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FRIDAY, OCTOBER 30TH  
10:00 - 11:15 AM  
BALLROOM A-B-C**

- 4) Participants with a positive family history of LI and learning disabilities were more likely to show decreased scores; and
- 5) For the youth born with HIV, not being on **cART** medications at the first time of measurement and low CD4 counts decreased their likelihood of improving their language scores/resolving their LI. Additional follow-up is needed to figure out the long-term impacts of these risk and protective factors.

**Notes**

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**Presentation 3: Epidemiology of Hearing Impairment – Present Knowledge and Research Needs**  
Howard Hoffman

The presentation will talk about the **prevalence** and **incidence of hearing impairment** in countries like the United States. It will also talk about the worldwide **prevalence of hearing impairment**. This information is based on recent findings by the 2010 Global Burden of Disease (GBD) Hearing Loss Expert Team.

The presentation will also look into knowledge about **hearing impairment** in the United States. The importance of major risk factors for hearing loss – age/aging, loud noise exposure, **congenital** and other heritable factors, infection (including otitis media), and **ototoxicity** – will be talked about. A survey of recent and on-going studies of **hearing impairment**, funded by the NIDCD, will be talked about. The presentation will look at pediatric research studies like childhood hearing **epidemiology** (newborn screening, **otitis media**, hearing studies that were in women from pregnancy through early-to-middle childhood). Finally, we will look at how childhood hearing problems, both **conductive** and **neurosensory**, can later impact hearing in adults of all ages.

**Presentation 4: WIN Test Data Collection in AMP Up**  
Peter Torre

The Words-in-Noise (WIN) test evaluates how well people repeat words in various listening environments. The listening environment changes from easy to difficult, and this is done raising the volume of a background noise when the words are being presented. The words and the noise are presented to the person while they are wearing earphones and the number words correctly repeated is calculated. Those individuals with a great number of words correctly repeated may have better hearing than those individuals who repeat few words correctly.

The goal of the presentation is to describe what the WIN test is and what problems that test administrators may have. Further, it is hoped that Community Advisory Board (CAB) members will recognize the importance of the WIN test and assist in conveying that importance to all AMP Up participants.









# GLOSSARY

**AMP:** Adolescent Master Protocol.

**Anemia:** Defined as not having enough healthy red blood cells or not having enough hemoglobin (See hemoglobin).

**Antiretroviral (ARV):** An anti-HIV medicine (See antiretroviral therapy).

**Antiretroviral Therapy (ART):** A treatment developed to suppress a retrovirus, such as HIV. It is a course of treatment with anti-HIV medicine or medicines.

**Asthma:** An obstructive lung disorder that makes the airways narrower. Patients with asthma have symptoms, such as wheezing, shortness of breath, coughing, and chest tightness.

**Atherosclerosis:** Hardening of the arteries.

**BP:** blood pressure (in the Cardiopulmonary WG presentation, BP is measured during the echocardiogram).

**Bronchodilator:** A drug that causes widening of the bronchi, e.g., any of those taken by inhalation for the alleviation of asthma.

**Cardiac Biomarkers:** Substances that are released into the blood when the heart is damaged or stressed.

**cART:** Some specific combinations of HIV medications.

**CD4 count:** A lab test that measures the CD4 T lymphocytes in a sample of blood. An indicator of how well your immune system is working.

**CELF:** Clinical Evaluation of Language Fundamentals, a general purpose standardized language test.

**Cesarean Section (C-Section):** a surgical operation for delivering a child by cutting through the wall of the mother's abdomen.

**CI:** "Cognitive impairment", a testing profile consisting of language performance within the normal range and cognitive performance below the normal range.

**CLI:** "Concomitant language and cognitive impairment", a testing profile consisting of language and cognitive performance below the normal range (comorbidity).

**Conductive Hearing Loss:** Hearing loss due to poor sound conduction through the outer ear and middle ear (includes ear drum and ossicles, tiny bones in the middle ear).

**Cognitive Abilities:** Brain-based skills we need to carry out any task from the simplest to the most complex. They have more to do with the mechanisms of how we learn, remember, problem-solve, and pay attention rather than with any actual knowledge.

**Congenital:** Present from birth.

**Dietary Recall:** This measure is used in a study where researchers ask participants to tell them what they ate and drank in a certain time period.

**Echocardiograms:** ultrasound of the heart.

**ED:** end diastolic, the period when the ventricle is filling up with blood.

**Epidemiology:** The branch of medicine that deals with the incidence, distribution, and possible control of diseases and other factors relating to health.

**ES:** end systolic, the period when the ventricle contracts to pump blood out.

**Gastroenteritis:** An intestinal infection marked by diarrhea, cramps, nausea, vomiting, and fever. Also known as the stomach flu.

**Gestational Age:** The length of time that the baby is in the mother's uterus until it is born.



# GLOSSARY

**Hearing Impairment:** Often defined by reference to hearing thresholds assessed at different (audible) frequencies (tones people hear).

**Hemoglobin:** A protein molecule in the red blood cells that carries oxygen from the lungs to the tissues and returns carbon dioxide from the tissues back to the lungs.

