



Faculty Lectures And Timings

REGISTRATION & BREAKFAST

Expo Hall: 7:00am - 7:45am

7:45am – Welcome & Introductory Remarks - JEREMY PHILLIPS

Morning Theme: **NEUROCHEMISTRY; NEUROTRANSMISSION AND GENOMIC INFLUENCES**

8:00am – 9:00am – PAUL ANDERSON, N.M.D.

Neurochemistry – 1 Neurohormonal and Metabolic Factors in Neurology

Hormonal influences on the brain including peripheral and central hormones will be discussed. The effects of corticoids, insulin and other hormones will be detailed as well as the important topic of neurosteroid function and therapies.

9:00am – 10:00am – MARK HEISIG, N.D.

Section #1: Identifying the issues in concussion/PCS (The “5 buckets”)

A very brief look at the neurometabolic cascade and head impact metrics. The 5 Buckets of mTBI: Autonomic, Metabolic, Visual/Vestibular, Cervical, Psychological. Autonomic → Clinical presentation; Orthostatic, HRV, BCTT, Pupillometry testing. Visual/Vestibular → Clinical presentation; VOMS, Simplified notes on detailed pursuit & saccade testing (e.g., intrusions, latency, hypo vs hypermetric). Cervical → Clinical presentation; AROM/PROM, Cervical JPET, SPNTT, Cervical Flexion Rotation testing.

MORNING BREAK: 10:00am – 11:45am

10:45am – 11:45am – PAUL ANDERSON, N.M.D.

Neurochemistry – 2 Neurotransmitters

Primary neurotransmitter biology and therapy will be discussed. Nutrient factors in the synthesis of neurotransmitters and their metabolism will be detailed.

11:45am – 12:30pm – PAUL ANDERSON, N.M.D.

Neurochemistry – 3 Neurological Genomic Factors

Specific neurological pathways, both synthetic and eliminatory, will be discussed in regard to their related SNP areas and their potential for therapies using supportive nutrition.

12:30pm – 1:00pm – BOB MILLER, CTN

How Genetic & Epigenetic Factors Contribute to Depression & Anxiety (non-CME)

How gain of function in iNOS from genetic and environmental factors depletes BH4, the cofactor for creating Serotonin. How mutations in the HEME Cycle contribute to anxiety as GABA receptors are blocked. How upregulation of IL-6 from genetic and environmental factors increases Histamine

**FUNCTIONAL
GENOMIC ANALYSIS™**
Supporting Wellness through Science & Nutrition

LUNCH BREAK: 1:00pm – 2:15pm

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Afternoon Theme: **NEUROCHEMISTRY; PSYCHEDELIC MEDICINE AND NEUROTRANSMISSION**

2:15pm – 3:45pm – ERICA ZELFAND, N.D.

The Science of Psychedelics - How psilocybin, LSD, and other "classic" psychedelics work on the brain

In this module we examine the pharmacology of the “classic psychedelics,” namely psilocybin (the active constituent in “magic mushrooms”) and LSD-25 (also known as “acid”). The effects of these medicines on brain function, chemistry, and neuronal firing will be reviewed, and the concepts of the default mode network (DMN), brain entropy, relaxed belief under psychedelics (REBUS), and child consciousness will be introduced. We will also take a closer look at the role of mystical experiences, and what spirituality has to do with psychological and physiological healing. We will also consider recent clinical studies on using psychedelics for the treatment of nicotine addiction and depression.

3:45pm – 4:15pm – LYLEN FERRIS, N.D.

Evaluating Neurotransmitter Imbalance: An Essential Consideration in the Management of Chronic Disease (non-CME)

How do neurotransmitter imbalances present clinically? Understanding the biochemical pathways and interconnectivity of neurotransmitters is critical before determining clinical applications.

This lecture will introduce participants to assessment of neurotransmitters via urinary testing, and help providers begin to employ an integrative approach which has been shown to be more effective in addressing mood disorders, addiction, and more both for the short term and long-term sustained improvement.



AFTERNOON BREAK: 4:15pm – 5:00pm

5:00pm – 6:00pm – PAUL ANDERSON, N.M.D.

Specific Therapeutics in Neurological Healing

Synergy is key in all neurological cases. In this session Dr. Anderson will discuss the common uses of neurofeedback, hyperbaric oxygen, IV and Oral supports and other synergistic therapies.

6:00pm – 6:30pm

EXPERT PANEL DISCUSSION – All Faculty

Neurochemistry; The beginning of Diagnosis and Therapy

Your speakers will use the panel to discuss assessment topics and answer specific questions.

