Introduction to the Auto-Antibody Airline Crewmember Research Project

The goal of this research project is to measure, describe, and compare the presence of specific types of proteins in the blood that indicate damage to the central nervous system. The research will compare the levels and types of blood proteins in: two groups of airline crewmembers who have documented exposure to oil fumes at work, and a control group, described below. To be eligible to participate, you need to fit into one of the following three groups:

A. Have worked as an airline crewmember for at least three years and have documented at least one “oil fume event” (defined below) and subsequently sought specialist medical treatment for neurological symptoms that were serious enough to be unable to work for at least a month.

B. Have worked as an airline crewmember for at least three years and have documented at least one oil fume event but was able to return to work within one week of each incident and did not seek specialist medical treatment for neurological symptoms.

C. Have not worked as an airline crewmember, mechanic, or ramp worker and have not sought specialist medical treatment for neurological symptoms, matched by gender/age. Also, have not flown more than three trips as a passenger during the past 12 months. This is the control group.

If you are in group A or B, then your documented oil fume event must meet at least two of the following conditions:

1. One or more onboard crewmembers documented fumes onboard with their airline or other official reporting format. The fumes could have been sustained or transient, but must have been documented;
2. One or more crewmember reports describes cabin conditions consistent with fume event conditions (e.g., dirty socks/musty/oil-type odor sourced to air supply vents, onset during transient engine power condition); and
3. One or more maintenance logbook entries confirms engine oil contamination of ECS/air supply system.

If you fit into either group A or B and have a qualifying fume event OR if you fit into group C, then please download the five documents below. You will need to read and complete this paperwork to participate in the research project. The work is being conducted by Prof. Abou-Donia at Duke University in North Carolina, USA.

1. Instructions for study participant
2. Letter to study participant
3. Letter to physician
4. Consent form
5. Questionnaire (either crewmember version or control group version)

Thank you for your interest in this important crew health research.