**Highly Active Antiretroviral Therapy (HAART):** Treatment for HIV infection using a combination of ARVs from at least two different classes.

**HIV-Exposed but Uninfected (HEU):** Refers to babies without HIV who were born to mothers living with HIV.

**HOMA-IR:** Homeostatic model assessment (HOMA) is a method for assessing  $\beta$ -cell function and insulin resistance (IR) from basal (fasting) glucose and insulin or C-peptide concentrations.

**In Utero:** In a pregnant woman's uterus; before birth.

**Incidence, Incidence Rate:** A measure of how often an event occurs.

**Infectious:** (of a disease or disease-causing) likely to be transmitted to people through the environment.

**Insulin Resistance:** A resistance to the hormone insulin, resulting in increasing blood sugar. Insulin is a hormone produced in the pancreas that regulates the amount of glucose sugar in the blood. The lack of insulin causes a form of diabetes.

**Language Acquisition:** The process by which humans acquire the capacity to perceive and comprehend language, as well as to produce and use words and sentences to communicate.

**Language Impairment:** Children whose language ability is in the bottom 15th percentile of their age peers on a language test.

**Lipids:** Fats

**LV:** left ventricular, this is referring to one of the chambers of the heart that is most involved with pumping blood.

**Mortality:** Death

**Neurodevelopment:** Growth and development of the brain or central nervous system.

**Neurosensory Hearing Loss:** Hearing loss due to damage in the inner ear (cochlea) or in the nerve pathways from the inner ear to the brain.

**Nonverbal IQ:** Cognitive ability that does not require language ability, such as the ability to solve visual puzzles or build a block design.

**Nonverbal IQ Impairment:** Children whose nonverbal cognitive ability is in the bottom 10-15th percentile of their age peers on a nonverbal IQ test.

**Obstructive Disease:** When a person has difficulty breathing out all of the air from the lung.

**Otitis media:** Ear infection, may be classified as acute, recurrent, or chronic, typically with fluid (effusion) in the middle ear space. Otitis media (OM) may be the cause of conductive hearing loss, which usually doesn't last very long, but may become a semi-permanent or permanent condition.

**Ototoxicity:** Damage or destruction of sensory structures in the ear ("oto" = Greek prefix meaning "ear"). Some important medications such as aminoglycoside antibiotics (e.g., gentamicin) and cancer chemotherapy drugs such as cisplatin and carboplatin are ototoxic.

**Perinatal:** Immediately before and after birth while a baby is inside a mother's uterus.

**Persistence:** continuation or prolonged existence.

# GLOSSARY

**PLI:** "Primary language impairment", a testing profile consisting of language performance below the normal range and cognitive performance within the normal range.

**Prematurity:** When the baby spends less than 37 weeks in the mother's uterus.

**Prevalence:** The number, or proportion, of individuals with the 'condition', e.g., hearing impairment, at the present time, or during a defined period of time (how common something is).

**PTH:** parathyroid hormone, related to vitamin D, controls calcium in the body; levels above 65 are considered elevated.

**Pulmonary:** Of or relating to the lungs.

**Pulmonary function tests (PFTs):** Pulmonary Function Tests, which are a group of tests that measure how well your lungs work and can be used to help diagnose asthma, allergies, and other lung problems. A pulmonary function test may include spirometry, which measures the amount of air you breathe in and out.

**Pulse Wave Velocity:** Measures how flexible blood vessels are in the body.

**Restrictive Disease:** When a person has reduced lung capacity so that they can't breathe in as much air as needed.

**Reversibility:** Improvement in breathing after receiving a bronchodilator.

**SEM:** Standard error of measurement, used to interpret individual test scores by taking the test's stability into account.

**Small Reservoir, Low Proviral Burden:** Fewer cells are infected with HIV.

**Sponsor:** The entity that initiates a clinical investigation, but does not actually conduct the investigation. The sponsor may be an individual or pharmaceutical company, governmental agency, academic institution, private organization, or other organization.

**Statistician:** A scientific specialist responsible for analyzing all of the data collected in a clinical trial to determine trial results. Statisticians are part of the protocol team, and are important in designing clinical trials.

**Subcortical:** A part of the brain that is below the cortex part of the brain.

**TLC:** "Typical language and cognition", a testing profile consisting of performance within the normal range on language and cognitive tests.

**Trigger:** A clinical or laboratory result, which falls outside a predetermined acceptable limit. This result is said to "trigger" additional testing.

**Undetectable Viral Load:** A viral load test result showing that the amount of virus in the blood sample is too low to be detected by the laboratory. An undetectable viral load usually shows that treatment is effective and/or that the person is at low risk of disease progression.

**WAIS:** Wechsler Adult Intelligence Scale, a standardized achievement test (16 and older).

**WISC-IV:** Wechsler Intelligence Scale for Children, a standardized achievement test. Nonverbal sub-tests were used.

**Working Group:** Within PHACS, a group of scientists, clinicians, and community members that reviews the data, monitor triggers, and develops conference and publication materials in a particular area of interest.

**25 OHD:** 25-Hydroxyvitamin D, used to measure how much vitamin D is in someone's body.