EVENING SESSION

6:30pm – 8:00pm

Cocktail Reception in the Expo Hall

Day 1 Agenda – May 20th, 2022



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REGISTRATION & BREAKFAST

Expo Hall: 7:15am - 8:15am

Morning Theme: **NEUROLOGICAL AUTOIMMUNITY**

8:15am – 9:15am – **KEN SHARLIN, M.D., MPH**

Neurological Autoimmunity; Multiple Sclerosis Considerations Part-1

1. Core concepts that define the conventional neurological approach to the patient.
2. How does the conventional neurological approach apply to MS?
3. MS Immunopathology

9:15am – 9:45am – **PAUL ANDERSON, N.M.D.**

Integrative Considerations in Neurological Autoimmunity

In this session Dr. Anderson will use one of the most difficult types of neurological disease, ALS, to illustrate clinical strategies to address advanced disease

MORNING BREAK: 9:45am – 10:30am

10:30am – 11:30am – **KEN SHARLIN, M.D., MPH**

Neurological Autoimmunity; Multiple Sclerosis Considerations Part-2

4. An Overview of Conventional Disease-Modifying Therapies for Multiple Sclerosis (including pertinent mechanisms of action)
5. Beyond Conventional Treatment: An Integrative Approach – An Investigation of root causes using the principles of the Functional Medicine Matrix; the Integrative team-based approach to patient management (helping to ensure a path to success); a review of Regenerative Medicine tools in the management of MS.

11:30am – 12:30pm – **KEN SHARLIN, M.D., MPH**

Neurological Autoimmunity; Multiple Sclerosis Considerations Part-3

6. Considerations for the discontinuation of disease-modifying therapy – patient and practitioner goals and what is known (evidence-based medicine).

12:30pm – 1:00pm – **DEIBBY MAMA HIT, M.D.**

Managing Neuroinflammation in Autism and Dementia with Antiorbital Ionic Calcium (Non-CME)

Describing the science behind the management of neuroinflammation using AIC, case reports and obtaining patient protocols.



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LUNCH BREAK: 1:00pm – 2:15pm

Afternoon Theme: **ADDICTION**

2:15pm – 3:15pm – **AARON VAN GAVER, N.D.**

Addiction: Opiate Addiction

In this session Dr. Van Gaver will outline the biological and psychological basis for addiction to opiates. Critical diagnostic features, neurological patterns and other clinical factors will be discussed. Dr. Van Gaver will begin by reviewing the neurobiology of addiction, followed using the DAST-10 and other relevant validated diagnostic scales in order to diagnose opiate addiction.

3:15pm – 3:45pm – **JOSEPH DESANTO, M.D.**

Implantable Naltrexone in the Use of Weight Loss and Addiction (Non-CME)

How the opioid receptor Antagonist Naltrexone is used in Implantable pellet form to help treat obesity, eating disorders, alcohol and opioid use disorders. Pharmacology, Methodology, Aspects of each Program, and associated Apps will be discussed.



AFTERNOON BREAK: 3:45pm – 4:30pm

4:30pm – 5:30pm – **AARON VAN GAVER, N.D.**

Addiction: Benzodiazepine Addiction

In this session Dr. Van Gaver will outline the biological and psychological basis for addiction to benzodiazepines. Critical diagnostic features, neurological patterns and other clinical factors will be discussed. Dr. Van Gaver will review the neurobiology of the GABA/Glutamate receptors in the brain, and how benzodiazepines are used in medical practice, followed by their abuse potential. As this is a complex area of addiction, focus will be on how to slowly and safely remove benzodiazepine by supplementing naturopathic treatment options like herbs and orthomolecular vitamins/minerals.

5:30pm – 6:00pm

EXPERT PANEL DISCUSSION – All Faculty

Autoimmunity and Addiction: Clinical Considerations

Your speakers will use the panel to discuss assessment topics and answer specific questions.

EVENING SESSION

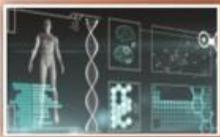
Demonstration Rooms: 6:15pm – 8:15pm

Hors D'oeuvres and Interactive Workshops

This is your chance to see hands-on demonstrations of new technologies as well as asking direct questions in a small group setting.



