
Melbourne, FL 32934

321.259.71111 – Office  
321.259.7222 – Fax

[www.icdrc.org](http://www.icdrc.org)  
[dlross@hotmail.com](mailto:dlross@hotmail.com)