Day 2 Agenda – May 21st, 2021



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Day 3 Agenda – May 22nd, 2021

REGISTRATION & BREAKFAST

Expo Hall: 7:15am - 8:15am

Morning Theme: **PSYCHEDELIC INTERVENTIONS AND ADDICTION MEDICINE**

8:15am – 9:45am – **ERICA ZELFAND, N.D.**

Microdosing - What we know (and don't) about taking miniscule doses of psilocybin and LSD on a regular basis

What happens when we take extremely diluted doses of LSD or psilocybin? Everything or nothing, depending on who you ask. Peppered with cases of people who have tried microdosing, this presentation reviews dosage protocols, critiques the studies currently available on this new way of taking psychedelics, and summarizes their findings. The proposed mechanisms of action of microdosing will be explained, along with safety considerations and drug-drug interactions.

9:45am – 10:45am – **AARON VAN GAVER, N.D.**

Addiction: Alcohol Addiction

In this session Dr. Van Gaver will outline the biological and psychological basis for addiction to alcohol. Critical diagnostic features, neurological patterns and other clinical factors will be discussed. Dr. Van Gaver will briefly review the neurobiology of the GABA/Glutamate system and how alcohol interacts here. This will be followed by the diagnostic features of alcoholism and the various screening tools used to uncover this in our patients (CAGE, AUDIT). Lastly Dr. Van Gaver will review how to safely guide patients off alcohol use and how to manage withdrawal symptoms such as seizure potential and delirium tremens (DTs).

MORNING BREAK: 10:45am – 11:30am

11:30am – 12:30pm – **AARON VAN GAVER, N.D.**

Addiction: Case Studies

In this session Dr. Van Gaver will discuss his approach to addiction medicine via a case analysis method. By presenting past patient cases that Dr. Van Gaver has successfully helped manage, he will highlight the steps taken to rehabilitate patients off various substances. Focus will be on naturopathic AND conventional treatment, as well as community-based support groups such as Alcoholics Anonymous and Narcotics Anonymous.

12:30pm – 12:40pm – **DR. ANDERSON & JEREMY PHILLIPS**

Dr. A. Medical Innovation Awards / AAMP Competition

LUNCH BREAK: 12:40pm – 1:45pm

Afternoon Theme: **BRAIN TRAUMA AND HEALING**

1:45pm – 2:45pm – **MARK HEISIG, N.D.**

Section #2: Management of the issues in concussion/PCS

Proposed management algorithm by literature (and CCMI)

1:45pm – 2:45pm – **MARK HEISIG, N.D. (Continued)**

Case #1 - PCS for 5yrs with suspected CTE by a neurologist. A great well-rounded example of when the algorithm goes well.

Case #2 - Young female with suspected POTS. When everything cleared up except for non-specific cognitive symptoms. Referral to cardiology

Case #3 - Young hockey player with vestibular hypofunction. A tough case with a longer than expected recovery

Summary notes on referral network: Exercise Testing, Cervical Spine Manual Therapy → OT, DC, DPT Deficits in pursuits, saccades, NPC, Accommodation → Neuro-optometry. Deficits in VOR, VMS → Vestibular therapy (often DPT or OT). Persistent neurocognitive deficits → Neuropsychology Mental/emotional symptoms/PTSD → CBT/Biofeedback

2:45pm – 3:45pm – **MARK HEISIG, N.D.**

Section #3: Considerations for athletes & RTP

The purpose of baseline testing is for making return decisions, NOT concussion dx. Incomplete baseline testing: SCAT-5 + ImPACT (or DANA). Complete baseline testing: SCAT-5, ImPACT (or DANA), Rxn Time, Force Plate Balance

Baseline testing at rest for RTP decisions is insufficient for returning aerobically trained athletes (e.g., hockey, soccer, lacrosse, rugby, certain football positions, etc...)

Return to play programming needs to include dual-tasking & exertion protocol testing. Dual-tasking mirrors the complexities of sport (& evokes persistent deficits in neurocognitive function and gait). Exertion testing prior to RTP baseline testing catches ~1 in 3 athletes that would have been cleared at rest. Matching game-like conditions THEN testing neurocognitive and physical performance provides the safest means for RTP decisions.

Return-to-Play Algorithm & Gapski-Goodman Test: Case #4 - Young hockey player injured during summer training camp

3:45pm – 4:30pm – **PAUL ANDERSON, N.M.D.**

Case Study: Synergistic Therapies in the Traumatized Brain

A recent case detailing the use of therapeutic synergy in healing brain trauma

BRIEF COMFORT BREAK: 4:30pm – 4:40pm

4:40pm – 5:10pm

EXPERT PANEL DISCUSSION – All Faculty

Psychedelic Medicine, Addiction and Trauma

Your speakers will use the panel to discuss assessment topics and answer specific questions.

5:10pm – 5:15pm Closing Remarks & Adjourn